The Digital Finance Analyst's Canvas

Three Questions for Every Business Model

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Digital Finance: Intensive Course

You Have $1M to Invest. Coinbase: Yes or No?

In Day 5A we mapped Coinbase's revenue anatomy:

- 2023: $3.1B revenue, 75% from retail transaction fees
- 2022: revenue fell 75% when crypto volume collapsed
- Expenses track headcount, not market cycles – losses in downturns

You have $1 000 000 to deploy. Three minutes, decide:

1. Would you buy Coinbase equity today?
2. What three facts would change your answer?
3. What is the single biggest risk you need to price in?

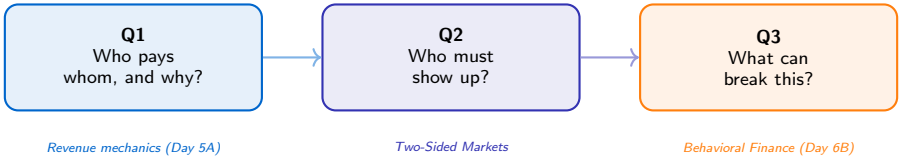
The Analyst's Gap

Strong brand.
Volatile revenue.
Regulatory exposure.

You need a framework to answer this fast.

The three questions of the Analyst's Canvas give you a structured, repeatable answer to exactly this kind of dilemma.

The Analyst's Canvas: Three Questions



Each question maps to a theory. Each theory gives you the vocabulary to spot fragility *before* it becomes a crisis.

Apply them in order: revenue first, network second, failure modes third.

Q1 without Q2 misses platform risk. Q2 without Q3 misses behavioral collapse. All three together is the complete picture.

Q1: Who Pays Whom, and Why?

Apply Q1 to Coinbase – in pairs (3 min):

1. Who is the paying customer? (Not "users" – who actually transfers money to Coinbase?)
2. What triggers the payment? Is it a trade, a balance, or a service?
3. Are there customers who pay nothing? Who subsidises them?

Data point: Coinbase had 110 million verified users in 2023. Estimate: what fraction paid a fee that year?

Revenue archetypes

Spread: buy/sell margin
Fee: per transaction
Float: yield on reserves
Data: sell analytics
Subscription: SaaS
Regulatory: compliance fees

TCE link: Q1 asks which transaction cost Coinbase eliminates and whether the customer values paying to eliminate it.

Coinbase Revenue: What the Numbers Reveal

Who actually pays:

- **Retail traders**: 0.5–1.5% per trade (the primary revenue engine)
- **Institutional clients**: spread on large OTC trades
- **Token issuers**: listing and staking fees
- **All customers with idle cash**: float income on reserves

Key number: $3.1B revenue in 2023, 75% from retail fees. Most of those 110M verified users paid nothing, ever.

2023 Revenue Mix

Retail fees: ≈75%
Institutional: ≈10%
Staking / other: ≈15%

Q1 verdict:
One paying segment
funds the entire platform.

Revenue concentration risk: 75% from retail fees means a crypto bear market is not a dip – it is an existential event.

Why Retail Traders Pay: The TCE Answer

Coinbase charges 0.5–1.5%. A DEX charges 0.3%. Why do retail users pay more?

Transaction Cost Economics:

- **Search cost eliminated**: no need to find counterparties
- **Verification cost eliminated**: KYC done, assets are real
- **Custody provided**: no private key management required
- **Fiat on-ramp**: direct bank link, no stablecoin needed

The fee is not for the trade. It is for everything that makes the trade *safe for a non-expert*.

TCE Premium

DEX fee: $\approx 0.3\%$
Coinbase fee: $\approx 1.0\%$

Difference: $\approx 0.7\%$

Price of trust and convenience.

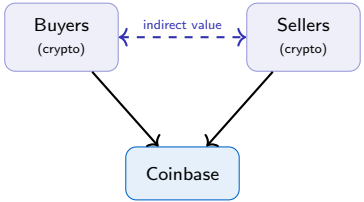
TCE predicts: as users become crypto-native and self-custodial, they migrate to DEXes. Coinbase's moat is beginner trust, not price.

Q2: Who Must Show Up for This to Work?

Apply Q2 to Coinbase – in pairs (3 min):

1. Which groups are *both* required for Coinbase to function?
2. Is there a cold-start problem? How would you solve it if starting from scratch today?
3. Which single participant, if removed, shuts down the business tomorrow?

Hint: Think beyond buyers and sellers. Who must approve before the first dollar flows?



Two-sided markets: each side only comes if the other side is already there. Coinbase solved this with regulatory credibility, not with price.

Coinbase's Four Critical Dependencies

Who must show up:

- **Banks**: fiat on/off ramp – dollars in, dollars out
- **Regulators**: money-transmitter licences in all 50 US states
- **Token projects**: listings create new trading activity
- **Liquidity providers**: institutional market makers keep spreads tight

Remove any one:

- Banks withdraw: users cannot deposit or withdraw
- Regulator revokes: US operations stop overnight
- Liquidity dries up: spreads widen, retail traders leave

Critical path

Bank access
Regulatory licence
Market liquidity
Token ecosystem

Q2 verdict:
Four stakeholders, any one can shut it down.

Platform risk: Coinbase is a four-sided market (traders, banks, regulators, token issuers), not just a two-sided exchange.

How Coinbase Solved the Cold-Start Problem

The chicken-and-egg:
Traders need liquidity to come. Liquidity providers need traders first. Regulators need a compliant entity before approving. Who moves first?

Coinbase's sequence (2012–2015):

1. Obtained money-transmitter licences *before* volume
2. Partnered with one US bank (Silvergate) for fiat rails
3. Offered custody first – institutions came for custody, not trading
4. Retail volume followed institutional credibility

Compliance was the subsidy that seeded the platform.

Cold-Start Sequence

Step 1: Licence
Step 2: Bank partner
Step 3: Custody product
Step 4: Retail follows

Credibility before volume.

Network effects compound after seeding: more traders attract more listings, which attract more traders. The compliance moat keeps imitators out.

Q3: What Can Break This?

Apply Q3 to Coinbase – in pairs (3 min):

1. What assumption must hold for Q1 and Q2 to keep working?
2. What was Coinbase's worst quarter in the last five years? Why?
3. What behavioral bias would cause customers to leave suddenly, even if nothing at Coinbase itself changed?

Hint: Stress the answer to Q1. What happens to revenue when the primary payer stops paying?

Failure taxonomy

Revenue: payer leaves
Network: one side collapses
Regulatory: licence revoked
Behavioral: run on the system
Tech: critical exploit

Q3 is both prospective (use before investing) and retrospective (use after failure to explain what happened). This afternoon: retrospective.

Coinbase Fragility: The Evidence Already Exists

Known failure modes, already triggered:

- **Revenue cliff**: 2022 crypto bear market – revenue fell 75% in 12 months
- **Regulatory**: SEC sued Coinbase in 2023 over tokens as unregistered securities
- **Competition**: Binance undercut fees globally (until its own SEC case)
- **Contagion**: FTX collapse triggered a Coinbase withdrawal surge in Nov 2022

Q3 verdict: Procyclical model – amplifies bull markets and bleeds in bear markets.

Fragility timeline

2022: revenue -75%
Staff cut $-1{,}100$

2023: revenue $+168\%$
SEC lawsuit filed

2024: record revenues
Cycle repeating

Volatility coupling = fragility

A business whose revenue swings 75% with asset prices is not fragile by accident – it is fragile by design. Q3 predicted this.

Behavioral Amplification: Why Crashes Hit Coinbase Twice

Crypto price falls 40%. What happens next?

1. **Herding**: retail holders sell together, prices fall further
2. **Fear-driven withdrawal**: users move assets off exchange (accelerated by FTX memory)
3. **Volume collapses**: no directional trading – no fees
4. **Revenue falls faster than the asset price itself**

Authority bias in reverse:
FTX was "audited" and "regulated." When it failed, trust in all exchanges fell – including Coinbase, which was solvent.

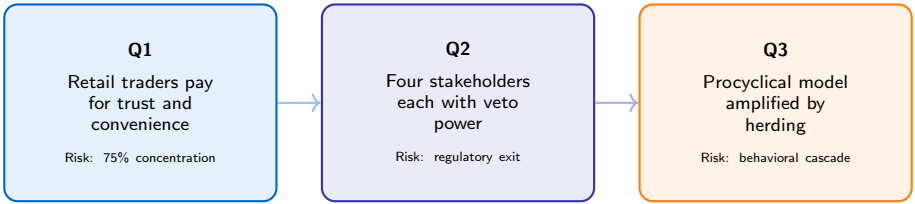
Behavioral cascade

Price drop
→ herding (sell)
→ withdrawal surge
→ volume collapse
→ revenue cliff

Revenue falls faster
than the asset price.

Behavioral Finance predicts non-linear revenue collapse: loss aversion plus herding plus information cascades compound each other.

Coinbase: The Three-Question Verdict



Your $1M decision: Coinbase has a sound model with a durable moat (compliance), but a structurally fragile revenue base. You are buying crypto cycle exposure, not just an exchange.

The Canvas maps risk – it does not say buy or sell. Whether the risk is priced in requires market data on top of this framework.

The Canvas Works on Any Digital Finance Business

What you just did with Coinbase:

- Identified revenue concentration in one paying segment
- Mapped the platform's dependency graph (four stakeholders)
- Predicted the behavioral failure mode before it happened

The same three questions apply to:

- A cross-border payment platform (today, solo practice)
- An algorithmic stablecoin (Terra-LUNA: Q3 answer was obvious in hindsight)
- A crypto exchange with a sister trading desk (FTX: Q2 showed who held the keys)
- A regional bank with a bond portfolio (SVB: Q3 flagged duration mismatch)

Portable Framework

Due diligence
Investment thesis
Crisis post-mortem
Regulatory review

Same three questions.
Every context.

A framework that works on one company is a tool. A framework that works on every company is a career asset.

What the Canvas Predicted Before the Collapse

Q3 applied retroactively:

- **Terra-LUNA**: Q1 showed no real paying customer; revenue model required infinite growth to sustain the peg
- **FTX**: Q2 showed Alameda Research held positions on both sides of every trade
- **SVB**: Q3 flagged duration mismatch – long-duration bonds funded by short-duration deposits
- **Knight Capital**: Q3 showed a single technical failure point with no kill switch

Day 6B: This Afternoon

Four failures.
Same three questions.
All Q3 signals
visible before collapse.

You will be the detective.

The Canvas is a risk map, not a prediction machine. Unaddressed Q3 signals raise collapse probability – they do not guarantee it.

Solo Practice: Apply All Three Questions (15 Minutes)

Your task: Apply the Analyst's Canvas to the cross-border payment company on your handout.

Work individually – write your answers first:

1. **Q1**: Who is the paying customer? What is the exact fee mechanism? Is there a cross-subsidy?
2. **Q2**: Who must show up in each payment corridor? What is the cold-start risk?
3. **Q3**: What is the single most likely failure mode? What behavioral dynamic could amplify it?

Time: 15 minutes

No discussion yet.
Write answers before the class debrief.

Writing first prevents anchoring to others.

Individual writing before discussion prevents anchoring – you get a genuine first-cut diagnosis before social influence takes over.

Wise: Context and Key Numbers

About Wise:

- Cross-border FX platform, founded 2011, listed 2021
- 160+ countries, 10+ million customers
- Revenue: £971M (FY2024), 50%+ gross margin

The model in one sentence:
Charge a transparent FX fee (0.4–1.0% plus a small fixed charge) instead of hiding a 3–5% spread the way banks do.

Compare your answers to what follows.

Wise vs Bank FX

Bank spread: 3–5%
Wise fee: 0.4–1.0%

Revenue strategy:
Transparency as product.

Float income on
£1B+ held in transit.

Wise's moat is information transparency: banks charge for opacity; Wise charges for honesty and earns loyalty through visible pricing.

Wise Q1 and Q2: Revenue and Platform

Q1: Who pays?

- **Senders** pay a transparent fee plus a small fixed charge
- Business accounts pay a monthly SaaS fee on top
- Float income on £1B+ held during transit

Q1 verdict: Revenue follows usage, not asset prices. No leverage, no cyclicality – the opposite of Coinbase.

Q2: Who shows up?

- **Senders** (individuals and SMEs, 160+ countries)
- **Recipients** (need a local bank account at destination)
- **Banking partners** in each corridor (settlement rails)
- **Regulators** in each jurisdiction (e-money licence)

Cold-start: build one corridor (UK→US) first, then replicate.

Wise's bilateral banking network is its defensible asset: replicating 40 currency corridors takes years, keeping fast-follower banks out.

Wise Q3: What Can Break This?

Known risks:

- **Regulatory**: e-money licence revocation in a key market
- **Competition**: banks and neobanks copying transparent pricing (Revolut, N26, ING)
- **FX risk**: rapid currency moves during the transit window
- **Banking partner**: one withdrawal closes a corridor entirely
- **Volume**: thin margins require very high throughput to be profitable

Q3 verdict: Robust model – no behavioral cascade risk, no asset price coupling. Main risk is margin compression.

Wise vs Coinbase

Revenue: usage-based vs cycle-dependent

Network: corridor-based vs exchange-based

Fragility: regulation vs market sentiment

Different Q3.

Very different risk.

Wise shows eliminating information asymmetry can be a durable advantage. The Canvas reveals why two fintech companies with similar sizes have very different risk profiles.