WOWYRD · RULE REVIEW

Rule review: technical report

Client: Demo client (aml-hi, synthetic). Data: 2022-09-01 to 2022-09-18 (daily periods). Cut-off: 2022-09-18 (given with --cutoff). Generated: 2026-11-20 10:02 UTC.

Demo run. The unit costs are demo values, not a client's costs. The transactions and labels are synthetic.

Internal report. Do not share it outside your firm.

Method and definitions

The review measures what the client's own engine logged. It does not run the client's rules. To compare your own rule definitions with your engine's log, give the collector a rule file: Download an example rule file (JSON, with a note on every key; replace its example consent line before you use it). Label delay: 7 days. Hits newer than 2022-09-18 minus the label delay are not yet mature. One alert takes 6 analyst minutes at 0.80 USD per minute. A declined payment that was not fraud costs 4.00 USD in customer friction. The client entered these costs. Every cost in this report is an estimate from them.

- A **hit** is a transaction on which the rule fired, from the client's rule-hit log. An **alert** is a transaction with at least one hit.
- A hit is **mature** when the transaction is older than the client's stated label delay at the cut-off, so a fraud label had time to arrive. Immature hits are reported, never counted as false alarms or as friction.
- The **label** of a transaction is the label row with the latest date known at or before the cut-off. A later label that arrives after the cut-off is not used.
- A **declined** payment has no outcome (selective labels): its hits are counted and reported, and left out of precision and false-alarm counts.
- **Evaluable** = mature and not declined. **Caught** = evaluable with a fraud label. **False alarm** = evaluable with no fraud and no disputed label. **Disputed** = evaluable with a disputed label: it is neither caught nor a false alarm, it is shown on its own, and it is left out of precision.
- **Precision** = caught / (caught + false alarms). **Recall share** = caught / all evaluable fraud in the period.
- **Alert cost**: one alert per transaction with any hit, whatever the number of rules; a false alarm costs analyst minutes x cost per minute, shared equally among the rules that fired on it. **Friction**: a mature declined payment with no fraud and no disputed label costs the client's friction cost, shared the same way.
- **Decay**: precision of the last three mature periods is at most half of the three before (needs six periods).

Totals

MEASURE	VALUE
Transactions	58,331
Alerts (transactions with at least one hit)	53,483
Alerts not yet mature (newer than the label delay)	143
Alerts on declined payments (no outcome; left out of precision)	2,129

MEASURE	VALUE
Confirmed fraud (label known by the cut-off)	967
Confirmed fraud with at least one hit	928
Evaluable fraud (mature, not declined)	948
False alarms	50,302
Declined payments with no fraud or disputed label (friction)	2,110
False-alarm cost (estimate)	249,889.60 USD
Rule-hit rows that matched a transaction	58,331 of 58,331 (100.0%)
Label rows that matched a transaction	1,076 of 1,076 (100.0%)

Source: transactions, rule-hit log and labels files, 2022-09-01 to 2022-09-18.

Per-rule metrics

Rules are sorted by false-alarm cost, highest first. The trend line shows precision per period.

RULE	HITS	NOT YET MATURE	DECLINED	EVALUABLE	CAUGHT	FALSE ALARMS	PRECISION	RECALL SHARE	COST (USD)	DECAYED	PRECISION TREND
Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d` Finds one sender spreading money to many receivers in a short time.	41,258	20	2,093	39,145	211	38,934	0.5%	22.3%	95,904.24 USD	No	
Transfer above 500 USD `tp_u21_transfer_over_500` Flags every transfer over a low fixed amount, so analysts see most mid-size transfers.	36,685	141	2,112	34,432	837	33,595	2.4%	88.3%	77,428.24 USD	No	
Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h` Finds an account that collects several small payments and passes most of the money on at once.	15,845	0	1,974	13,871	66	13,805	0.5%	7.0%	23,994.16 USD	No	
Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d` Finds an account that receives a large sum and quickly passes nearly all of it to other people.	15,502	26	1,999	13,477	119	13,358	0.9%	12.6%	23,275.53 USD	No	
Single payment above 9,000 USD `tp_u21_large_txn_9k` Flags any one large payment for a closer look.	12,042	73	2,006	9,963	345	9,618	3.5%	36.4%	17,737.70 USD	No	
Money from 5+ different senders into one account within 5 days (fan-in) `tp_ffiec_fan_in_5_senders_5d` Finds one account that collects money from many people, as a collection or mule account does.	1,588	27	7	1,554	100	1,454	6.4%	10.5%	4,322.97 USD	No	
10+ mid-size payments in 5 days, over 20,000 USD in total `tp_u21_stats_10tx_1k3k_5d` Finds a burst of many similar mid-size payments that add up to a large total.	1,771	3	102	1,666	31	1,635	1.9%	3.3%	3,991.46 USD	No	
More than 2 wire transfers in 7 days `tp_u21_wire_count_gt2_7d` Finds a sender who uses wire transfers unusually often.	653	0	125	528	0	528	0.0%	0.0%	1,333.86 USD	No	
20+ small payments in 5 days, over 20,000 USD in total `tp_u21_stats_20tx_0_1k_5d` Finds many small payments that together move a large sum.	349	1	24	324	2	322	0.6%	0.2%	698.93 USD	No	
Wire transfers above 4,999 USD in total within 7 days `tp_u21_wire_total_gt4999_7d` Finds a sender who moves a large total by wire in one week.	505	0	137	368	0	368	0.0%	0.0%	625.00 USD	No	
Repeated payments just under 10,000 USD (structuring) `tp_u21_structuring_9k_10k_5d` Finds payments kept just below a reporting limit to avoid a report.	554	1	246	307	7	300	2.3%	0.7%	577.51 USD	No	

Hits and precision per period

Each cell: hits / precision in that period.

RULE	2022-09-01	2022-09-02	2022-09-03	2022-09-04	2022-09-05	2022-09-06	2022-09-07	2022-09-08	2022-09-09	2022-09-10	2022-09-11	2022-09-12	2022-09-13	2022-09-14	2022-09-15	2022-09-16	2022-09-17	2022-09-18
Money from 5+ different senders into one account within 5 days (fan-in) `tp_ffiec_fan_in_5_senders_5d` Finds one account that collects money from many people, as a collection or mule account does.	175 / 2.3%	229 / 4.4%	66 / 13.8%	112 / 12.5%	232 / 8.7%	97 / 12.4%	61 / 6.6%	88 / 4.5%	302 / 4.0%	198 / 5.1%	9 / 100.0%	8 / no data	4 / no data	7 / no data	0 / no data	0 / no data	0 / no data	0 / no data
Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h` Finds an account that collects several small payments and passes most of the money on at once.	1,715 / 0.7%	5,788 / 0.1%	1,406 / 0.2%	52 / 2.1%	150 / 4.4%	264 / 1.8%	267 / 3.5%	269 / 5.4%	4,468 / 0.3%	1,466 / 0.6%	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data
Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d` Finds one sender spreading money to many receivers in a short time.	5,078 / 0.4%	6,540 / 0.4%	1,859 / 0.6%	1,867 / 0.8%	4,735 / 0.3%	4,675 / 0.5%	4,598 / 0.5%	4,550 / 0.6%	5,499 / 0.6%	1,827 / 1.2%	19 / 70.0%	6 / no data	3 / no data	2 / no data	0 / no data	0 / no data	0 / no data	0 / no data
Single payment above 9,000 USD `tp_u21_large_txn_9k` Flags any one large payment for a closer look.	2,182 / 0.8%	2,216 / 2.1%	432 / 12.6%	439 / 6.4%	1,172 / 3.5%	1,142 / 4.1%	1,135 / 3.9%	1,172 / 3.4%	1,610 / 3.3%	457 / 12.7%	31 / 75.0%	22 / no data	15 / no data	9 / no data	1 / no data	3 / no data	4 / no data	0 / no data
Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d` Finds an account that receives a large sum and quickly passes nearly all of it to other people.	1,221 / 0.6%	3,928 / 0.3%	1,727 / 0.6%	1,356 / 0.9%	2,157 / 0.4%	249 / 5.1%	339 / 3.0%	405 / 4.5%	2,743 / 0.7%	1,339 / 1.2%	22 / 66.7%	7 / no data	6 / no data	3 / no data	0 / no data	0 / no data	0 / no data	0 / no data
10+ mid-size payments in 5 days, over 20,000 USD in total `tp_u21_stats_10tx_1k3k_5d` Finds a burst of many similar mid-size payments that add up to a large total.	28 / 3.7%	95 / 1.1%	36 / 5.6%	57 / 3.5%	167 / 2.4%	248 / 2.1%	300 / 2.5%	321 / 1.0%	374 / 0.3%	142 / 3.9%	0 / no data	3 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data
20+ small payments in 5 days, over 20,000 USD in total `tp_u21_stats_20tx_0_1k_5d` Finds many small payments that together move a large sum.	0 / no data	0 / no data	0 / no data	6 / 0.0%	19 / 0.0%	33 / 0.0%	42 / 0.0%	86 / 2.6%	117 / 0.0%	45 / 0.0%	1 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data
Repeated payments just under 10,000 USD (structuring) `tp_u21_structuring_9k_10k_5d` Finds payments kept just below a reporting limit to avoid a report.	49 / 0.0%	92 / 0.0%	24 / 0.0%	26 / 0.0%	65 / 2.3%	63 / 3.6%	65 / 3.6%	64 / 0.0%	80 / 7.4%	25 / 0.0%	0 / no data	0 / no data	1 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data
Transfer above 500 USD `tp_u21_transfer_over_500` Flags every transfer over a low fixed amount, so analysts see most mid-size transfers.	5,504 / 1.0%	6,073 / 1.4%	1,476 / 4.7%	1,528 / 4.8%	3,838 / 2.6%	3,768 / 2.7%	3,761 / 2.3%	3,840 / 2.7%	5,046 / 2.1%	1,689 / 5.7%	59 / 76.2%	44 / no data	29 / no data	18 / no data	3 / no data	3 / no data	5 / no data	1 / no data

RULE	2022-09-01	2022-09-02	2022-09-03	2022-09-04	2022-09-05	2022-09-06	2022-09-07	2022-09-08	2022-09-09	2022-09-10	2022-09-11	2022-09-12	2022-09-13	2022-09-14	2022-09-15	2022-09-16	2022-09-17	2022-09-18
More than 2 wire transfers in 7 days `tp_u21_wire_count_gt2_7d` Finds a sender who uses wire transfers unusually often.	3 / 0.0%	33 / 0.0%	40 / 0.0%	40 / 0.0%	98 / 0.0%	98 / 0.0%	98 / 0.0%	98 / 0.0%	105 / 0.0%	40 / 0.0%	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data
Wire transfers above 4,999 USD in total within 7 days `tp_u21_wire_total_gt4999_7d` Finds a sender who moves a large total by wire in one week.	54 / 0.0%	86 / 0.0%	23 / 0.0%	25 / 0.0%	54 / 0.0%	55 / 0.0%	57 / 0.0%	57 / 0.0%	69 / 0.0%	25 / 0.0%	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data	0 / no data

What changed since the previous report

No previous report was given, so this report is treated as the first one. There is nothing to compare with yet. The next run can compare with this one: give it this folder with --previous.

Overlaps between rules

RULE A	RULE B	JACCARD	TRANSACTIONS HIT BY BOTH
Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d`	Transfer above 500 USD `tp_u21_transfer_over_500`	0.49	25,731
More than 2 wire transfers in 7 days `tp_u21_wire_count_gt2_7d`	Wire transfers above 4,999 USD in total within 7 days `tp_u21_wire_total_gt4999_7d`	0.49	382
Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h`	Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d`	0.38	8,706
Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h`	Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d`	0.35	14,842
Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d`	Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d`	0.34	14,408
Single payment above 9,000 USD `tp_u21_large_txn_9k`	Transfer above 500 USD `tp_u21_transfer_over_500`	0.33	12,042
Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h`	Transfer above 500 USD `tp_u21_transfer_over_500`	0.25	10,367
Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d`	Transfer above 500 USD `tp_u21_transfer_over_500`	0.24	9,949
Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d`	Single payment above 9,000 USD `tp_u21_large_txn_9k`	0.18	8,170
Single payment above 9,000 USD `tp_u21_large_txn_9k`	Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d`	0.14	3,470
Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h`	Single payment above 9,000 USD `tp_u21_large_txn_9k`	0.14	3,478
Single payment above 9,000 USD `tp_u21_large_txn_9k`	Repeated payments just under 10,000 USD (structuring) `tp_u21_structuring_9k_10k_5d`	0.05	554
Money from 5+ different senders into one account within 5 days (fan-in) `tp_ffiec_fan_in_5_senders_5d`	Transfer above 500 USD `tp_u21_transfer_over_500`	0.03	1,131
10+ mid-size payments in 5 days, over 20,000 USD in total `tp_u21_stats_10tx_1k3k_5d`	Transfer above 500 USD `tp_u21_transfer_over_500`	0.03	1,025
Repeated payments just under 10,000 USD (structuring) `tp_u21_structuring_9k_10k_5d`	Wire transfers above 4,999 USD in total within 7 days `tp_u21_wire_total_gt4999_7d`	0.02	25

Rules that never fired

RULE	INPUT FIELDS	STATUS
Large payment on an account less than 30 days old `tp_ffiec_new_account_large_30d` Finds big money movement on a newly opened account.	amount, account_age_days	Input absent: the transactions file has no account_age_days
Repeated large round-number transfers `tp_ffiec_round_amounts` Finds a sender who keeps sending large, round amounts (a common money-laundering sign).	ts, sender_id, receiver_id, amount	Input present; the rule never fired
Dormant account suddenly moves more than 5,000 USD `tp_u21_dormant_100d_5k` Finds an account that was quiet for months and then starts moving money, as when a taken-over or sold account is put to use.	ts, sender_id, receiver_id, amount	Input present; the rule never fired

RULE	INPUT FIELDS	STATUS
Spending in the last 3 days doubles the monthly norm `tp_u21_hist_deviation_3d_31d` Finds a sender whose recent outgoing volume jumps far above their own usual level.	ts, sender_id, receiver_id, amount	Input present; the rule never fired

Proposals

No written effectiveness threshold was given. The retire line is the fraud rate of all payments with a known outcome.

Effects are backtests on past data, not forecasts.

01 Retire rule Money sent to 5+ different recipients within 5 days (fan-out): 0.5% of its 39,145 alerts with a known outcome were fraud

Reference `REC-a9097de7`. Quote this reference in your change record.

Retire the rule | Confidence: medium | Priority: 62.17

Rules

- Money sent to 5+ different recipients within 5 days (fan-out) `tp_u21_fan_out_5_benef_5d`
  Finds one sender spreading money to many receivers in a short time.

Expected effect (backtest on past data): 7,624 fewer alerts, 40 caught fraud cases lost, 36,403.20 USD saved (estimate).

Evidence

- Rule Money sent to 5+ different recipients within 5 days (fan-out) fired 41,258 times. 39,145 alerts have a known outcome; 211 were fraud (0.5%).
- The line is the fraud rate of all payments with a known outcome, 1.7% (948 of 56,056).
- On 7,624 payments only this rule fired. 40 of them were fraud that no other rule caught. 0 are too recent to judge.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,093 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 20 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review) and UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel) come from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review)
- UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel)
- UK-FCA-02 (Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice)
- US-FFIEC-01 (Tune and validate monitoring; justify each threshold)
- US-NYDFS-01 (Analyse scenarios, rules and thresholds on an ongoing basis)

02 Retire rule More than 2 wire transfers in 7 days: 0.0% of its 528 alerts with a known outcome were fraud

Reference `REC-0e97fd0f`. Quote this reference in your change record.

Retire the rule | Confidence: high | Priority: 60.08

Rules

- More than 2 wire transfers in 7 days `tp_u21_wire_count_gt2_7d`
  Finds a sender who uses wire transfers unusually often.

Expected effect (backtest on past data): 132 fewer alerts, 0 caught fraud cases lost, 633.60 USD saved (estimate).

Evidence

- Rule More than 2 wire transfers in 7 days fired 653 times. 528 alerts have a known outcome; 0 were fraud (0.0%).
- The line is the fraud rate of all payments with a known outcome, 1.7% (948 of 56,056).
- On 132 payments only this rule fired. 0 of them were fraud that no other rule caught. 0 are too recent to judge.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 125 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review) and UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel) come from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review)
- UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel)
- UK-FCA-02 (Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice)
- US-FFIEC-01 (Tune and validate monitoring; justify each threshold)
- US-NYDFS-01 (Analyse scenarios, rules and thresholds on an ongoing basis)

03 Retire rule 20+ small payments in 5 days, over 20,000 USD in total: 0.6% of its 324 alerts with a known outcome were fraud

Reference `REC-8623ab86`. Quote this reference in your change record.

Retire the rule | Confidence: high | Priority: 60.02

Rules

- 20+ small payments in 5 days, over 20,000 USD in total `tp_u21_stats_20tx_0_1k_5d`
  Finds many small payments that together move a large sum.

Expected effect (backtest on past data): 29 fewer alerts, 0 caught fraud cases lost, 139.20 USD saved (estimate).

Evidence

- Rule 20+ small payments in 5 days, over 20,000 USD in total fired 349 times. 324 alerts have a known outcome; 2 were fraud (0.6%).
- The line is the fraud rate of all payments with a known outcome, 1.7% (948 of 56,056).
- On 29 payments only this rule fired. 0 of them were fraud that no other rule caught. 0 are too recent to judge.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 24 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 1 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review) and UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel) come from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review)
- UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel)
- UK-FCA-02 (Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice)
- US-FFIEC-01 (Tune and validate monitoring; justify each threshold)
- US-NYDFS-01 (Analyse scenarios, rules and thresholds on an ongoing basis)

04 Retire rule Money in, then almost all of it sent on within 3 days (layering): 0.9% of its 13,477 alerts with a known outcome were fraud

Reference `REC-5f92ad0d`. Quote this reference in your change record.

Retire the rule | Confidence: medium | Priority: 60.01

Rules

- Money in, then almost all of it sent on within 3 days (layering) `tp_u21_layering_10k_90pct_3d`
  Finds an account that receives a large sum and quickly passes nearly all of it to other people.

Expected effect (backtest on past data): 109 fewer alerts, 1 caught fraud cases lost, 518.40 USD saved (estimate).

Evidence

- Rule Money in, then almost all of it sent on within 3 days (layering) fired 15,502 times. 13,477 alerts have a known outcome; 119 were fraud (0.9%).
- The line is the fraud rate of all payments with a known outcome, 1.7% (948 of 56,056).
- On 109 payments only this rule fired. 1 of them were fraud that no other rule caught. 0 are too recent to judge.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 1,999 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 26 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review) and UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel) come from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review)
- UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel)
- UK-FCA-02 (Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice)
- US-FFIEC-01 (Tune and validate monitoring; justify each threshold)
- US-NYDFS-01 (Analyse scenarios, rules and thresholds on an ongoing basis)

05 Retire rule Wire transfers above 4,999 USD in total within 7 days: 0.0% of its 368 alerts with a known outcome were fraud

Reference `REC-c96ac8db`. Quote this reference in your change record.

Retire the rule | Confidence: high | Priority: 60.0

Rules

- Wire transfers above 4,999 USD in total within 7 days `tp_u21_wire_total_gt4999_7d`
  Finds a sender who moves a large total by wire in one week.

Expected effect (backtest on past data): 2 fewer alerts, 0 caught fraud cases lost, 9.60 USD saved (estimate).

Evidence

- Rule Wire transfers above 4,999 USD in total within 7 days fired 505 times. 368 alerts have a known outcome; 0 were fraud (0.0%).
- The line is the fraud rate of all payments with a known outcome, 1.7% (948 of 56,056).
- On 2 payments only this rule fired. 0 of them were fraud that no other rule caught. 0 are too recent to judge.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 137 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review) and UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel) come from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review)
- UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel)
- UK-FCA-02 (Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice)
- US-FFIEC-01 (Tune and validate monitoring; justify each threshold)
- US-NYDFS-01 (Analyse scenarios, rules and thresholds on an ongoing basis)

06 Retire rule Many small payments in, then sent out within a day: 0.5% of its 13,871 alerts with a known outcome were fraud

Reference `REC-be451688`. Quote this reference in your change record.

Retire the rule | Confidence: medium | Priority: 59.97

Rules

- Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h`
  Finds an account that collects several small payments and passes most of the money on at once.

Expected effect (backtest on past data): 142 fewer alerts, 2 caught fraud cases lost, 672.00 USD saved (estimate).

Evidence

- Rule Many small payments in, then sent out within a day fired 15,845 times. 13,871 alerts have a known outcome; 66 were fraud (0.5%).
- The line is the fraud rate of all payments with a known outcome, 1.7% (948 of 56,056).
- On 142 payments only this rule fired. 2 of them were fraud that no other rule caught. 0 are too recent to judge.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 1,974 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review) and UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel) come from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-04 (Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review)
- UA-NBU-05 (Record a review decision for every rule: keep, adjust or cancel)
- UK-FCA-02 (Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice)
- US-FFIEC-01 (Tune and validate monitoring; justify each threshold)
- US-NYDFS-01 (Analyse scenarios, rules and thresholds on an ongoing basis)

07 Add a rule for: Gambling winnings arrive with no deposits, then card transfers follow

Reference `REC-446cbd14`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 50.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, mcc, operation_type.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S07 (Gambling winnings arrive with no deposits, then card transfers follow) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S07 (Gambling winnings arrive with no deposits, then card transfers follow)

08 Add a rule for: Large loans are taken and repaid again and again

Reference `REC-ba91d001`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 50.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, operation_type, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S05 (Large loans are taken and repaid again and again) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S05 (Large loans are taken and repaid again and again)

09 Add a rule for: One type of operation makes up an unusual share of a user's activity

Reference `REC-5aaedf3e`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 50.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, operation_type, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S02 (One type of operation makes up an unusual share of a user's activity) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S02 (One type of operation makes up an unusual share of a user's activity)

10 Add a rule for: Payment purposes do not fit the merchant's category code

Reference `REC-fb8e4691`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 50.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: mcc, payment_purpose.
- None of the 15 rules in your catalogue matches this typology by name.
- It cannot be covered on this data: the transactions file has no category-code or no payment-purpose column (see UA-NBU51-01 (The acquirer passes payee (merchant) name and category code to the issuer. Check that these fields are filled in your data. Most time-relevant item: the deadline is about 20.11.2026)).
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S11 (Payment purposes do not fit the merchant's category code) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S11 (Payment purposes do not fit the merchant's category code)
- UA-NBU51-01 (The acquirer passes payee (merchant) name and category code to the issuer. Check that these fields are filled in your data. Most time-relevant item: the deadline is about 20.11.2026)

11 Add a rule for: Regular transfers to a personal account look like business activity

Reference `REC-0ed6eeef`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 50.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: account_type, counterparty_id, ts, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S08 (Regular transfers to a personal account look like business activity) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S08 (Regular transfers to a personal account look like business activity)

12 Add a rule for: A large first payment to a payee never paid before

Reference `REC-cb3579dc`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: payer_id, payee_id, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- UK-FINANCE
- UK-PSR

13 Add a rule for: A new merchant's volume is far above similar merchants, then the merchant closes

Reference `REC-aa6aa855`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: merchant_id, mcc, merchant_onboarded_at, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S09 (A new merchant's volume is far above similar merchants, then the merchant closes) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S09 (A new merchant's volume is far above similar merchants, then the merchant closes)

14 Add a rule for: Activity at hours unusual for the customer

Reference `REC-bae797f8`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, ts.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- NBU-DRAFT

15 Add a rule for: An older customer suddenly sends a large amount to a new payee

Reference `REC-9a8e640b`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_age, payee_id, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- FINCEN

16 Add a rule for: Contacts, device, apps, IMEI, operating system or network address change often

Reference `REC-5bdeada7`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, device_id, ip, contact_changed_at.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S12 (Contacts, device, apps, IMEI, operating system or network address change often) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S12 (Contacts, device, apps, IMEI, operating system or network address change often)

17 Add a rule for: Credits from many different banks into one account

Reference `REC-e2af60b6`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: payee_id, payer_bank.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- FIU-UA
- FINCEN

18 Add a rule for: Many senders' accounts share one beneficiary

Reference `REC-8380b3b9`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: payer_id, payee_id.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- WOWYRD-SPIKE
- FINCEN

19 Add a rule for: Merchant account inflows mirror its outflows (transit)

Reference `REC-503ead70`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: merchant_id, direction, amount.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S10 (Merchant account inflows mirror its outflows (transit)) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S10 (Merchant account inflows mirror its outflows (transit))

20 Add a rule for: One device fingerprint is used by unrelated users

Reference `REC-265cee82`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: device_id, customer_id.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S13 (One device fingerprint is used by unrelated users) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S13 (One device fingerprint is used by unrelated users)

21 Add a rule for: One user holds many more accounts or cards than similar users

Reference `REC-8cf723d6`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, account_id.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S01 (One user holds many more accounts or cards than similar users) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S01 (One user holds many more accounts or cards than similar users)

22 Add a rule for: The payee name does not match and the payment still goes

Reference `REC-87ecb24a`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: name_check_result.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- UK-PSR
- EU-PSR

23 Add a rule for: The payment reference mentions investment, crypto or a 'safe account'

Reference `REC-19d324eb`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: payment_purpose.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- UK-FINANCE

24 Add a rule for: Transfers to or from high-risk jurisdictions

Reference `REC-9b484507`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: counterparty_country.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.

Sources:

- FATF-REF
- FFIEC-APPF

25 Add a rule for: Two operations are too far apart to travel between in the time

Reference `REC-6d6b4334`. Quote this reference in your change record.

Add a missing fraud type | Confidence: medium | Priority: 30.0

Rules: none.

Expected effect: no effect estimate for this proposal.

Evidence

- Needs these data fields: customer_id, geo_location, ts.
- None of the 15 rules in your catalogue matches this typology by name.
- Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.

Caveats

- Selective labels: 2,131 alerts were on declined payments. Their outcome is unknown, so they are left out of precision and of fraud caught.
- Label maturity: 143 alerts are newer than the 7-day label delay. They are not counted as false alarms.
- Short history: the data covers 1 calendar month(s). Trends need at least 6.
- Synthetic data: the transactions, labels and unit costs are demo values, not a client's data.
- UA-NBU-S14 (Two operations are too far apart to travel between in the time) is a sign from an NBU draft resolution. It is a draft, not law.

Sources:

- UA-NBU-S14 (Two operations are too far apart to travel between in the time)

Your tools: what each one adds

Demo: the tool names and the tool map are made up. The rules are the demo's own rules.

Each rule belongs to one tool, from your tools.csv. Rules that are not in the map are grouped as "Not assigned". An alert's cost is shared equally among the tools that fired on it, so the tool costs add up to the total false-alarm cost. Catch rate = caught / all mature fraud with a known outcome (948 cases).

TOOL	RULES	ALERTS	CAUGHT	CATCH RATE	FALSE ALARMS	PRECISION	FALSE-ALARM COST (ESTIMATE)	ONLY THIS TOOL CAUGHT
Transaction monitoring (example)	7	43,792	287	30.3%	41,342	0.7%	121,748.27 USD	50
In-house rules (example)	2	36,685	837	88.3%	33,595	2.4%	93,887.87 USD	508
AML monitoring (example)	2	17,421	166	17.5%	15,252	1.1%	34,253.47 USD	7

Overlap between tools

CAUGHT BY ↓, ALSO CAUGHT BY →	TRANSACTION MONITORING (EXAMPLE)	IN-HOUSE RULES (EXAMPLE)	AML MONITORING (EXAMPLE)
Transaction monitoring (example)	–	77.4% (222)	18.1% (52)
In-house rules (example)	26.5% (222)	–	17.2% (144)
AML monitoring (example)	31.3% (52)	86.7% (144)	–

Each cell: the share of the row tool's caught fraud that the column tool also caught, with the count. A tool with fewer than 10 caught cases shows "too few to compare".

Fraud types per tool

FRAUD TYPE	TRANSACTION MONITORING (EXAMPLE)	IN-HOUSE RULES (EXAMPLE)	AML MONITORING (EXAMPLE)
no type given	129 (48 only)	329 (223 only)	65 (7 only)
BIPARTITE	8 (0 only)	47 (34 only)	8 (0 only)
CYCLE	10 (0 only)	41 (29 only)	5 (0 only)
FAN-IN	11 (0 only)	50 (20 only)	21 (0 only)
FAN-OUT	54 (2 only)	75 (21 only)	17 (0 only)
GATHER-SCATTER	24 (0 only)	81 (40 only)	19 (0 only)
RANDOM	8 (0 only)	40 (32 only)	2 (0 only)
SCATTER-GATHER	19 (0 only)	94 (56 only)	22 (0 only)
STACK	24 (0 only)	80 (53 only)	7 (0 only)

Caught fraud cases per fraud type in your labels; in brackets, the cases only this tool caught.

If one tool were off (backtest on past data, not a forecast)

TOOL	ALERTS REMOVED	CAUGHT FRAUD CASES LOST	COST SAVED (ESTIMATE)
Transaction monitoring (example)	10,868	50	51,918.40 USD
In-house rules (example)	7,562	508	33,451.20 USD
AML monitoring (example)	584	7	2,764.80 USD

Only the payments where this tool alone fired change. Cost uses the same either/or rule as the rest of the report: analyst time when not declined, friction when declined.

- Transaction monitoring (example) fired on 2,129 payments that were declined. Fraud stopped by a decline has no outcome, so this tool's real value may be higher than shown.
- In-house rules (example) fired on 2,112 payments that were declined. Fraud stopped by a decline has no outcome, so this tool's real value may be higher than shown.
- AML monitoring (example): on your history, almost all fraud this tool caught was also caught by your other tools (7 of 166 only by this tool). Before you change anything, check what this data cannot show (see the limits).
- AML monitoring (example) fired on 1,976 payments that were declined. Fraud stopped by a decline has no outcome, so this tool's real value may be higher than shown.
- Card scheme score (example): no hits in this export. It cannot be measured here.
- On this history, your current tools together caught most of the fraud: they missed 39 of 948 mature fraud cases with a known outcome. The proposals in this report are fine-tuning, not a gap.

Your tools over time

Two equal windows: the latest 3 days old enough for labels, against the 3 before. Each share is pooled over its window, so a small day weighs little. Precision is compared only with 30 or more alerts with a known outcome on each side, catch rate only with 30 or more fraud cases with a known outcome on each side. A change is flagged when it is 10 points or more and a two-proportion test gives |z| of 1.96 or more. The 10 points and the 1.96 are our defaults, not a regulatory number. The alert rate is shown, never flagged: a change in traffic moves it with no change in the tool.

TOOL	WINDOW	ALERTS	ALERTS PER 1,000 PAYMENTS	ALERTS WITH A KNOWN OUTCOME	CAUGHT	PRECISION	FRAUD CASES WITH A KNOWN OUTCOME	CATCH RATE
Transaction monitoring (example)	2022-09-05 to 2022-09-07	14,856	793.7	14,725	92	0.6%	320	28.7%
Transaction monitoring (example)	2022-09-08 to 2022-09-10	12,887	762.4	12,096	107	0.9%	323	33.1%
In-house rules (example)	2022-09-05 to 2022-09-07	11,367	607.3	11,242	285	2.5%	320	89.1%
In-house rules (example)	2022-09-08 to 2022-09-10	10,575	625.6	9,793	283	2.9%	323	87.6%
AML monitoring (example)	2022-09-05 to 2022-09-07	1,067	57.0	979	54	5.5%	320	16.9%
AML monitoring (example)	2022-09-08 to 2022-09-10	6,788	401.6	6,046	55	0.9%	323	17.0%

- Transaction monitoring (example): precision and catch rate did not change by more than our limit between 2022-09-05 to 2022-09-07 and 2022-09-08 to 2022-09-10.
- In-house rules (example): precision and catch rate did not change by more than our limit between 2022-09-05 to 2022-09-07 and 2022-09-08 to 2022-09-10.
- AML monitoring (example): precision and catch rate did not change by more than our limit between 2022-09-05 to 2022-09-07 and 2022-09-08 to 2022-09-10.

Per day

TOOL	PERIOD	ALERTS	ALERTS PER 1,000 PAYMENTS	PRECISION	CATCH RATE
Transaction monitoring (example)	2022-09-05	4,968	789.1	0.5%	21.6%
Transaction monitoring (example)	2022-09-06	4,957	796.9	0.7%	30.4%
Transaction monitoring (example)	2022-09-07	4,931	795.2	0.7%	35.1%
Transaction monitoring (example)	2022-09-08	4,924	783.2	0.9%	36.1%
Transaction monitoring (example)	2022-09-09	5,971	757.3	0.7%	35.5%
Transaction monitoring (example)	2022-09-10	1,992	729.4	1.4%	26.6%
In-house rules (example)	2022-09-05	3,838	609.6	2.6%	87.4%
In-house rules (example)	2022-09-06	3,768	605.8	2.7%	90.2%
In-house rules (example)	2022-09-07	3,761	606.5	2.3%	89.7%
In-house rules (example)	2022-09-08	3,840	610.8	2.7%	85.7%
In-house rules (example)	2022-09-09	5,046	639.9	2.1%	87.3%
In-house rules (example)	2022-09-10	1,689	618.5	5.7%	90.4%
AML monitoring (example)	2022-09-05	378	60.0	7.1%	23.4%
AML monitoring (example)	2022-09-06	361	58.0	4.9%	14.3%
AML monitoring (example)	2022-09-07	328	52.9	4.2%	12.4%
AML monitoring (example)	2022-09-08	357	56.8	5.1%	13.4%
AML monitoring (example)	2022-09-09	4,769	604.8	0.5%	20.0%
AML monitoring (example)	2022-09-10	1,662	608.6	1.2%	18.1%

A day with fewer than 30 alerts with a known outcome shows "too few" for its precision. No flag comes from a single day.

What this data cannot show

1. A tool whose score or decision is not in your export cannot be measured here. Access to a tool is not use of it: this report measures only what your hit log recorded.
2. A tool that acts before the hit log is written (for example a decline at authorization) is not visible here.
3. A declined payment has no outcome, so a tool that declines payments gets less credit than it may deserve.
4. "Tool off" assumes your other tools would have acted the same. They may not: one tool's decision can change what another tool sees.
5. A score band is one cut-off. The same tool at another cut-off can catch more or less.
6. Two windows of three periods show a change, not its cause. A change in the tool's set-up, in your traffic or in your labels can each move the figures. A window counts periods that hold data, not calendar periods: a gap in your export makes a window span more time, and the table per period shows it.

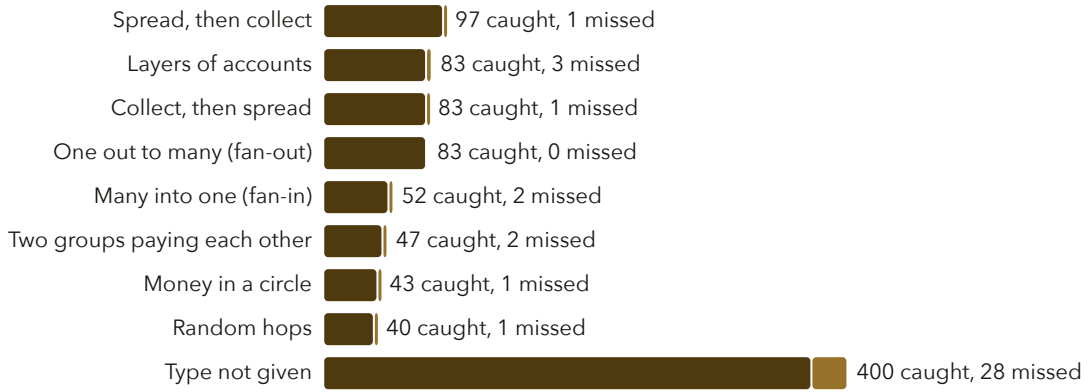
> For internal use. Check your vendor contracts before you share tool-level numbers outside your firm.

Below-the-line sample (AML rules)

No rule file was given, so there is no below-the-line sample. Give a rule file and mark your AML rules with "kind": "aml": Download an example rule file (JSON, with a note on every key; replace its example consent line before you use it).

Coverage by fraud type

Fraud types present in your labels



LABELLED FRAUD CASES PER TYPE. BLUE: A RULE FIRED ON THE PAYMENT. ORANGE: NO RULE FIRED. SOURCE: LABELS FILE AND RULE-HIT LOG, LABELS KNOWN BY THE CUT-OFF.

FRAUD TYPE	LABELLED CASES	CAUGHT	MISSED	LIBRARY TYPES IT MATCHES	YOUR RULES' COVERAGE	WOWYRD
Spread, then collect	98	97	1	Money comes in and leaves fast, little balance stays (UA-NBU-S06), Most of an incoming amount leaves again within hours (OR-02)	Covered	WoWyrd rule available: Money leaves soon after it arrives `rapid_pass_through`
Layers of accounts	86	83	3	none	Covered	WoWyrd rule: planned
Collect, then spread	84	83	1	Money comes in and leaves fast, little balance stays (UA-NBU-S06), Most of an incoming amount leaves again within hours (OR-02), Many small credits, then one large debit (OR-13)	Covered	WoWyrd rule available: Money leaves soon after it arrives `rapid_pass_through`; Many small credits, then one large payout `many_small_credits_then_large_payout`
One out to many (fan-out)	83	83	0	One payer sends to far more payees than similar payers (UA-NBU-S15), One account pays many new beneficiaries (OR-07)	Covered	WoWyrd rule available: One account pays many different payees `account_many_payees`
Many into one (fan-in)	54	52	2	Many payers send to one payee, far more than for similar payees (UA-NBU-S16), Many different senders pay one account within a short time (OR-01)	Covered	WoWyrd rule available: Many senders pay one account `inbound_sender_fan_in`; One payee shared by several customers `beneficiary_reuse`
Two groups paying each other	49	47	2	none	Covered	WoWyrd rule: planned
Money in a circle	44	43	1	Money goes round in a circle between accounts within days (OR-11)	Covered	WoWyrd rule: planned
Random hops	41	40	1	none	Covered	WoWyrd rule: planned

FRAUD TYPE	LABELLED CASES	CAUGHT	MISSED	LIBRARY TYPES IT MATCHES	YOUR RULES' COVERAGE	WOWYRD
Type not given	428	400	28	none	Unknown	WoWyrd rule: planned

Not in this dataset, so it cannot be measured here

Your labels hold no case of these types, so this data cannot show whether your rules catch them. This is not a gap in your rules. The rules column lists catalogue rules whose names match the type.

LIBRARY TYPE	ID	YOUR RULES WHOSE NAMES MATCH	SOURCES	WOWYRD
One user holds many more accounts or cards than similar users	UA–NBU–S01	none	UA-NBU-S01	WoWyrd rule: planned
One type of operation makes up an unusual share of a user's activity	UA–NBU–S02	none	UA-NBU-S02	WoWyrd rule available: One type of operation dominates an account `operation_type_concentration`
Many operations of one type in a short time, incoming or outgoing	UA–NBU–S03	Money from 5+ different senders into one account within 5 days (fan-in) `tp_ffiec_fan_in_5_senders_5d`	UA-NBU-S03	WoWyrd rule available: Many requests from one account in an hour, then a payout `payout_velocity_1h`; A burst of operations of one type `same_operation_type_burst`
Balance stays low although large amounts pass through	UA–NBU–S04	Many small payments in, then sent out within a day `tp_ffiec_small_in_rapid_out_24h`	UA-NBU-S04	WoWyrd rule available: Large amounts pass through an account that keeps a low balance `low_balance_high_turnover`
Large loans are taken and repaid again and again	UA–NBU–S05	none	UA-NBU-S05	WoWyrd rule available: Large loans taken and repaid again and again `loan_issue_repayment_churn`
Gambling winnings arrive with no deposits, then card transfers follow	UA–NBU–S07	none	UA-NBU-S07	WoWyrd rule available: Gambling winnings with no gambling deposits `gambling_winnings_without_deposits`
Regular transfers to a personal account look like business activity	UA–NBU–S08	none	UA-NBU-S08	WoWyrd rule available: A personal account paid by many payers `personal_account_business_activity`
A new merchant's volume is far above similar merchants, then the merchant closes	UA–NBU–S09	none	UA-NBU-S09	WoWyrd rule available: A merchant with little history suddenly busy `low_history_merchant_spike`
Merchant account inflows mirror its outflows (transit)	UA–NBU–S10	none	UA-NBU-S10	WoWyrd rule available: A business account pays out almost all it receives `business_account_transit`
Payment purposes do not fit the merchant's category code	UA–NBU–S11	none	UA-NBU-S11	WoWyrd rule available: Payment purpose does not fit the merchant's business `payment_purpose_atypical_for_mcc`; Card payment to a person without category or purpose `acquiring_to_person_missing_data`

LIBRARY TYPE	ID	YOUR RULES WHOSE NAMES MATCH	SOURCES	WOWYRD
Contacts, device, apps, IMEI, operating system or network address change often	UA–NBU–S12	none	UA-NBU-S12	WoWyrd rule available: Payout right after an email or phone change `contact_change_to_payout`; One session from several network addresses `session_multiple_ips`; One account used from many devices `account_many_devices`
One device fingerprint is used by unrelated users	UA–NBU–S13	none	UA-NBU-S13	WoWyrd rule available: One device used by several customers `multi_account_device`
Two operations are too far apart to travel between in the time	UA–NBU–S14	none	UA-NBU-S14	WoWyrd rule available: Locations too far apart for the time between them `impossible_travel`
A new account gets large or many credits soon after opening	OR–03	Large payment on an account less than 30 days old `tp_ffiec_new_account_large_30d`	UNIT21, UK-FINANCE	WoWyrd rule available: A new account receives a large credit `new_account_large_incoming_credit`; A new account paid by several people `new_account_inbound_fan_in`
A dormant account suddenly moves large amounts	OR–04	Dormant account suddenly moves more than 5,000 USD `tp_u21_dormant_100d_5k`	FFIEC-APPF	WoWyrd rule: planned
Repeated amounts just under a reporting or limit threshold	OR–05	10+ mid-size payments in 5 days, over 20,000 USD in total `tp_u21_stats_10tx_1k3k_5d`, 20+ small payments in 5 days, over 20,000 USD in total `tp_u21_stats_20tx_0_1k_5d`, Repeated payments just under 10,000 USD (structuring) `tp_u21_structuring_9k_10k_5d`	FFIEC-APPF	WoWyrd rule available: Payments just under a limit `just_below_threshold_payment`; Many small payments from one account add up to a large sum `amount_structuring_account`; Many small payments to one payee add up to a large sum `amount_structuring_beneficiary`
Repeated round amounts with no business reason	OR–06	Repeated large round-number transfers `tp_ffiec_round_amounts`	FFIEC-APPF	WoWyrd rule available: Several payments in large round amounts `repeated_round_amounts`
Outgoing payments per hour above the customer's usual level	OR–08	Spending in the last 3 days doubles the monthly norm `tp_u21_hist_deviation_3d_31d`	UNIT21, EBA-GL-2021-02	WoWyrd rule available: More payments in an hour than the customer usually makes `high_customer_velocity_1h`; Many requests from one account in an hour, then a payout `payout_velocity_1h`
A large first payment to a payee never paid before	OR–09	none	UK-FINANCE, UK-PSR	WoWyrd rule available: A large payment to a payee added just before `new_payee_high_amount`
Many senders' accounts share one beneficiary	OR–10	none	WOWYRD-SPIKE, FINCEN	WoWyrd rule available: One payee shared by several customers `beneficiary_reuse`
An amount far above the customer's own history	OR–12	Spending in the last 3 days doubles the monthly norm `tp_u21_hist_deviation_3d_31d`	EBA-GL-2021-02, NBU-DRAFT	WoWyrd rule available: A payment far above the customer's usual amount `amount_far_above_customer_average`
Credits from many different banks into one account	OR–14	none	FIU-UA, FINCEN	WoWyrd rule available: Credits from many different banks into one account `inbound_from_many_banks`
Transfers to or from high-risk jurisdictions	OR–15	none	FATF-REF, FFIEC-APPF	WoWyrd rule available: A payment to or from a high-risk country `high_risk_jurisdiction_counterparty`
Cash withdrawn right after a credit arrives	OR–16	Spending in the last 3 days doubles the monthly norm `tp_u21_hist_deviation_3d_31d`	FINCEN, FIU-UA	WoWyrd rule available: Cash taken out soon after money arrives `cash_withdrawal_after_credit`

LIBRARY TYPE	ID	YOUR RULES WHOSE NAMES MATCH	SOURCES	WOWYRD
The payee name does not match and the payment still goes	OR–17	none	UK-PSR, EU-PSR	WoWyrd rule available: Paid although the payee name did not match `payee_name_mismatch_paid`
The payment reference mentions investment, crypto or a 'safe account'	OR–18	none	UK-FINANCE	WoWyrd rule available: The payment reference uses common scam wording `payment_reference_scam_wording`
An older customer suddenly sends a large amount to a new payee	OR–19	none	FINCEN	WoWyrd rule available: An older customer sends a large amount to a new payee `older_customer_new_payee_large`
Activity at hours unusual for the customer	OR–20	none	NBU-DRAFT	WoWyrd rule available: Activity at an hour unusual for the customer `unusual_hour_for_customer`

New in our reference set since your last report

Our reference set: version v0.7.0, published 2026-11-18 (built into this collector).

This is the first report with a record of our reference set. The next report lists what is new since this one.

Incoming payments and money-mule signs

Incoming payments not measured: your transactions file has no direction column (for example direction, with values such as in and out).

Requirements changed since the last review

Your rules are mapped to current requirements. We flag when a new requirement affects them. We follow official publications of regulators in Ukraine, the EU, the UK and the US.

> **Not legal advice. This report maps your rules to requirements, in our own short wording. It is not legal advice. You decide how you comply.**

Requirements library read on 2026-11-11. No change file was given for this run, so no changed requirement is listed here.

Requirements still open since the previous report

No previous report was given, so this report is treated as the first one. There is nothing to compare with yet. The next run can compare with this one: give it this folder with --previous.

Requirements that showed a gap are followed up only when the two reports compare.

Not legal advice. Your compliance team decides how a requirement applies to you. Public cases show how regulators have treated the same kind of gap; they do not predict an outcome for you.

Regulatory checks by regulator

> **Not legal advice. This report maps your rules to requirements, in our own short wording. It is not legal advice. You decide how you comply.**

Regulatory statuses as of 2026-11-11 (library date). Check them again before you rely on this report.

Checks are grouped by the regulator that sets the requirement. Each row gives the requirement ID, our own short wording of it, the result on your files, and the source's status on the date shown. Our wording is a summary, not the regulator's text.

Checks per NBU requirements

Rows citing the NBU draft of 17.07.2026 — draft, not in force: its text can change before adoption. Resolutions 51, 54 and 116 are in force. Bill 16013 is a Ukrainian bill, shown here with its status.

REQUIREMENT ID	NBU DRAFT PARAGRAPH	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
UA-NBU51-01	–	The acquirer passes payee (merchant) name and category code to the issuer. Check that these fields are filled in your data. Most time-relevant item: the deadline is about 20.11.2026.	Not measurable from these files	Your transactions file has no payee-name or category-code column. Add them to the export so this can be measured. Without them no rule can check payment purpose against category code.	Transactions file: 58,331 rows; columns checked: payee_name, merchant_name, recipient_name, receiver_name, beneficiary_name, mcc, merchant_category_code.	in force since 20.05.2026; 6 months to comply (about 20.11.2026)	2026-11-11	bank.gov.ua
UA-NBU-01	§66	Review every rule at least monthly by back-testing it. (NBU draft §66; library item UA-NBU-01.)	Gap	The data covers 1 calendar month(s), 2022-09-01 to 2022-09-18. A monthly back-test needs one run per month; a trend needs 6 months. This run splits the data by day into 18 periods.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua

REQUIREMENT ID	NBU DRAFT PARAGRAPH	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
UA-NBU-02	§60	Metric 1: compare how often each rule fired with how many payments were actually stopped. (NBU draft §60(1); library item UA-NBU-02.)	Partly met	Measured: 8.5%; no written threshold to compare against (§62). 11 rules fired 126,752 times; 10,835 of those hits were on stopped payments (8.5%). The per-rule table is in the technical report.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days. First rules: Money from 5+ different senders into one account within 5 days (fan-in) 1,588 hits, 8 stopped; Many small payments in, then sent out within a day 15,845 hits, 1,974 stopped; Money sent to 5+ different recipients within 5 days (fan-out) 41,258 hits, 2,095 stopped; Single payment above 9,000 USD 12,042 hits, 2,008 stopped; Money in, then almost all of it sent on within 3 days (layering) 15,502 hits, 2,001 stopped; 10+ mid-size payments in 5 days, over 20,000 USD in total 1,771 hits, 102 stopped; 20+ small payments in 5 days, over 20,000 USD in total 349 hits, 24 stopped; Repeated payments just under 10,000 USD (structuring) 554 hits, 247 stopped; Transfer above 500 USD 36,685 hits, 2,114 stopped; More than 2 wire transfers in 7 days 653 hits, 125 stopped.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua
UA-NBU-03	§60	Metric 2: share of fraud value that was prevented, out of all fraud value. (NBU draft §60(2); library item UA-NBU-03.)	Partly met	Measured: under 0.1%; no written threshold to compare against (§62). Fraud value stopped: under 0.1% (246,596.74 of 1,398,433,325.74 USD). Fraud value with any alert: 100.0% (1,398,421,750.73 USD). Whether reviewed alerts were stopped is not in the decision log.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days. 967 payments labelled fraud.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua
UA-NBU-04	§62	Set rule-effectiveness thresholds in writing. A rule under its threshold gets an immediate review. (NBU draft §62; library item UA-NBU-04.)	Gap	No written effectiveness threshold was given. As a pointer: 6 of 11 rules with at least 30 alerts with a known outcome catch fraud at or under the base fraud rate of 1.7%.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua
UA-NBU-05	§68–69	Record a review decision for every rule: keep, adjust or cancel. (NBU draft §68–69; library item UA-NBU-05.)	Partly met	No recorded decisions in your files. Recommended decisions: cancel 6, adjust 0, keep 5. 0 rules have fewer than 30 alerts with a known outcome, so no decision is recommended. The decision itself is yours to record.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua

REQUIREMENT ID	NBU DRAFT PARAGRAPH	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
UA-NBU-11	–	Have evidence ready for a supervisor: documents, rules, risk markers.	Partly met	This report maps each finding to a requirement ID and its status (20 requirements). Your written rules, risk markers and staff interviews stay with you.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua
UA-NBU51-02	–	Show the acquirer's full name before an online payment; receipts show payee, commission, purpose and category code.	Not measurable from these files	No acquiring payment was found (operation_type purchase, or a card channel). This checks the data in your export, not your payment page or your receipts. Showing the acquirer's full name before an online payment stays a checklist question.	Transactions file, 58,331 rows.	in force since 20.05.2026; 6 months to comply (about 20.11.2026)	2026-11-11	bank.gov.ua
UA-NBU-09	–	Reconcile payment operations every day.	Partly met	Days reviewed: 18 (2022-09-01 to 2022-09-18; UTC days). Days with no payments: 0. Payments with no row in the rule-hit log: 0. Rule-hit rows with no payment: 0. No ledger was given, so amounts were not reconciled. Give your settlement or ledger export with --ledger to reconcile them. This checks your exports. Whether your staff reconcile every day is a process question: answer it in the assessment checklist.	Transactions file and rule-hit log, by UTC day.	draft (NBU draft resolution on control of payment operations, published 2026-07-17; not law)	2026-11-11	bank.gov.ua
UA-NBU51-03	–	Acquiring for natural persons only for allowed categories, with the required data passed to the issuer.	Not measurable from these files	Checklist question. The files do not show this.	Answer in the assessment checklist.	in force since 20.05.2026; 6 months to comply (about 20.11.2026)	2026-11-11	bank.gov.ua
UA-NBU54-01	–	Non-bank providers that acquire payments need an authorisation; the sanctions pause has ended.	Not measurable from these files	Checklist question. The files do not show this.	Answer in the assessment checklist.	in force; grace period ended 02.09.2026	2026-11-11	bank.gov.ua

REQUIREMENT ID	NBU DRAFT PARAGRAPH	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
UA-NBU116-01	–	Remote verification of natural persons uses the updated procedure with credit-bureau data.	Not measurable from these files	Checklist question. The files do not show this.	Answer in the assessment checklist.	in force since 10.10.2026; 3 months to align internal procedures (about 10.01.2027)	2026-11-11	bank.gov.ua
UA-NBU116-02	–	Reports to the State Financial Monitoring Service go only through the e-cabinet, with numbered registers.	Not measurable from these files	Checklist question. The files do not show this.	Answer in the assessment checklist.	in force since 10.10.2026; 3 months to align internal procedures (about 10.01.2027)	2026-11-11	bank.gov.ua
UA-16013-01	–	Passing cards, account access or payment data to fraudsters becomes a crime. Detect and restrict accounts used as drops.	Not measurable from these files	Checklist question. The files do not show this.	Answer in the assessment checklist.	adopted by the Rada 28.10.2026; presidential signature not confirmed	2026-11-11	itd.rada.gov.ua

Checks per EU requirements

REQUIREMENT ID	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
EU-PSR-05	When a payee name check fails because of the payee's provider, that provider compensates the payer's provider. Keep evidence of the name check on received transfers.	Not measurable from these files	Your transactions file has no payee name-check result. Add it to measure received transfers with a name mismatch or no check.	Columns looked for: name_check_result, payee_check_result, cop_result, vop_result, name_check.	agreed, not adopted (EU Payment Services Regulation; adoption expected by 12.2026)	2026-11-11	oeil.europarl.europa.eu

Checks per UK requirements

REQUIREMENT ID	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
UK-PSR-03	A claim may carry an excess of up to 100 GBP, never for vulnerable customers.	Not measurable from these files	Checklist question. The files do not show this.	Answer in the assessment checklist.	in force	2026-11-11	psr.org.uk
UK-FCA-02	Test and review rules; a poorly calibrated rule set the firm cannot explain is poor practice.	Partly met	6 rules or thresholds look poorly calibrated on your data (retire 6); 4 catalogue rules never fired. Every proposal gives a plain-word reason.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	guidance in force	2026-11-11	fca.org.uk

Checks per US requirements (FinCEN, NYDFS, FFIEC, Nacha, Federal Reserve)

FinCEN and Nacha items are not checked from your files in this run; the rows below are NYDFS and FFIEC items.

REQUIREMENT ID	OUR WORDING	RESULT	FINDING	EVIDENCE	SOURCE STATUS	AS OF	OFFICIAL SOURCE
US–NYDFS–01	Analyse scenarios, rules and thresholds on an ongoing basis.	Partly met	This run analyses 11 rules over 18 periods by day (1 calendar month(s)). Ongoing analysis means running it every month.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	in force	2026-11-11	dfs.ny.gov
US–NYDFS–02	Test rules before and after they go live.	Not measurable from these files	The files do not show when each rule went live, so before-and-after tests cannot be checked. A replay of a new rule on past data can serve as the test before go-live.	Rule catalogue has no go-live date.	in force	2026-11-11	dfs.ny.gov
US–FFIEC–01	Tune and validate monitoring; justify each threshold.	Partly met	6 tuning proposals (retire 6). Each states its evidence on past data.	Source: your decision log and fraud labels, 2022-09-01 to 2022-09-18, labels known by 2022-09-18, label delay 7 days.	guidance	2026-11-11	bsaaml.ffiec.gov

Other checks

No other checks in this run.

Run record

The files, code and parameters of this run, so it can be repeated.

ITEM	VALUE	SOURCE
Input file: catalogue	1ba1a64a09faa99994d49f08f3234ed3049002776677a9c0bf586127f873e484	SHA-256
Input file: costs	30f762bad066b62dfcb20d236f03995ea3edf0f809c04e934cdb957f3f4de2c4	SHA-256
Input file: decisions	4f93135d000b15749c574990d5b6d621308ff9be94c4d041d7554e31c022430c	SHA-256
Input file: labels	5300406887cc1c2d31e72f5a5ae5e77ff197767e26a261670539900ccf30716c	SHA-256
Input file: transactions	85182da32f2e942304c498041a2eb2ba71989d5c6bc63d6f8737aa49b780d121	SHA-256
Collector version	v0.7.0-11-gba7bd7b03d5199dd42d1810a9e4294cde08c03a4	git commit
Generation time	2026-11-20 10:02 UTC	run time
cutoff	2022-09-18T09:55:00+00:00	client
label delay days	7	client
min cell	10	default
min join coverage	0.95	default
period	day	client
threshold	not given	not given
tokens for all rules	False	default
Regulatory library	2026-11-11	statuses as of this date
Requirement change file	not given	--changes
Tool map	b97e0d95e40f37467efa81e487c6763cfb06c7ff85447e629c887cfeebceed6f	SHA-256; tools.csv; 5 rows; 4 tools
Ledger export	not given	--ledger
Reference set source	built into this collector	
Reference set version	v0.7.0	published 2026-11-18
Reference set file	e96e792983d3748de554ba3b49a15291c8d4110f1778795555caff0fa81ee119	SHA-256

Rule glossary

Each rule in this review, in plain words: what it detects, the fraud type it guards against, when it fires, where it comes from, and the data it needs.

10+ mid-size payments in 5 days, over 20,000 USD in total `Rule ID: tp_u21_stats_10tx_1k3k_5d`

What it detects	Finds a burst of many similar mid-size payments that add up to a large total.
Fraud type it guards against	Money laundering (many similar payments); structuring
When it fires	10 or more payments in 5 days, each 1,000 to 3,000 USD on average, more than 20,000 USD in total.
Source	Unit21 open rule library
Data fields it needs	ts, sender_id, receiver_id, amount

20+ small payments in 5 days, over 20,000 USD in total `Rule ID: tp_u21_stats_20tx_0_1k_5d`

What it detects	Finds many small payments that together move a large sum.
Fraud type it guards against	Money laundering (smurfing); structuring
When it fires	20 or more payments in 5 days, up to 1,000 USD each on average, more than 20,000 USD in total.
Source	Unit21 open rule library
Data fields it needs	ts, sender_id, receiver_id, amount

Dormant account suddenly moves more than 5,000 USD `Rule ID: tp_u21_dormant_100d_5k`

What it detects	Finds an account that was quiet for months and then starts moving money, as when a taken-over or sold account is put to use.
Fraud type it guards against	Account takeover; mule account
When it fires	No activity for more than 100 days, then more than 5,000 USD in or out within 5 days.
Source	Unit21 open rule library; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	ts, sender_id, receiver_id, amount

Large payment on an account less than 30 days old `Rule ID: tp_ffiec_new_account_large_30d`

What it detects	Finds big money movement on a newly opened account.
Fraud type it guards against	New-account fraud; mule account
When it fires	A payment of at least 10,000 USD where the sender or receiver account is 30 days old or less.
Source	FFIEC BSA/AML Examination Manual, Appendix F red flag; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	amount, account_age_days

Many small payments in, then sent out within a day `Rule ID: tp_ffiec_small_in_rapid_out_24h`

What it detects	Finds an account that collects several small payments and passes most of the money on at once.
Fraud type it guards against	Mule account; money laundering (pass-through)
When it fires	3 or more incoming payments under 3,000 USD within 24 hours, then at least 80% of their total goes out within the same 24 hours.
Source	FFIEC BSA/AML Examination Manual, Appendix F red flag; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	ts, sender_id, receiver_id, amount

Money from 5+ different senders into one account within 5 days (fan-in) `Rule ID: tp_ffiec_fan_in_5_senders_5d`

What it detects	Finds one account that collects money from many people, as a collection or mule account does.
Fraud type it guards against	Mule account; scam proceeds collection
When it fires	One receiver gets money from 5 or more different senders within 5 days.
Source	FFIEC BSA/AML Examination Manual, Appendix F red flag; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	ts, sender_id, receiver_id

Money in, then almost all of it sent on within 3 days (layering) `Rule ID: tp_u21_layering_10k_90pct_3d`

What it detects	Finds an account that receives a large sum and quickly passes nearly all of it to other people.
Fraud type it guards against	Money laundering (layering); mule account
When it fires	At least 10,000 USD comes in, and at least 90% of it goes out to other receivers within 3 days.
Source	Unit21 open rule library
Data fields it needs	ts, sender_id, receiver_id, amount

Money sent to 5+ different recipients within 5 days (fan-out) `Rule ID: tp_u21_fan_out_5_benef_5d`

What it detects	Finds one sender spreading money to many receivers in a short time.
Fraud type it guards against	Money laundering (dispersal); mule network
When it fires	One sender pays 5 or more different receivers within 5 days.
Source	Unit21 open rule library
Data fields it needs	ts, sender_id, receiver_id

More than 2 wire transfers in 7 days `Rule ID: tp_u21_wire_count_gt2_7d`

What it detects	Finds a sender who uses wire transfers unusually often.
Fraud type it guards against	Money laundering through wires
When it fires	One sender makes more than 2 wire transfers within 7 days.
Source	Unit21 open rule library
Data fields it needs	ts, sender_id, channel

Repeated large round-number transfers `Rule ID: tp_ffiec_round_amounts`

What it detects	Finds a sender who keeps sending large, round amounts (a common money-laundering sign).
Fraud type it guards against	Money laundering; payments with no real purchase behind them
When it fires	One sender makes 3 or more transfers of at least 1,000 USD in whole hundreds within 30 days.
Source	FFIEC BSA/AML Examination Manual, Appendix F red flag; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	ts, sender_id, receiver_id, amount

Repeated payments just under 10,000 USD (structuring) `Rule ID: tp_u21_structuring_9k_10k_5d`

What it detects	Finds payments kept just below a reporting limit to avoid a report.
Fraud type it guards against	Structuring (avoiding the reporting threshold)
When it fires	One sender makes 2 or more payments between 9,000 and 10,000 USD within 5 days.
Source	Unit21 open rule library; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	ts, sender_id, receiver_id, amount

Single payment above 9,000 USD `Rule ID: tp_u21_large_txn_9k`

What it detects	Flags any one large payment for a closer look.
Fraud type it guards against	Large-value money laundering
When it fires	One payment is more than 9,000 USD.
Source	Unit21 open rule library
Data fields it needs	amount

Spending in the last 3 days doubles the monthly norm `Rule ID: tp_u21_hist_deviation_3d_31d`

What it detects	Finds a sender whose recent outgoing volume jumps far above their own usual level.
Fraud type it guards against	Account takeover; sudden cash-out
When it fires	The daily average sent over the last 3 days is more than twice the daily average over the last 31 days.
Source	Unit21 open rule library; the source gives no exact numbers, so WoWyrd chose some of them
Data fields it needs	ts, sender_id, receiver_id, amount

Transfer above 500 USD `Rule ID: tp_u21_transfer_over_500`

What it detects	Flags every transfer over a low fixed amount, so analysts see most mid-size transfers.
Fraud type it guards against	General transfer monitoring (no specific fraud type)
When it fires	One transfer is more than 500 USD.
Source	Unit21 open rule library
Data fields it needs	amount

Wire transfers above 4,999 USD in total within 7 days `Rule ID: tp_u21_wire_total_gt4999_7d`

What it detects	Finds a sender who moves a large total by wire in one week.
Fraud type it guards against	Money laundering through wires
When it fires	One sender's wire transfers add up to more than 4,999 USD within 7 days.
Source	Unit21 open rule library
Data fields it needs	ts, sender_id, amount, channel

Fraud types in plain words

Each fraud type named in your labels, in one sentence. The word in small grey text is the label as your file gives it.

Collect, then spread `GATHER-SCATTER`	Money from many accounts is collected in one, then sent on to many others.
Layers of accounts `STACK`	Money passes through several layers of accounts in a row, so its origin is hard to trace.
Many into one (fan-in) `FAN-IN`	Many accounts send money into one account, which collects it.
Money in a circle `CYCLE`	Money passes along a chain of accounts and comes back to the account it left.
One out to many (fan-out) `FAN-OUT`	One account sends money out to many accounts, so it spreads thin.
Random hops `RANDOM`	Money hops between accounts along an irregular path with no fixed shape.
Spread, then collect `SCATTER-GATHER`	Money is split across many accounts, then collected again in one account.
Two groups paying each other `BIPARTITE`	One group of accounts pays a second group, with many payments crossing between them.
Type not given `no type`	Fraud labels in your file that do not say which kind of fraud it was.