Talosai

TALOSAI EARLY WARNING

CASE STUDY: SRI LANKA

Economic Crisis and Potential Instability
April 2021 – July 2022

Multi-stream risk quantification before operational disruption

INTEGRATED RISK INDEX

78.3
Critical Warning

Apr 2021	Aug 2021	Dec 2021	Apr 2022	Jul 2022
Risk Formation	Early Deterioration	Watch Posture	Systemic Alert	Critical Warning
69.6 wks	51.9 wks	30.9 wks	8.9 wks	0 wks

NARRATIVE DOMINANCE

Economic & Governance
87.4%
External Share

SIGNAL CONVERGENCE

Narrative Pressure	High
Public Concern	High
Currency Pressure	High
Economic Pressure	High
Governance Pressure	High

SYSTEMIC ALERT

MULTI-STREAM RISK INTELLIGENCE

- ECONOMY
- GOVERNANCE
- SOCIETY
- PUBLIC CONCERN
- CURRENCY
- POLITICAL STABILITY
- ESSENTIAL SERVICES

SRI LANKA RISK TIMELINE

- Apr 2021
  Risk Formation
- Aug 2021
  Early Deterioration
- Dec 2021
  Watch Posture
- Apr 2022
  Systemic Alert
- Jul 2022
  Critical Warning

ACTIONABLE GUIDANCE

- Increase Monitoring
- Begin Contingency Review
- Brief Leadership
- Reassess Exposure
- Review Travel & Security Posture
- Prepare Operational Continuity

JUNE 2025

RISK INTELLIGENCE. EARLY. QUANTIFIED. ACTIONABLE.

Bottom line
Talosai was able to show a staged sequence of warning outputs in the Sri Lanka collapse: watch-level formation by December 2021, public-concern escalation in February 2022, a currency-pressure break and systemic alert in late March/early April, and critical convergence by mid-April and July 2022.

29.9 weeks	69.1	91.4	75.7
Watch-level integrated pressure before July rupture	Public concern momentum by mid-February	Currency-pressure index by early April	Integrated risk index by mid-April

EXECUTIVE SUMMARY

During Sri Lanka's 2021-2022 economic collapse cycle, Talosai was able to combine OSINT narrative monitoring, public search behavior, forex/currency signals, historical baseline comparison, trend analysis, forward-looking posture guidance, correlations, and lead-lag interpretation into a single output-level case study. The purpose of this public report is to show how Talosai's outputs tracked what was changing in Sri Lanka and what was forming beneath the surface as financial stress became societal and political destabilization.

- Talosai was able to detect early warning conditions and provide operational guidance on the earliest measurable watch signals (by December 2021), roughly 29.9 weeks before the July 2022 crisis rupture. The integrated risk index reached 51.2, while currency pressure was already elevated at 61.2.
- Talosai was able to detect early warning conditions and provide operational guidance on public concern/search-behavior acceleration before the currency break: public concern momentum reached 69.1 by mid-February, unemployment concern reached 88, and anxiety/stress reached 87 by early March.
- Talosai was able to track acute currency deterioration before the July rupture early warning conditions and provide operational guidance. USD/LKR moved from about 202.5 in early March to about 298.0 by early April, a 47.2% move in less than one month; by July it was about 362.8.
- Talosai was able detect early warning conditions and provide operational guidance on the lead-lag sequence as it formed: public concern and currency pressure were elevated together by late March and early April, then OSINT narrative pressure moved sharply upward by mid-April, producing a critical convergence posture roughly 11.9 weeks before the July rupture.
- Talosai was able to confirm broad systemic pressure by late July and provide operational guidance: the integrated risk index reached 77.1, OSINT narrative pressure reached 86.0, and currency pressure remained near 96.8.

WHY THIS DISTINGUISHES TALOSAI

Talosai was able to do more than count coverage or list events. In this case, it placed OSINT narrative pressure, public concern/search behavior, forex/currency deterioration, historical baseline movement, trend direction, correlation behavior, and lead-lag sequencing into a decision-oriented risk picture. This public report remains output-focused: it shows direction, magnitude, abnormality, convergence, and posture implications without revealing how Talosai internally constructs or weights its scores.

Risk-intelligence question	Typical news/event monitoring	Talosai quantified output
Is there coverage?	Counts or lists articles/incidents.	Talosai was able to measure whether risk pressure was abnormal, rising, or broadening relative to the country context.
Is the situation getting worse?	Depends on analyst review of headlines.	Talosai was able to quantify direction, momentum, and acceleration across economic, social, governance, public concern, and currency signals.
Is the risk isolated or systemic?	Often treats categories separately.	Talosai was able to show convergence across currency pressure, OSINT narrative pressure, public concern, governance, society, and psychological strain.
When should decisions change?	Often alerts after disruption is visible.	Talosai was able to support staged posture changes: monitor, watch, systemic alert, critical warning, and continuity execution.
What should be done?	Often leaves response to the reader or provides generic reactive actions.	Talosai was able to provide decision-grade recommendations tied to signal state, including monitoring cadence, contingency triggers, travel/security review, fuel/logistics planning, exposure reduction, and continuity actions.
Is this abnormal relative to history?	Usually requires separate analyst benchmarking.	Talosai was able to compare output movement against historical baseline conditions to distinguish routine volatility from posture-changing pressure.
What may be forming beneath the surface?	Often waits for visible disruption.	Talosai was able to use trend direction, acceleration, convergence, and lead-lag behavior to support forward-looking posture guidance before disruption became fully visible.

PERFORMANCE TIMELINE

Talosai was able to map the Sri Lanka crisis as a sequence rather than a single July 2022 event. The timeline ties output-level movement to real-world phases: latent economic stress in late 2021, rising public concern before the late-March protest surge, currency deterioration and debt-stress visibility in March/April, and broad systemic confirmation during the July political rupture. The value was the lead-lag picture: public concern moved first, currency pressure broke next, and OSINT narrative pressure intensified as the crisis became unmistakably systemic.

Window	Lead time	Signal state	What was quantified	Decision value
Sep-Oct. 2021	9+ months	Latent economic stress	Currency pressure was already elevated near 59.6; integrated risk was not yet systemic, but the historical baseline was no longer benign.	Increase monitoring cadence; identify exposure to local currency, supply, fuel, banking, travel, and staffing disruption before the street-level crisis became dominant.
Early Dec. 2021	29.9 weeks	Watch posture	Integrated risk reached 51.2; narrative pressure rose to 45.8; currency pressure remained elevated.	Move from passive monitoring to watch posture; brief leadership; begin contingency trigger design before the March-April escalation window.
Mid-Feb. 2022	20.9 weeks	Public concern escalation	Public concern momentum reached 69.1; unemployment concern reached 86.5; anxiety/stress was 83.5, preceding the late-March protest surge and emergency posture.	Review employee support, security posture, local cash/FX exposure, and likely protest/social-stress scenarios.
Late Mar.-early Apr. 2022	13.9 weeks	Systemic alert	As public unrest and debt-stress visibility intensified, currency pressure crossed 90 by early April; public concern remained elevated above 60; integrated risk reached 65.4.	Pre-position contingency responses; reduce discretionary exposure; validate fuel, logistics, vendor, banking, and cash alternatives.
Mid-Apr. 2022	11.9 weeks	Critical convergence	Around the April debt-payment suspension and broadening crisis window, narrative pressure jumped to 78.3; currency pressure was 94.0; integrated risk reached 75.7.	Escalate to active continuity posture; prepare for staffing, transport, security, and supply-chain disruption before July rupture.

July 2022	Crisis window	Crisis confirmation	During the July political rupture window, currency pressure remained near 96.8; late-July narrative pressure reached 86.0; crime/safety concern reached 76.5.	Execute continuity plans; sustain security monitoring; manage staff movement, supply access, and operational recovery.

VISUAL EVIDENCE: OUTPUT-LEVEL INDICATORS

Talosai was able to make the crisis path visible without requiring readers to infer it from headlines alone. Figures 1-6 show how the same Sri Lanka scenario appeared through integrated risk, independent signal streams, forex pressure, public search behavior, OSINT narrative pressure, and multi-stream convergence. The charts are retained because they show output-level timing and trend behavior.

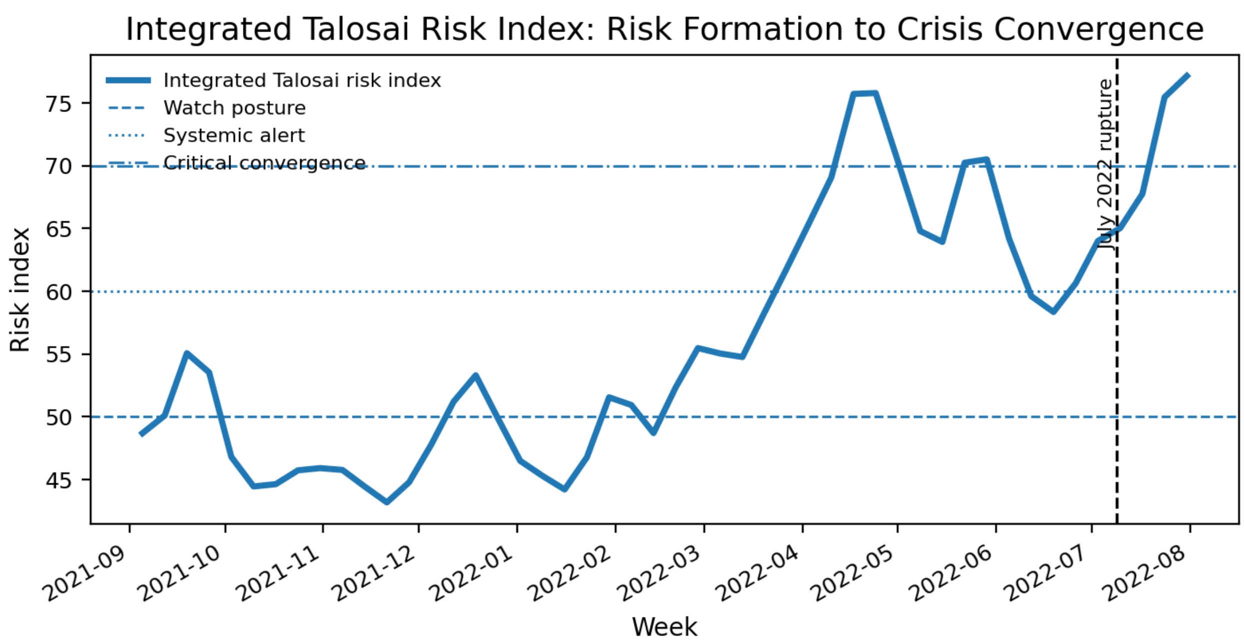

Figure 1. Talosai was able to show the integrated risk index reaching watch posture by December 2021, systemic-alert territory in late March and early April, and critical-convergence territory in mid-April, before the July 2022 rupture.

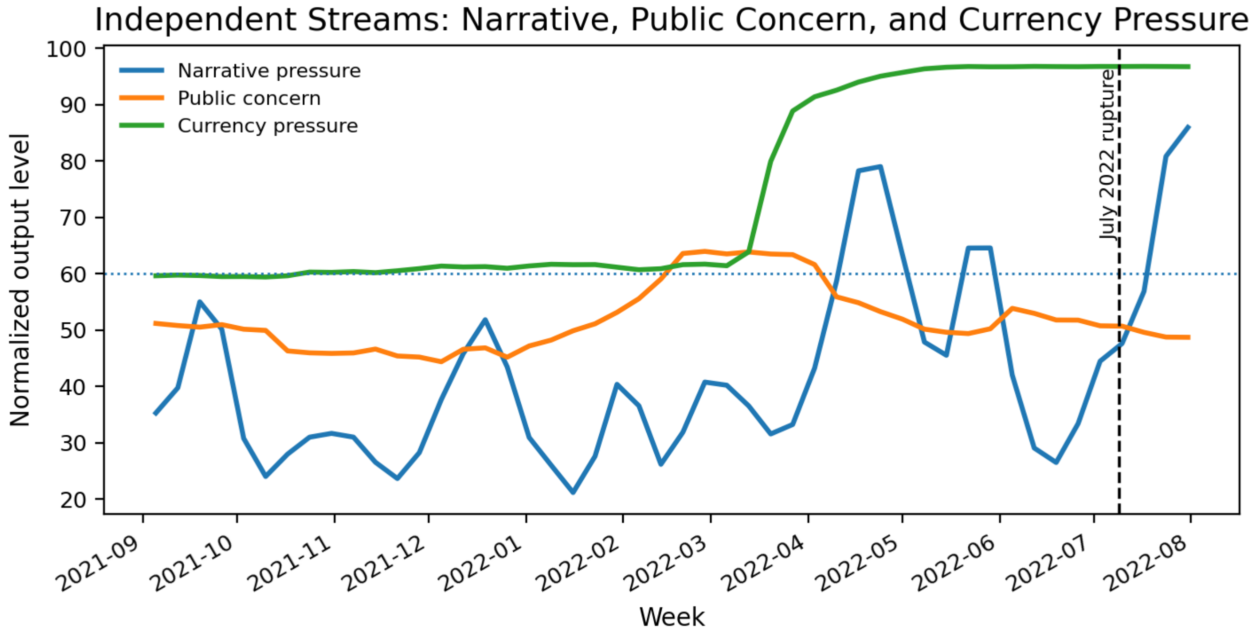

Figure 2. Talosai was able to show that the three independent signal streams did not move identically. Public concern rose first, currency pressure broke sharply in March and April, and OSINT narrative pressure escalated as the crisis became systemic.

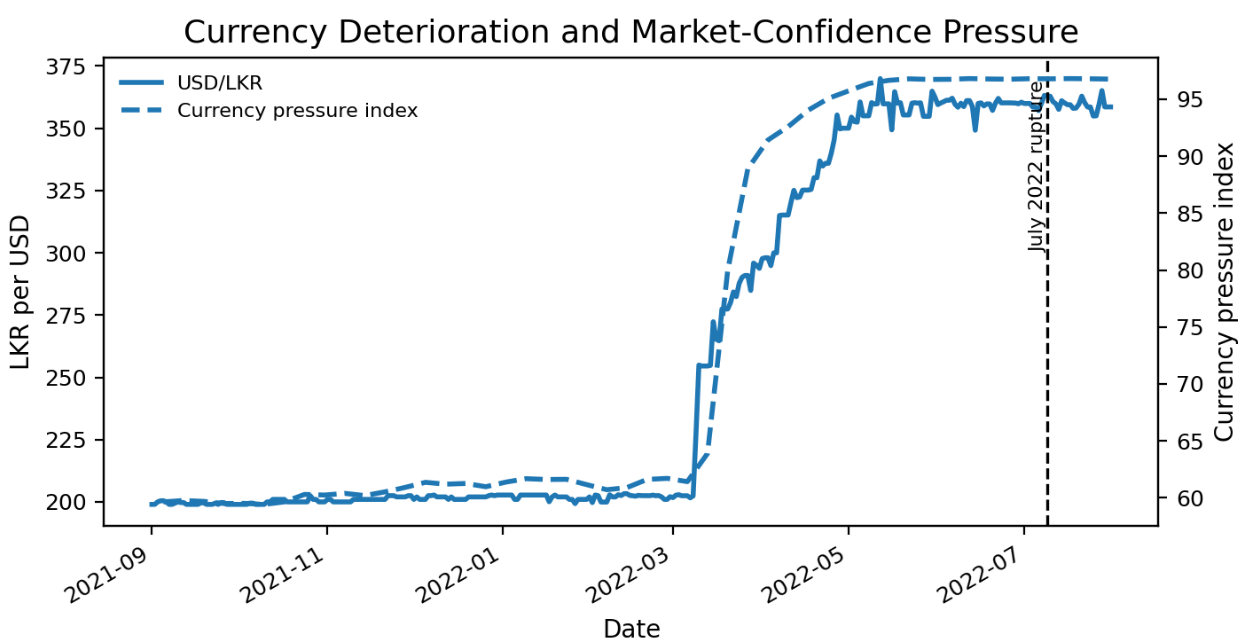

Figure 3. Talosai was able to isolate currency pressure as the clearest market-confidence signal: USD/LKR moved from about 202.5 in early March to about 298.0 by early April and about 362.8 by July.

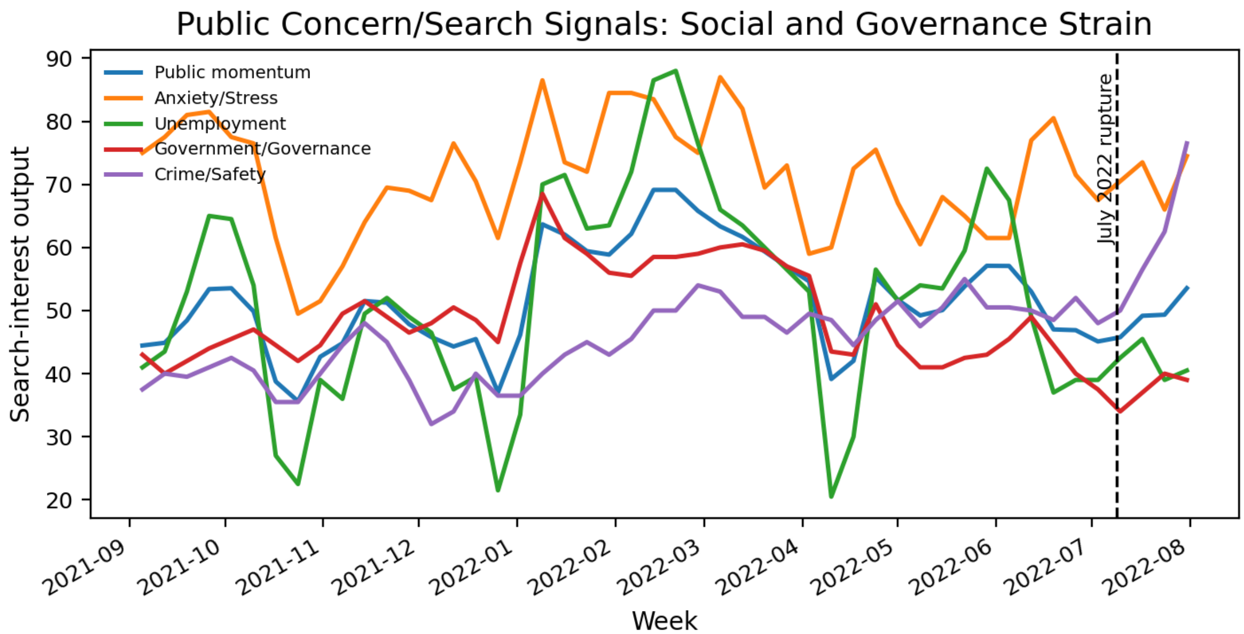

Figure 4. Talosai was able to use public concern/search behavior to surface social and governance strain, with unemployment, anxiety/stress, governance, and safety indicators rising at different stages of the crisis.

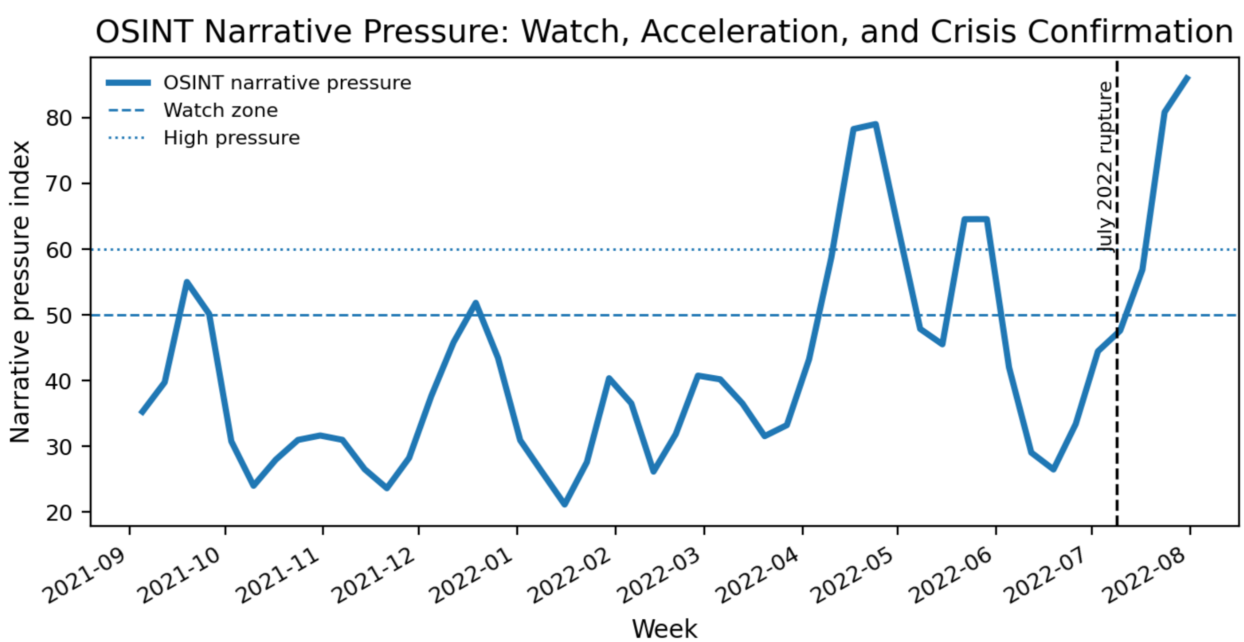

Figure 5. Talosai was able to monitor OSINT narrative pressure as it moved from watch-level pressure into high-pressure territory in April and late July, confirming that the crisis had broadened beyond isolated economic stress.

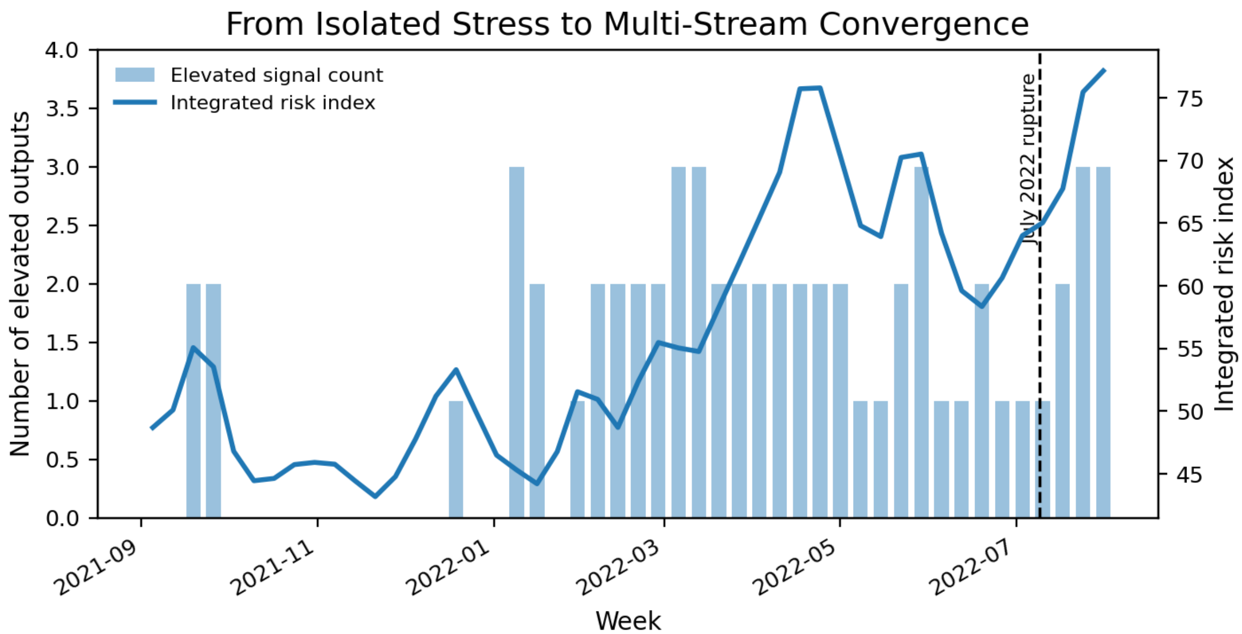

Figure 6. Talosai was able to show operational warning strengthening as independent signal families became elevated together, shifting the profile from isolated stress to systemic convergence.

PERFORMANCE AGAINST EXPECTED INDICATORS

Talosai was able to evaluate the major Sri Lanka collapse indicators against the output record rather than treating them as isolated anecdotes. The table below connects expected crisis indicators—forex stress, search-behavior stress, governance confidence, protest/safety pressure, historical-baseline movement, and cross-domain convergence—to what the system displayed and why those outputs mattered operationally.

Indicator	Finding	What the data showed	Decision value
Currency deterioration	Strong yes	USD/LKR moved from 202.5 in early March to 298.0 by early April and 362.8 by July; currency pressure crossed 90 by early April.	Strong early signal for liquidity, procurement, payroll, pricing, and market-confidence risk.
Public concern/search spikes	Strong yes	Public concern momentum reached 69.1; unemployment concern reached 88; anxiety/stress reached 87.	Supported earlier monitoring of public stress, staffing risk, travel risk, and civil-unrest potential.
Inflation, fuel, and food insecurity pressure	Supported indirectly	The public-release evidence package does not include separate inflation, fuel, or food keyword traces. The	Useful for posture escalation; keyword-specific public-release feeds strengthen

		available public concern, currency, unemployment, and OSINT pressure outputs nevertheless captured the broader economic-stress cascade.	attribution in future case-study versions.
Public protest / societal acceleration	Moderate-to-strong	Crime/Safety concern rose into late July, reaching 76.5; OSINT narrative pressure reached 86.0 during late-July confirmation.	Supported security, movement, and continuity planning as economic stress translated into societal destabilization.
Governance confidence decline	Moderate-to-strong	Government/Governance concern reached 68 in the case-study window and remained part of the public-concern escalation ahead of the crisis.	Supported leadership briefings, country-risk escalation, and reassessment of operating assumptions.
Cross-domain convergence	Strong yes	By mid-April, narrative pressure was 78.3, currency pressure was 94.0, and integrated risk was 75.7.	Indicated a shift from isolated economic pressure into systemic stress requiring active contingency posture.
Historical baseline / trend shift	Strong yes	Talosai was able to show that early values were not yet systemic but the baseline was no longer benign; integrated risk moved from the mid-40s in October to watch territory by December and systemic/critical levels by April.	Helped separate routine volatility from posture-changing deterioration.

SELECTED QUANTIFIED EVIDENCE

Talosai was able to preserve the most decision-relevant facts in a compact evidence table: when the signal appeared, how sharply it moved, and whether the movement occurred before or during known crisis milestones. This section highlights trend analysis and historical-baseline movement at the output level, keeping the focus on what changed.

Evidence point	Early trend	Watch / public escalation	Systemic alert	Critical / crisis confirmation
Integrated Talosai risk index	44.6 in mid-Oct.; not yet systemic	51.2 by early Dec.; watch posture	65.4 by early Apr.	75.7 by mid-Apr.; 77.1 late July
OSINT narrative pressure	28.0 in mid-Oct.; still forming	45.8 by early Dec.	78.3 by mid-Apr.	86.0 by late July

Public concern/search behavior	Public momentum 38.7 in mid-Oct.	Momentum 69.1 by mid-Feb.; unemployment 86.5	Public concern 63.5 by early Mar.	Crime/Safety 76.5 late July
Currency pressure / FX	USD/LKR 201.0; pressure 59.6	USD/LKR 202.0; pressure 61.2	USD/LKR 298.0; pressure 91.4	USD/LKR 362.8; pressure 96.8
Pressure magnitude	Risk was forming but not yet broad.	Watch-level integrated pressure became visible.	Currency moved 47.2% from early Mar. to early Apr.	Currency was 79.6% weaker vs early Dec. by July.
Lead-lag signal	Currency pressure was already elevated while broad systemic risk was still forming.	Public concern/search behavior led the market break, with public momentum at 69.1 by mid-February.	Currency pressure broke sharply in March-April; OSINT narrative pressure then jumped by mid-April.	Late-July OSINT and crime/safety concern confirmed that the deterioration had become broad and systemic.

VALIDATION AGAINST TALOSAI DIFFERENTIATOR QUESTIONS

This validation section treats the July 2022 political rupture as the retrospective comparison point and asks whether Talosai's outputs gave users more than a post-event summary. Talosai was able to show acceleration, convergence, divergence/lead-lag behavior, forward-looking warning posture, and decision timing before the crisis fully surfaced.

Validation question	Assessment	Evidence and interpretation
1. Did pressure accelerate before the event?	Yes	Talosai was able to show pressure acceleration well before July. Watch-level integrated pressure appeared by early December, public concern surged by mid-February, currency pressure broke in March-April, and narrative pressure jumped by mid-April.
2. Did multiple domains converge?	Yes	Talosai was able to show that economy/currency, public concern, OSINT narrative pressure, governance concern, psychological strain, and safety concern did not move identically, but they formed a cascade that converged into a systemic-alert posture by late March through mid-April.
3. Did divergence / lead-lag behavior appear?	Yes	Yes. Talosai was able to show public concern leading the narrative and market break. Public concern surged in February while OSINT narrative pressure had not yet reached its April spike; currency then broke sharply in March-April. Historical domestic-vs-external

		narrative divergence was not separately included in the public-release 2021-2022 evidence package.
4. Did isolated stress become systemic stress?	Yes	Yes. Talosai was able to show the profile moving from isolated currency/public stress into integrated systemic pressure. The integrated risk index crossed 60 by late March and exceeded 75 by mid-April.
5. Did Talosai provide forward-looking warning or forecast posture before the event?	Yes for posture forecasting; formal forecast-band backtest not included in public release	Talosai was able to support worsening forward-looking posture guidance from trend acceleration and cross-domain convergence. This public-release package does not include archived weekly forecast bands from 2021-2022, so a strict forecast-band backtest remains outside the claims made here.
Benchmark: How early was abnormal convergence visible?	Watch: ~29.9 weeks; critical: ~11.9 weeks	Talosai was able to show the first watch-level integrated signal by early December 2021. The clearest critical convergence signal appeared by mid-April 2022, about 11.9 weeks before the July rupture.

SYSTEMIC CORRELATION AND CONVERGENCE

Talosai was able to separate correlation from timing. In Sri Lanka, the strongest analytic point was not a single high correlation between all streams at all times; it was the sequence in which public concern/search behavior, currency pressure, OSINT narrative pressure, and crime/safety concern moved at different stages. The table is retained because it supports the lead-lag story at the output level: mixed pairwise correlations did not negate operational convergence; they helped explain it.

Co-movement pair	Sep-Dec 2021	Jan-Mar 2022	Apr-Jul 2022	Full window
Narrative pressure and Currency pressure	0.18	0.01	-0.12	0.58
Public concern and Currency pressure	-0.78	0.41	-0.88	0.14
Narrative pressure and Public concern	0.30	0.52	-0.22	-0.01
Currency pressure and Crime/Safety concern	-0.33	0.10	0.31	0.64
Unemployment concern and	0.70	0.34	-0.30	0.51

Anxiety/Stress concern				

DECISION-RELEVANCE ASSESSMENT

Talosai was able to translate observed deterioration into decision timing. In the Sri Lanka case, the operational value was not an exact prediction of the day protesters entered state facilities or the day the president resigned; it was the ability to move users from monitor, to watch, to systemic alert, to critical convergence as risk became more visible across public, financial, narrative, and safety signals.

Alert posture	What the data supported	Decision-maker actions supported
Monitor / latent formation	Sep-Oct.: Talosai was able to show currency pressure already elevated and integrated pressure not benign, though not yet systemic.	Increase update cadence; inventory country exposure; define escalation triggers for cash, FX, supply, fuel, staffing, and travel.
Watch posture	Early Dec.: Talosai was able to show integrated pressure crossing watch-level territory and OSINT narrative pressure materially higher than mid-Oct.	Begin structured leadership briefings; review business continuity, local liquidity, procurement, fuel, and transport assumptions.
Public concern escalation	Jan-Feb.: Talosai was able to show public concern/search behavior rising sharply, especially unemployment and anxiety/stress, before the late-March/April escalation.	Prepare employee support; review security and movement posture; monitor public-stress indicators and social-unrest risk.
Systemic alert	Late Mar.-early Apr.: Talosai was able to show currency pressure breaking sharply while public concern remained elevated.	Pre-position continuity responses; reduce discretionary exposure; validate fuel, transport, banking, vendor, and supply-chain alternatives.
Critical convergence	Mid-Apr. and July: Talosai was able to show currency, narrative, and safety/social indicators confirming broad systemic pressure.	Activate continuity plans; support high-consequence decisions on staffing, travel, site posture, supply access, and operational resilience.

CONCLUSION

Talosai was able to show that Sri Lanka's 2022 collapse was not a sudden July surprise. OSINT narrative monitoring, public concern/search behavior, forex/currency signals, historical-baseline movement, trend analysis, correlations, and lead-lag relationships together showed a crisis path forming in late 2021, becoming socially visible in January and February, breaking through currency pressure in March and April, and converging into broad systemic stress before the July rupture.

The important differentiator is output-level quantification and decision timing. News-based situational analysis generally informs decision-makers that Sri Lanka was receiving coverage; Talosai was able to show whether the related public, market, and narrative signals were abnormal, whether pressure was accelerating, whether independent streams were confirming the same deterioration pathway, and when operational posture should change.

Case-study takeaway

Bottom line: Talosai was able to improve decision timing in the Sri Lanka case. The report demonstrates a staged sequence of quantified outputs: watch formation by December, public-concern escalation by February, currency break and systemic alert in March-April, and critical convergence by mid-April and July 2022.