Supplementary Files S1–S4

Manuscript: Documented presence and process location of generative artificial intelligence in industrial scam compounds and the limits of the transformation claim
Author: Hamza Khan
Purpose: Methodological transparency package for editorial and referee evaluation. This study is a structured qualitative synthesis, not a systematic review or meta-analysis.

Supplementary File S1. Reporting checklist (ENTREQ-aligned) and note on PRISMA

S1.1 Why PRISMA 2020 is not the governing standard

PRISMA 2020 is the reporting standard for systematic reviews that identify, screen and synthesise studies against a pre-specified eligibility question, typically with a reproducible multi-database search and, where appropriate, a meta-analysis. This manuscript:

- does not claim exhaustive coverage of all writing on generative AI and fraud;
- does not pool quantitative outcomes;
- uses a dual-strand design in which Strand A (peer-reviewed compound, trafficking-for-forced-criminality, cybercrime-organisation and generative-fraud research) carries organisational findings, and Strand B (official assessments and investigative process sources) may fill script cells only;
- codes three *separable claims* (organisation; tool presence and process location; measured transformation), not a single PICO/PECO outcome.

Completing a PRISMA 2020 checklist as if those procedures had been followed would over-claim. The appropriate analogue is a qualitative-synthesis reporting standard. The table below follows the ENTREQ items (Tong, Flemming, McInnes, Oliver & Craig, 2012) as a transparency frame.

ENTREQ is used here only as a reporting frame for this supplement. The manuscript itself is not presented as an ENTREQ review.

S1.2 ENTREQ-aligned checklist

No.	Item	Where addressed
1	Aim	Abstract; §1, three research questions
2	Synthesis methodology	§3.1: structured qualitative synthesis; co-location frame, not causal production
3	Approach to searching	S3; §3.2. Purposive and theoretically bounded, not an exhaustive SR harvest
4	Inclusion criteria	§3.3 and S3.2
5	Data sources	§3.2; Table A1; S3
6	Electronic search	S3.3 (example strings and portals). Not a multi-database Boolean

No.	Item	Where addressed
	strategy	protocol
7	Study screening methods	Single-author screening against the three inclusion rules in §3.3; dual-source rule for organisational sentences that carry a main finding
8	Study characteristics	Table A1; S3.4
9	Study selection results	S2 adapted flow; Table A1
10	Rationale for appraisal	Sources appraised for *claim type* (organisation / presence / cause), not for a single risk-of-bias score. Official threat judgements excluded; process, role, tool or organisational passages retained
11	Appraisal items	Dual-source rule; peer-reviewed vs official-investigative status marked in Table 1
12	Appraisal process	Single author; uncertainty retained rather than resolved by majority vote
13	Appraisal results	§4.1 strong; §4.2 moderate; §4.5 not shown; §4.3 agentic layer thin
14	Data extraction	S4 fields; Table 1 composite script
15	Software	No CAQDAS package. Extraction in structured tables
16	Number of reviewers	One. Stated as a limitation in §6
17	Coding	Three claim codes plus script-cell status (PR / official-investigative / inferred / unknown)
18	Study comparison	Cross-study organisational patterns in §4.1; tool-presence sources in §4.2
19	Derivation of themes	Not a thematic synthesis of lived experience. Claims pre-specified as organisation, location, transformation
20	Quotations	Claims are carried by cited findings, not participant quotations
21	Synthesis output	Table 1; §§4–5; Appendix B (what is not shown)

S1.3 PRISMA items that do not apply (for editors who still require a mapping)

PRISMA 2020 cluster	Status in this study
Protocol and registration	Not registered. Design is a structured synthesis, not an SR protocol
Eligibility criteria	Provided (§3.3), but for process-rich compound sources, not for an outcome meta-analysis
Information sources and search	Documented in S3 as a purposive search
Selection and data collection	Single author; fields in S4
Risk of bias / certainty	Not GRADED. Evidential status is categorical (strong / moderate /

PRISMA 2020 cluster	Status in this study
	not shown)
Effect measures and synthesis methods	No quantitative effects. Official loss bands reported as official estimates only
Reporting bias and certainty of evidence	Negative result on transformation is the finding; absence of compound-level measures is stated, not filled
Flow diagram	Adapted source-flow in S2, not a database-hit PRISMA diagram

Supplementary File S2. Adapted source-flow (text form)

Use this as the basis for a simple flow figure if the journal requires one.

This is a source-allocation diagram for the named set in Table A1. It is not a PRISMA identification–screening–inclusion count.
(peer-reviewed compound / trafficking-for-forced-criminality / cybercrime-organisation / crime-script / generative-or-synthetic-fraud literature, 2018–2026, plus a bounded official/investigative strand)

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    |
    v
Screened against unit of analysis
(compound or closely related industrial scam organisation
in mainland Southeast Asia; structured group activity;
enough process detail to locate at least three script scenes)

    |
    +---> Excluded from Claim 1 organisational sample
    |     Generic cybercrime without compound organisation
    |     Headline threat assessments with no process, role or tool
    |     Single-source press on named software stacks
    |     (retained only as corroboration of tool presence)
    |     Bibliographic items without a stable outlet and DOI
    |     (not used as load-bearing evidence)
    |
    v
Included sources (see Table A1)

    |
    +---> Claim 1 (organisation)     — peer-reviewed compound set
    |     Franceschini et al. 2023, 2024; Lazarus et al. 2026;
    |     Akartuna & Manning 2026; comparison only: Leukfeldt & Holt 2020
    |
    +---> Claim 2 (tool presence / process location)
    |     Akartuna & Manning 2026; Lin 2025; Visconti 2026;
    |     Tiwari et al. 2026; Zhang 2026
    |     Strand B process cells: UNODC 2023, 2024, 2026; OHCHR 2023;
    |     Europol 2026; NCA 2026 (process language only)
    |
    +---> Claim 3 (scale, reach, resilience as industry findings;
          transformation by AI not shown)
          Official estimates cited as official estimates;
          no author-constructed loss figure
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Counts (transparent, not a simulated SR harvest).
The organisational claim set is the peer-reviewed compound literature named in Table A1, not a

hidden denominator of "n records identified in database X". Adding a fictitious identification number would be less honest than stating that the sample is the named set plus the stated exclusions.

Supplementary File S3. Search approach, criteria, and source log

S3.1 Approach

Strand A was assembled by chaining: (i) the core compound ethnography and political-economy papers (Franceschini and colleagues); (ii) the 2020–2025 qualitative meta-synthesis of trafficking and scam compounds (Lazarus et al., 2026) and its cited set; (iii) the Myanmar ecosystem network paper (Akartuna & Manning, 2026); (iv) criminological work on organised-crime concepts and cybercrime organisation used as a baseline, not as a second sample; (v) peer-reviewed work on generative models, deepfakes and financial crime published mainly 2022–2026. Forward and backward citation chasing from those seeds was the principal discovery method.

Strand B was limited to named official assessments already used in the field (UNODC regional assessments and technical briefs; OHCHR 2023; Europol IOCTA 2026; UK NCA National Strategic Assessment 2026). Passages were retained only when they described a process, role, tool or organisational arrangement. General threat judgements were excluded.

Searches were run in 2026 against publisher platforms and scholarly indexes used in the author's institutional access, including Google Scholar, Scopus, Web of Science Core Collection, and the websites of UNODC, OHCHR, Europol and the National Crime Agency. The study does not claim that every item returned by every possible string was screened. These were discovery aids for the named seed set and citation chaining, not an exhaustive multi-database protocol.

S3.2 Inclusion and exclusion (operational)

Include in the Claim 1 organisational set if all of the following hold:

1. Structured group activity over time for material gain (Campana & Varese, 2018).
2. Compound or industrial scam organisation, principally mainland Southeast Asia.
3. Enough process detail to locate at least three crime-script scenes.

Include for Claim 2 (tool presence) if a generative model, synthetic media, deepfake, translation/persona tool, or related automation is named in connection with organised or industrialised fraud. Compound co-location is preferred; organised-fraud papers without a compound setting may support repertoire presence but not compound organisation.

Exclude from Claim 1: generic cybercrime without compound organisation; lone-actor fraud; papers that only assert AI as a force multiplier without organisational evidence.

Exclude from all load-bearing claims: items that cannot be cited with a stable outlet and DOI; single-source press used as the sole support for an organisational sentence.

Strand B rule: official or investigative text may fill a Table 1 cell marked "official/investigative". It may not upgrade presence into a measured labour, success or form effect.

S3.3 Example search strings (illustrative, not a claim of exhaustive recall)

These strings reconstruct the kind of queries used in citation chaining. They are not a registered, copy-paste protocol and were not used to generate a screened hit count.

Used in varying combinations on Scholar/Scopus/WoS:

- "scam compound*" AND (Myanmar OR Cambodia OR Laos OR "Southeast Asia")
- ("forced criminality" OR trafficking) AND (scam OR "cyber fraud" OR "pig butchering")
- ("generative AI" OR deepfake* OR "synthetic media") AND (fraud OR scam OR "social engineering")
- "crime script*" AND (fraud OR scam OR cyber*)
- UNODC AND ("scam compound*" OR "forced criminality" OR "cyber fraud")

Date emphasis: 2018–2026 for organisation and scripts; 2022–2026 for generative-tool literature.

S3.4 Source log

Reproduced from Appendix A of the manuscript for referee convenience.

Source	Type	Jurisdiction / focus	Informs	Included
Franceschini et al. (2023)	Peer-reviewed	Cambodia, Myanmar, Laos	Compound organisation; facilitation	Yes — Claim 1
Franceschini et al. (2024)	Peer-reviewed	SEA compounds; survivors	Recruitment; labour; victim profiles	Yes — Claim 1
Lazarus et al. (2026)	Peer-reviewed meta-synthesis	SEA 2020–2025	Hierarchy; coercion; victim-offender roles	Yes — Claim 1
Akartuna & Manning (2026)	Peer-reviewed	Myanmar ecosystem	Multi-actor network; tool repertoire; resilience	Yes — Claims 1–2; scale as cited estimate
Leukfeldt & Holt (2020)	Peer-reviewed	Netherlands cyber networks	Division of labour baseline	Yes — comparison only
Lin (2025)	Peer-reviewed	Organised fraud cases	Deepfakes as repertoire	Yes — Claim 2
Visconti (2026)	Peer-reviewed review	AI and deception	Generative deception literature	Yes — Claim 2; not causal proof

Source	Type	Jurisdiction / focus	Informs	Included
Tiwari et al. (2026)	Peer-reviewed review	GenAI and financial crime	Field growth after 2022	Yes — Claim 2 context
Zhang (2026)	Peer-reviewed incident analysis	Global AI/deepfake fraud cases	Post-2022 case rise	Yes — Claim 2 context
Dehghanniri & Borrion (2021); Alonso Berbotto & Chainey (2022)	Peer-reviewed method	Script method	Script structure	Yes — method
UNODC (2023, 2024, 2026)	Official assessment	SEA / Asia-Pacific	Ecosystem language; 2025 loss band; recruitment geography	Yes — Strand B; official estimates only
OHCHR (2023)	Official	SEA forced criminality	Forced criminality	Yes — Strand B
Europol (2026); NCA (2026)	Official	EU / UK	Process language where present	Yes — Strand B, process only
Generic cybercrime without compound organisation	—	—	—	Excluded from Claim 1 sample
Single-source press on named software stacks	Investigative	Variable	Script cells only	Corroboration; not sole support

Supplementary File S4. Extraction fields and claim-coding rules

S4.1 Record-level fields

For each included source:

1. Bibliographic identifier and type (peer-reviewed / official / investigative)
2. Jurisdiction or empirical focus
3. Organisational claims present? (yes/no) — hierarchy, coercion, multi-actor facilitation, compound form
4. Tool claims present? (yes/no) — generative text, translation/persona, deepfake/voice, cryptocurrency as named rail, agent-like orchestration
5. Process scenes described (preparation / targeting / engagement / extraction / concealment)
6. Any measured link from tools to labour, success rates, or organisational form? (yes / no / asserted but not measured)
7. Evidential use permitted: Claim 1 / Claim 2 / Strand B cell / comparison only / exclude

S4.2 Claim-coding rules

- **Organisation (Claim 1)** requires dual-source support for any sentence that carries a main finding. One peer-reviewed compound study plus a second peer-reviewed compound or meta-synthesis source is the minimum.
- **Presence (Claim 2)** may rest on peer-reviewed naming of the tool in organised or industrialised fraud. Compound co-location is recorded where the source supplies it.
- **Transformation (Claim 3 causal clause)** is coded "not shown" unless the source reports a compound-level measure (tasks per operator, languages per operator, time-to-trust, share of model-drafted conversations, substitution of fluent trafficked labour, or an identified shift in form attributable to the tool). Assertion without measurement remains "not shown".
- **Agentic orchestration** is coded separately from content generation. Multi-step plan / tool-use / loop / handoff with limited human steering requires explicit description. It is treated as thinly evidenced in the peer-reviewed compound set.
- **Inferred script cells** are labelled inferred and are not findings.
- **Official loss figures** are attributed to the issuer and are not merged across constructs.

S4.3 Script-cell fields (Table 1)

Scene; actions reported; roles; tools (including AI type if named); setting; dependencies; possible intervention point; evidential status (documented in peer-reviewed work / documented only in official or investigative sources / inferred / unknown).

Intervention points are dependencies named in sources, not evaluated disruption effects.

S4.4 What this extraction cannot produce

Prevalence of tool use across compounds; a causal effect of AI; a task-allocation dataset; generalisation to all organised crime. Those absences are the content of Appendix B and of Claim 3.