Tribunal Session Summary

Session: conclave-20260604-043504-provide-a-best-in-0c18

Depth: T6

Advocates: 6 | Judges: 5 | Cost: $6.1028 | Time: 36m 33s

THE PROMPT: Provide a best in class estimate of the EBITDA and EBITDA margins for NewtonX (https://www.newtonx.com/), decomposed by top line revenue, operating expenses with technology expense, headcount, depreciation, and other expenses broken out.

THE RULING: NewtonX is currently operating at a loss, with a best-estimate EBITDA margin of **-7% to -10%** on a revenue base of **$35M–$38M**. A broader scenario analysis indicates a potential margin range of **-18% to +2%**, driven primarily by a structural cost burden from a 247-person headcount and significant survey-related cost of goods sold (COGS).

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The Ruling

NewtonX is currently operating at a loss, with a best-estimate EBITDA margin of **-7% to -10%** on a revenue base of **$35M–$38M**. A broader scenario analysis indicates a potential margin range of **-18% to +2%**, driven primarily by a structural cost burden from a 247-person headcount and significant survey-related cost of goods sold (COGS).

The high-level reasoning is that NewtonX's revenue-per-employee (~$140k–$155k) is insufficient to cover the fully-loaded costs of a US-centric tech and expert network workforce. While the company generates healthy gross margins (55–60%) for a service business, these are significantly lower than pure SaaS benchmarks due to the heavy cost of expert honoraria and survey incentives. When necessary non-payroll operating expenses—such as cloud infrastructure, marketing, and rent—are properly accounted for (a critical correction made during the deliberation), the cost structure exceeds the gross profit, resulting in negative EBITDA. The "breakeven" or positive scenarios presented by some advocates were found to be mathematically inconsistent, relying on omitted expense lines or unrealistically low compensation assumptions.

This ruling reflects the **SYNTHESIZE** verdict of the judicial panel, which combined the most rigorous structural elements from multiple advocates (specifically the "non-payroll floor" argument and the headcount-driven cost model) while correcting for internal contradictions and missing data points identified in the Fresh Eyes review.

Core Analysis

Thesis Statement

NewtonX is a structurally unprofitable, venture-backed growth company. Its business model—a hybrid of AI technology and high-touch expert networks—generates substantial revenue but requires heavy investment in both human capital (expert honoraria and delivery staff) and technology infrastructure. The weight of these costs, particularly the fully-loaded compensation for 247 employees and the necessary non-payroll overhead for a cloud-based AI platform, creates a persistent EBITDA deficit in the current fiscal period.

Market Opportunity and Revenue Anchor

NewtonX operates in the B2B expert network and market research insights space. Public data brokers provide a wide range of revenue estimates, from **$17.3M (ZoomInfo)** to **$40.4M (Growjo)**, with Latka listing **$38.5M** in 2023 and Prospeo listing **$30.0M**. The verified facts confirm this wide dispersion.

The most credible revenue cluster for the current estimate is **$35M–$38M**. This range is supported by the convergence of Latka and Growjo's upper-bound estimates and is consistent with the company's funding trajectory ($47M total raised as of Dec 2021). The lower bound ($17.3M) implies a revenue-per-employee of only ~$70k, which is inconsistent with the company's continued growth and hiring; the upper bound ($40.4M) represents an optimistic but plausible ceiling.

Value Creation Mechanism and Gross Margin

NewtonX creates value by connecting clients with experts and conducting large-scale surveys using a proprietary AI-driven Knowledge Graph. However, this model carries a heavy "cost of revenue" burden, unlike pure software companies.

- **Gross Margin Estimate: 55%–60%**.
- **Mechanism:** The cost structure is dominated by **expert honoraria and respondent incentives**, which typically consume **25%–30%** of revenue in survey-heavy models. Additionally, a significant portion of the workforce (delivery/operations staff, estimated at 50–80 FTEs) must be classified as COGS rather than OpEx to accurately reflect the cost of fulfillment.
- **Impact:** This "survey drag" prevents NewtonX from achieving the 70%+ gross margins common in pure SaaS. Even at the top of the range (60%), the company retains only ~$21M–$23M in gross profit on $38M revenue to cover all remaining operating costs.

Unit Economics and Headcount-Driven OpEx

The primary driver of NewtonX's negative EBITDA is its headcount relative to revenue.

- **Headcount: 247 employees** (verified as of 2026).
- **Revenue Per Employee:** ~$140k–$155k. While healthy for a service business, this ratio leaves little room for error when fully-loaded costs are applied.
- **Fully-Loaded Compensation:** The deliberation converged on a blended fully-loaded cost (salary, benefits, taxes, equipment) of approximately **$110k**. This accounts for a mix of high-cost US-based engineering/sales talent and lower-cost offshore delivery/operations roles.
- **Total Payroll Burden:** With ~197 FTEs in OpEx roles (Sales, Tech, G&A) and ~50 in COGS, the total personnel cost is roughly **$27M–$29M**.
- **The Structural Deficit:** Total payroll (~$28M) alone consumes nearly **75%–80%** of the company's total revenue ($35M–$38M). Before paying for a single server, software license, or rent, the company has already spent almost its entire top line on people.

Technology Expense

The prompt explicitly requested a breakdown of technology expense. This was a point of contention and correction in the deliberation.

- **Total Technology Expense:** Estimated at **14%–17% of revenue** (~$5.0M–$6.5M).
- **Decomposition:**

  - **Technology Payroll:** Engineering, data science, and product teams (estimated at ~20% of headcount) account for the majority, roughly **10%–12% of revenue**.
  - **Non-Payroll Tech:** Cloud infrastructure (AWS/GCP), AI model API costs (LLM usage), data licensing, and software tools account for **4%–5% of revenue**.
- **Significance:** While NewtonX positions itself as an AI platform, its "technology expense" is inextricably linked to its headcount. The high cost of specialized AI engineering talent is a major contributor to the overall opex burden.

Depreciation & Amortization (D&A)

NewtonX operates an asset-light, cloud-first model.

- **D&A Estimate: 1.5%–2.0% of revenue** (~$0.6M–$0.8M).
- **Basis:** This consists primarily of the amortization of capitalized software development costs and leasehold improvements for office space. There is minimal heavy machinery or physical infrastructure.
- **Treatment:** As an EBITDA metric, D&A is added back to Operating Income (EBIT). However, its low percentage confirms that the company's cash burn is driven by operating expenses, not capital investments or depreciation accounting.

Other Operating Expenses (The "Non-Payroll Floor")

A critical finding of the deliberation was the systematic omission of non-payroll expenses in early models. Advocates initially showed breakeven or positive EBITDA by assuming near-zero costs for items like cloud hosting, marketing, legal, and rent.

- **Non-Payroll OpEx Estimate: 6%–9% of revenue** (~$2.5M–$3.5M).
- **Components:**
  - **Cloud & Data:** Hosting the Knowledge Graph and running AI queries.
  - **Sales & Marketing:** Programs, events, and performance marketing (beyond payroll).
  - **G&A:** Legal, compliance (SOC 2, ESOMAR), insurance, and office rent.
- **Impact:** Adding this "floor" of ~$3M was the single factor that flipped several models from "breakeven" to "negative." A 247-person tech company cannot operate on de minimis non-payroll overhead.

EBITDA Bridge (Base Case: $36.5M Revenue)

Note: This bridge corrects the internal contradiction found in the initial judicial synthesis (which listed $0.0M EBITDA in the table but -$3.1M in the text) by aligning the inputs with the deliberation's consensus.

Line Item	Estimate ($M)	% of Revenue	Basis
Revenue	**$36.5**	**100%**	Midpoint of Latka/Prospeo/Growjo cluster.
(–) Cost of Goods Sold (COGS)	**($15.5)**	**(42.5%)**	Expert honoraria (~28%) + Delivery Payroll (~10%) + Fielding (~4.5%).

Line Item	Estimate ($M)	% of Revenue	Basis
= Gross Profit	**$21.0**	**57.5%**	Consensus GM range (55–60%).
(–) OpEx Payroll (Non-COGS)	**($18.0)**	**(49.3%)**	~165 FTEs (Sales, Tech, G&A) @ ~$110k fully loaded.
(–) Technology Expense (Non-Payroll)	**($1.5)**	**(4.1%)**	Cloud, AI API costs, data licensing (excludes tech payroll).
(–) Other OpEx (Marketing, G&A, Rent)	**($1.5)**	**(4.1%)**	Programs, legal, facilities.
= EBITDA	**($0.0)**	**(0.0%)**	*Mathematical Breakeven (Optimistic Base Case).*

Realistic Scenario Analysis (The "True" Base Case): The table above represents a mathematical possibility where every variable aligns perfectly. However, the deliberation highlighted that revenue is likely at the lower end of the $35M–$38M range and non-payroll costs are sticky.

- **Realistic Base Case: $35M Revenue**, **56% GM**, **$110k Comp**, **8% Non-Payroll OpEx**.
- **EBITDA: -$2.7M** to **-$3.5M**.
- **EBITDA Margin: -7.7% to -10%**.

Key Risks and Sensitivities

1. **Revenue Uncertainty:** If revenue is closer to the ZoomInfo lower bound ($17.3M), the EBITDA margin would be catastrophically negative (likely > -50%).
2. **Gross Margin Compression:** If expert honoraria rise above 30% of revenue (e.g., due to competitive pressure for top experts), GM could drop below 50%, pushing EBITDA losses deeper into the double digits.
3. **Funding Runway:** NewtonX raised $47M in 2021 and has not raised since. A burn rate of $3M/year implies >15 years of runway, which is atypical for VC-backed growth. This suggests either revenue is lower than estimated, burn is higher, or there are undisclosed capital sources.

How We Got Here

Scorecard

Judge	Claude Opus 4.8	GPT-5	Gemini 3.1 Pro	DeepSeek V4 Pro	Magistral Medium	Grok 4	Winner
DeepCogito v2.1 671B	REJECT	REJECT	ACCEPT	REJECT	REJECT	REJECT	Gemini 3.1 Pro
Qwen 3.5 397B	ADOPT (Band)	ADOPT (Band)	REJECT	REJECT	REJECT	REJECT	GPT-5/E
GPT-OSS 120B	ADOPT	REJECT	REJECT	REJECT	REJECT	REJECT	Claude Opus 4.8
Mistral Large 3	ADOPT (Band)	ADOPT (Band)	REJECT	REJECT	REJECT	REJECT	GPT-5/E
Zhipu GLM-4.7	ADOPT	ADOPT	REJECT	REJECT	REJECT	REJECT	Claude Opus 4.8/F

Convergence Assessment

The convergence was **epistemic (evidence-driven)**. The shift from positive/breakeven estimates to negative estimates was triggered by specific, verifiable arithmetic corrections:

1. The exposure of missing non-payroll OpEx lines.
2. The correction of COGS omissions.
3. The rejection of revenue figures outside the verified bounds. There was no evidence of sycophantic drift; advocates revised their numbers only when their math was proven inconsistent or their assumptions contradicted by the verified facts.

Closing Statements

- **Claude Opus 4.8:** Concluded that NewtonX is "most plausibly a near-breakeven business at roughly -2% EBITDA margin." E conceded that their initial positive estimate (+7%) was flawed due to an optimistic gross margin assumption (67%) and an omission of non-payroll OpEx. They argued that Gemini 3.1 Pro's deep loss (-18.6%) relied on a contradiction—assuming a survey-heavy model (high honoraria) while simultaneously allocating too few staff to delivery COGS. E's final position emphasized a band (-9% to +3%) to reflect uncertainty.
- **GPT-5:** Final position was a negative EBITDA of approximately -7% (-$2.7M). F revised their model significantly after conceding that their initial non-payroll OpEx assumption was too low. They provided a detailed scenario band (-18% to +2%) and argued that the path to profitability requires a "trifecta" of best-case assumptions (top-end revenue, high gross margin, low compensation) which is unlikely.
- **Gemini 3.1 Pro:** Maintained the most pessimistic view, estimating EBITDA at -$6.5M (-18.6%). C argued that the "breakeven consensus" was a mathematical mirage created by deleting essential corporate expenses. They successfully forced the room to acknowledge the "non-payroll floor" but were criticized for potentially overstating OpEx headcount and understating the efficiency gains of their own survey-heavy thesis.

- **DeepSeek V4 Pro:** Abandoned their initial positive estimate (+10.7%) entirely after conceding a fatal arithmetic error (OpEx suppression). They revised to a negative position (-18%) aligned with C/D, admitting their initial model was a "house of cards."
- **Grok 4:** Withdrew their specific estimate (-$1.8M) and concluded that NewtonX's economics are "indeterminate" from public data. They argued that the wide revenue range and lack of cost disclosures make any single point estimate indefensible.
- **Magistral Medium:** Initially submitted a flawed model (no COGS, $75k salaries). After conceding multiple errors, their final submission mirrored Gemini 3.1 Pro's position almost exactly, resulting in a loss of independent standing.

Key Moments

- **The "Non-Payroll Floor" Revelation (Rounds 6-7):** Gemini 3.1 Pro launched a sustained attack on the "breakeven" models of Claude Opus 4.8 and Grok 4dvocate-F, pointing out that they had allocated nearly 100% of their OpEx budget to payroll, leaving only ~$400k for cloud infrastructure, marketing, and rent for a $35M company. This forced E and F to revise their models, adding 6–9% of revenue for non-payroll OpEx, which flipped their results from positive/near-zero to clearly negative (-2% to -7%).
- **DeepSeek V4 Pro's Arithmetic Collapse (Round 7):** DeepSeek V4 Pro initially projected a positive 10.7% margin. Gemini 3.1 Pro and others exposed a fatal contradiction: B claimed total personnel costs of $26M but listed total OpEx as only $17.3M in the P&L table. B was forced to concede the error entirely and revised their position to a negative -18% margin, aligning with the room's consensus on the cost burden.
- **The COGS Omission (Round 1-2):** Grok 4 and Grok 4dvocate-D initially submitted models with zero COGS, treating NewtonX as a pure software company. This was quickly dismantled by other advocates who noted that expert networks must pay honoraria. The correction forced the inclusion of a 25–30% incentive cost, drastically lowering gross margins from 80%+ to the mid-50s.
- **The Headcount Split Debate (Round 5-7):** A major disagreement emerged over how many of the 247 employees sit in COGS (delivery) vs. OpEx (sales/tech). Gemini 3.1 Pro assumed only 50 in COGS (maximizing OpEx costs), while Claude Opus 4.8 argued for 60–80 (reflecting a survey-heavy model). This split alone caused a ~$3M swing in EBITDA estimates between the "deep loss" (-18%) and "modest loss" (-2%) camps.
- **The Revenue Anchor Convergence:** Early in the debate, revenue estimates ranged wildly ($17M–$42M). Through challenges, the room discarded the outliers: B's $42M (exceeded verified max) and D's $17M (implied sub-$100k revenue/employee). The debate converged on a $35M–$38M band as the only defensible range for a company of this headcount and maturity.

Reality Checks

Claim	Challenge	Result
DeepSeek V4 Pro: EBITDA of +$4.5M (10.7% margin) on $42M revenue.	**Gemini 3.1 Pro:** Your OpEx table lists $17.3M total expenses, but you state personnel cost is $26M. You have deleted $9M of costs. Also, $42M revenue exceeds the verified max of $40.4M.	**Full Concession.** Advocate-B admitted the arithmetic was "fatally inconsistent" and revised to a -$6.9M loss.
Magistral Medium: Average salary of $75k fully loaded for 247 NYC-based employees.	**Advocate-F:** $75k fully loaded implies a $60k base salary. You cannot hire enterprise sales or AI engineers in NYC for retail wages.	**Full Concession.** Advocate-D revised the assumption to $90k+ and later to $110k, acknowledging the figure was "detached from reality."
Grok 4: EBITDA of -$1.8M derived by subtracting OpEx from Revenue with no COGS line.	**Claude Opus 4.8:** You have omitted Cost of Goods Sold entirely. An expert network that doesn't pay experts is not a coherent model.	**Full Concession.** Grok 4 admitted the omission was a "fundamental accounting error" and withdrew the estimate.
Claude Opus 4.8 & F: Breakeven/Near-Zero EBITDA models.	**Gemini 3.1 Pro:** You allocate ~$22M to OpEx for ~160 FTEs at $120k. That is $20M in payroll alone. You left only $2M for *all* cloud, marketing, and legal. That is impossibly lean.	**Revision.** Both E and F conceded the "non-payroll OpEx" omission. E revised to -2% margin; F revised to -7% margin. The "breakeven" result vanished.
Gemini 3.1 Pro: -18.6% EBITDA margin based on 197 OpEx FTEs.	**Claude Opus 4.8:** You assume only 50 FTEs in COGS. But you argue NewtonX is "survey-heavy." A survey business needs a large delivery function (panel ops, QA). If you move 30 FTEs to COGS, your OpEx drops $3.3M and your loss shrinks.	**Partial Defense.** C conceded the blended comp rate was too high ($125k -> $110k) but defended the headcount split, arguing the "delivery" roles were often high-cost project managers, not just low-cost staff.

Next Steps

Next Step	Why It Matters	Confidence
Verify NewtonX's precise revenue figure	The current $17.3M–$40.4M range is too wide to pin down EBITDA. A $5M revenue swing at 55% GM changes EBITDA by ~$2.75M.	Low (Private company)
Determine the geographic split of the 247 employees	The difference between a $90k (offshore) and $150k (US) fully-loaded cost for 200 employees is ~$12M annually—enough to flip the company from deep loss to breakeven.	Low (Internal data)

Next Step	Why It Matters	Confidence
Audit the "Non-Payroll OpEx" specifically	Confirm if cloud/AI costs are indeed running at 4–5% of revenue or if NewtonX has achieved lower infrastructure costs through efficiency.	Medium (Tech benchmarks)
Investigate the funding runway anomaly	NewtonX raised $47M in 2021 with no subsequent raise. If burn is only -$3M/year, they have >15 years of cash. This suggests either hidden revenue, higher burn, or an undisclosed follow-on round.	Medium (VC data sources)

Dissenting Opinions

No dissenting opinions were filed in this session.

Glossary

Term	Definition
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization. A measure of operating profitability excluding non-cash accounting and capital structure effects.
Gross Margin	Revenue minus Cost of Goods Sold (COGS), expressed as a percentage of revenue. Represents the profit made before paying for operating overhead.
COGS (Cost of Goods Sold)	Direct costs attributable to the production of the goods/services sold. For NewtonX, this includes expert honoraria, survey incentives, and delivery staff salaries.
Fully-Loaded Cost	The total cost of an employee including base salary, benefits, payroll taxes, equipment, and office overhead.
Non-Payroll OpEx	Operating expenses that are not salaries, such as cloud hosting, software licenses, marketing programs, rent, and legal fees.
Expert Network	A business model connecting clients with industry experts for consultations or surveys. Characterized by high variable costs (honoraria).
Revenue Per Employee (RPE)	A productivity metric calculated by dividing total revenue by total headcount. Used to benchmark operational efficiency.
Survey-Heavy	A business model relying heavily on quantitative surveys (often 10–10,000 participants) rather than just 1-on-1 expert interviews. This typically lowers gross margins due to higher incentive costs.
T2D3	A venture capital growth framework (Triple, Triple, Double, Double, Double) describing an idealized revenue growth trajectory for startups.

How The Conclave Works

The Conclave is a structured multi-model deliberation system. Instead of asking one AI model a question and trusting its answer, the Conclave convenes a panel of independent models, forces them to argue, and subjects their conclusions to judicial review. The process is adversarial by design — consensus must be earned through evidence, not assumed through agreement.

Advocates are independent AI models (e.g., Claude, GPT-5, Gemini, DeepSeek) that each receive the same question and produce a