PIPELINE

The Data Engineering Card Game · Set 1 print-and-play rules

Objective and components

Two players race to score Query Points (QP) across exactly 10 rounds. Each needs a 40-card Backlog, a score tracker, and counters for Progress, Tech Debt, and Signal. Final score is QP minus Tech Debt. Ties go to fewer Failed queries, then more Sources.

Setup

Each player shuffles a 40-card deck and draws 5. Each may mulligan once: shuffle the hand back and draw 4. Choose the first player randomly. The first player skips Ingest on turn 1. The second player has a once-per-game Warm Cache that reduces one Query cost by {1}. Scores begin at 0.

Turn sequence

1 · Refresh. Ready engaged Sources and Engines. Remove one Progress from each Long-Running Query. Resolve completed queries and start-of-turn effects.

2 · Ingest. Draw one card. If the Backlog is empty, gain one Tech Debt instead.

3 · Build. In any order, connect up to one Source, deploy Engines, attach Upgrades and Constraints, play Tweaks and Incidents, and run Queries.

4 · Commit. Resolve end-of-turn effects and discard down to seven cards.

Data and costs

Engage a ready Source to add its printed Data. B = Batch, S = Stream, J = Semi-structured, U = Unstructured / AI, G = Governance. Numbered pips are generic and can be paid with any type. Data empties at the end of each step. A Source normally engages once per turn. Join costs list multiple required types.

Run a Query

1. Choose your Engine with an unused Concurrency slot and which is not Offline. Matching type Affinity reduces the Query Complexity by 1.

2. Pay the Query cost by engaging Sources.

3. Open a response window. Players may play Incidents and Instant cards, responding in turn. Resolve the last card played first.

4. If current Engine Compute meets current Query Complexity, score QP and apply card text; otherwise Fail: score 0, Archive the Query, and gain 1 Tech Debt. Paid Data stays spent.

5. Archive the successful Query unless it is Long-Running or Recurring.

Long-Running, Recurring, and game end

A Long-Running N Query enters its Engine with N Progress and holds a Concurrency slot each turn. At each Refresh, check Compute; if too low it Fails. If the Engine is Offline, it does not advance. Remove Progress; at zero it resolves and scores. A Recurring Query returns to hand at Commit after it resolves and cannot be rerun that turn. After the second player’s 10th turn, unfinished Long-Running Queries Fail without Tech Debt.

Keyword reference

Disconnected: Source cannot engage or ready.

Offline: Engine cannot run Queries; Long-Running Queries do not advance.

Can’t Fail: Ignores Compute checks and Fail effects, though QP may be reduced.

Throttle: Lowers Compute or Concurrency.

Instant: May be played in any response window, including an opponent's turn.

Cancel: Canceled card has no effect and is Archived.

Legendary: At most one copy per deck and one controlled with the same name.

Deck construction

Minimum 40 cards; at most 3 copies of a card except Basic Sources, and at most 1 of each Legendary. Recommended mix: 16 Sources, 5 Engines, 11 Queries, 4 Bottlenecks, 4 Optimizations. Set 1 has 200 unique cards.

Starter deck recipes

Real-Time Rush

Source: 002 ×6, 003 ×5, 009 ×2, 028 ×2, 012 ×1

Engine: 046 ×2, 048 ×1, 050 ×1, 051 ×1

Query: 087 ×2, 089 ×2, 097 ×2, 088 ×1, 092 ×1, 098 ×1, 100 ×1, 124 ×1

Bottleneck: 142 ×2, 134 ×1, 165 ×1

Optimization: 176 ×1, 183 ×1, 184 ×1, 194 ×1

Governed Warehouse

Source: 001 ×6, 005 ×5, 025 ×2, 026 ×2, 007 ×1

Engine: 043 ×2, 057 ×1, 058 ×1, 064 ×1

Query: 077 ×2, 079 ×2, 121 ×2, 078 ×1, 082 ×1, 085 ×1, 117 ×1, 119 ×1

Bottleneck: 136 ×1, 137 ×1, 138 ×1, 158 ×1

Optimization: 172 ×1, 174 ×1, 179 ×1, 189 ×1

AI Lab

Source: 004 ×6, 001 ×4, 020 ×2, 027 ×2, 019 ×1, 021 ×1

Engine: 053 ×2, 043 ×1, 055 ×1, 067 ×1

Query: 106 ×2, 107 ×2, 111 ×2, 077 ×1, 108 ×1, 109 ×1, 115 ×1, 125 ×1

Bottleneck: 149 ×2, 133 ×1, 148 ×1

Optimization: 185 ×2, 172 ×1, 186 ×1

Printing

Print at 100% scale on US Letter. Each card is 63 × 88 mm after cutting. A sheet holds nine cards. For backs, print the shared back sheet on the reverse, aligned and flipped according to your printer. Plain-paper cards can be sleeved with old playing cards.

Playtest notes

Track final QP and Tech Debt, the turn of each player's first Query, Failed queries, Long-Running starts and completions, and cards that felt unfair or unused. The design bible flags cards 129, 130, 147, and 200, plus first-player advantage, for particular attention.