

Links That Work, Bets That Stack: A Critical Case Study of the ‘Muskonomiy’ as an Interlinked Venture Ecosystem and Its Lessons for Indonesian Creative Campuses

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Abstract

Business explainers on video now shape how students, founders and policymakers understand large technology ventures, yet they are rarely examined as arguments. This paper presents a qualitative critical case study of one such text, a 48-minute explainer published in October 2026 that maps the companies around Elon Musk, which it calls the “Muskonomiy”, and concludes that links between working capabilities add strength while chains of unfinished projects add risk. Using document analysis of the full time-stamped transcript, we built a coded inventory of 93 claim units, classifying each by type (fact, estimate, forecast, illustration or opinion), by attribution and by timestamp, and we re-computed the video’s arithmetic and checked its internal consistency. We then carried out a dependency-chain analysis of the ventures and the links between them. Two-thirds of the factual and quantitative claims are not attributed to any source in the video, and the figures for 2026 are reported here as stated in the video, without independent verification. Building on the video’s central thesis, we propose a Proven-Link versus Bet-on-Bet framework that grades each inter-venture link by maturity and each chain by its depth of unproven dependencies. The analysis supports the thesis where links connect operating businesses, but it shows that the video under-weights several risks: the gap between valuation and cash, concentrated voting control, flows between related companies, captive demand for a planned chip factory, the costs the orbital-computing arithmetic leaves out, and labour and safety costs. We translate the findings into a copy, adapt and avoid framework for Indonesian creative campuses, student startups and hexa-helix creative-economy partnerships.

Keywords: venture ecosystem; synergy; dependency risk; corporate governance; dual-class shares; related-party transactions; orbital computing; creative economy; student startups; hexa-helix; Indonesia

1. Introduction

1.1 A Video as a Text Worth Arguing With

Many students now meet the economics of technology ventures through long-form video before they meet it in a textbook. A well-made explainer can compress years of filings, interviews and news into an hour and offer a single, memorable idea that viewers carry into their own plans. That makes such videos influential, and it also makes them worth reading closely, in the way one would read a case study or a policy brief: as an argument with evidence, assumptions and omissions.

This paper examines one such text: “The Muskonomiy Explained: How Elon Musk’s Empire Really Works”, by Leo Cui, Ph.D., CFA, uploaded to YouTube on 2 October 2026 (<https://www.youtube.com/watch?v=Kh0JKfyx7bU>). The video runs 48 minutes 29 seconds and

maps the companies associated with Elon Musk: Tesla; SpaceX, which by the time of the video includes the AI lab xAI, the social network X and the coding product Cursor; the private Boring Company and Neuralink; and Terafab, a chip factory that Tesla and SpaceX are building together. Throughout this paper, a time in parentheses, such as (47:29), refers to the position in that video at which the cited statement begins. The video and its transcript are our primary source. As a non-journal source, the video is cited in the text and not in the reference list.

The video's central thesis is stated in its closing minutes. Where a working capability supports the next one, as a rocket supports Starlink, connecting the businesses clearly makes the group stronger; where several unfinished projects depend on each other arriving on time, the connections carry risk as well as possibility (47:29). The presenter then advises viewers to watch "which of those dashed lines turn solid" (48:01). The thesis is simple, testable and, in our reading, largely right. It is also incomplete in ways that matter for anyone who wants to learn from the case, and especially for those building ventures on a campus.

1.2 Why This Case Matters for Creative Campuses

The CreatiCampus series is concerned with ideas, creativity, the creative economy and campus innovation in Indonesia. A case about rockets, cars and AI data centres may seem far from that scope. We think it is close, for three reasons.

First, Indonesian creative campuses increasingly run portfolios of linked ventures, not single projects. A design studio feeds a fashion startup, which feeds an e-commerce channel, which feeds a content team; an incubator links student startups to lecturers, local government and investors. Studies of Indonesian incubators stress access to funding, experienced mentors, business networks and infrastructure [1], and studies of young founders identify market adaptability, financial management and mentorship as success factors [2], and research on platforms and digital entrepreneurship describes ecosystems in which actors create value through interaction [3,4]. The question the video asks of Musk's companies, whether connecting ventures adds strength or stacks risk, is the same question a campus should ask of its own portfolio.

Second, national policy is pushing in the same direction. The Creative Economy Master Plan 2026 to 2045, set by Presidential Regulation No. 37 of 2026, emphasises creative-economy data, talent, intellectual property and hexa-helix synergy among government, business, academia, communities, media and finance. The World Conference on Creative Economy, to be held in Jakarta on 21 to 23 October 2026 under the theme "Inclusively Creative: Collective Continuity", puts collaboration and continuity at the centre of the agenda. Hexa-helix synergy is a policy version of the video's "lines between the companies" (1:40). Knowing which lines strengthen an ecosystem and which merely chain hopes together is a practical policy skill.

Third, the Musk companies are among the most frequently cited role models in student entrepreneurship. Studies of digital leadership use Tesla as a case of technology-driven transformation [5], and founders' mindsets and leadership are routinely treated as determinants of startup success [2,6]. Role models are copied selectively. A careful reading can help students copy the right things.

1.3 Aim and Research Questions

The aim of this paper is to offer a critical case study of the "Muskonomy" as an interlinked venture ecosystem, built around the video's central thesis, and to add our own critical analysis rather than a summary. Four research questions guide it.

RQ1. What kinds of claims does the video make, how are they supported, and how far can they be checked from the video itself?

RQ2. Which links in the mapped ecosystem connect operating capabilities, and which form chains of unproven bets?

RQ3. Where is the video’s reasoning strong, where is it weak, and what does it leave out?

RQ4. What can Indonesian creative campuses, student startups and hexa-helix partnerships transfer from the case, and what should they avoid?

1.4 Contributions and Structure

The paper makes four contributions. It provides a coded claim inventory of the video, which separates facts, estimates, forecasts, illustrations and opinions and records their attribution and timestamp. It proposes a Proven-Link versus Bet-on-Bet framework that turns the video’s thesis into a grading scheme for links and chains. It develops six critiques of the narrative, concerning valuation and cash, control, related-party flows, orbital computing, captive demand, and labour and safety. And it derives a copy, adapt and avoid framework for creative campuses.

A caution applies throughout. The video describes events up to late September 2026, many of them very recent, and most of its figures are not attributed to a source on screen or in the narration. In this paper, every figure about 2026 is reported as stated in the video and was not independently verified. Our arguments therefore concern the reasoning built on those figures, not the figures’ accuracy.

Section 2 sets out the conceptual lens. Section 3 describes the method. Section 4 reports the claim inventory. Section 5 presents the dependency-chain analysis and the framework. Section 6 develops the six critiques. Section 7 assesses the video’s strengths, weaknesses and omissions. Section 8 derives lessons for creative campuses. Sections 9 and 10 discuss limitations and conclude.

2. Conceptual Lens: Synergy and Dependency in Venture Ecosystems

2.1 Ecosystems, Platforms and Interlinked Ventures

An ecosystem view treats firms as nodes in a network of exchanges, not as isolated units. Research on ecosystem exchange and strategic capabilities argues that firms improve performance by aligning resources across multiple actors, while coping with the affiliation challenges that multi-actor ecosystems create [7]. Platform research describes how digital platforms shape innovation ecosystems by connecting business actors, technology and supporting stakeholders [3], and studies of developing countries describe digital entrepreneurship as a driver of innovation ecosystems despite limited resources and infrastructure [4].

Two kinds of connection are often blurred in this literature and in popular accounts. The first is synergy: a link through which an operating capability in one venture lowers cost, raises demand or reduces risk for another. The second is dependency: a link through which one venture’s success requires another venture’s success. Every synergy is also a dependency, but not every dependency is a synergy. A dependency becomes risky when the upstream node is itself unproven, because the downstream venture then inherits the upstream uncertainty in addition to its own. Predictive studies of startup ecosystems treat factors such as revenue growth, capital raised, innovation rate and active users as signals of trajectory [8,9], but these signals describe nodes, not the links between them. The framework in Section 5 is an attempt to describe links.

2.2 Governance, Control and Related Parties

When ventures share an owner or a leader, their links run through governance as well as markets. Corporate governance and strategic leadership are associated with organisational performance and market stability [10], and studies of listed Indonesian manufacturers find that managerial and institutional ownership and the composition of independent boards are related to earnings management [11]. Consolidation into a holding structure introduces new risks that call for governance frameworks, processes and internal controls [12,13]. Legal research on digital platforms stresses transparency, accountability and human oversight as conditions of accountable

decision-making [14], and research on AI-driven business ecosystems stresses data protection and accountability [15,16]. These literatures do not address the Musk companies, but they supply the questions to ask: who decides, who is protected when interests diverge, and how are transactions between related entities disclosed and priced.

2.3 Valuation, Capital and Risk

A further strand concerns the difference between money that a business earns, money that investors provide and value that markets assign. Research on startups in Indonesia links effective financial management to profitability and long-term sustainability [17]. Studies of stock returns relate financial ratios such as return on assets, cash ratio and price-earnings ratio to managerial ownership and returns [18], and panel evidence from Indonesian non-financial firms shows that capital inflows carry hidden risks for firm performance [19]. Investors in technology ventures face market volatility, technological failure and regulatory change, which has prompted work on predictive risk management for green-technology investment [20]. Retail participation in early-stage finance is growing too, as studies of securities crowdfunding show [21]. All of this bears directly on a case in which a newly listed company spends most of its capital on a business that is still losing money.

2.4 Leadership, Culture and Human Costs

The video gives much attention to how Musk runs his companies. Research on leadership in entrepreneurial settings finds that abusive supervision, job stress and agile leadership all influence performance, moderated by perceived organisational support [22]. Charismatic leadership can strengthen an innovation culture, especially where employee participation is high [23], and corporate leadership in the digital era is linked to innovation and growth across markets [6]. Yet studies of stress among academic staff whose performance parameters keep rising [24], of startup founders' well-being [25] and of retention among younger startup employees who value autonomy and fairness [26] show the costs of sustained pressure. Occupational-safety research in heavy industry shows that hazard identification and real-time safety data reduce accidents [27,28]. Any lesson drawn from a culture of intensity has to be weighed against these costs.

2.5 Creative-Economy and Campus Context

Finally, the Indonesian creative-economy literature frames what a creative campus can take from a global case. Information technology supports the creative economy, for example in smart tourism [29], and digital entrepreneurship among millennials can grow the creative-economy ecosystem despite gaps in digital literacy and infrastructure [30]. Branding grounded in local wisdom can empower village creative economies [31], and community programmes use quantitative reasoning to strengthen creative micro-enterprises [32]. Penta-helix and hexa-helix collaboration is the policy frame through which campuses, governments, businesses and communities are asked to work together [33]. Campus incubators are the main institutional vehicle, and their success depends on mentoring, networks and funding [34,35].

3. Method

3.1 Design

The study is a qualitative critical case study using document analysis, with the video as the single primary text. A critical case study does not try to establish the facts of the case independently; it examines how a case is constructed, what evidence supports it, what alternative readings are possible and what follows for practice. Document analysis is appropriate because the object of study is a fixed, public text with a stable time index.

3.2 Source

The source is the video identified in Section 1.1. Its metadata at the time of retrieval list the title, the channel, an upload date of 2 October 2026, a duration of 48:29 and 27 chapters, from “The Connections Behind the Headlines” (0:00) to “What the Whole Map Tells Us” (45:22). The transcript was taken from the manually uploaded English subtitle track, not from automatic captions, and contains a timestamp for every caption line. The presenter states that the video is for educational purposes and is not financial advice (1:36). The video’s description identifies him as a venture-capital investor at a fund focused on artificial intelligence and deep technology. We note this as context for reading the video, not as evidence of bias; the video does not say whether he holds positions in the companies discussed. Only the spoken narrative, as captioned, was coded. Charts, on-screen text and any source notes shown in the picture were not analysed, so attribution code C means that no source is named in the narration, and the share of unattributed claims reported in Section 4 is an upper bound on what a viewer watching the screen would find. We read the full transcript, giving particular attention to the fifteen minutes from 30:00 to 45:00, which cover xAI and the Colossus supercomputer, the merger of SpaceX and xAI, the Anthropic compute deal, the Cursor acquisition, Terafab, orbital data centres, Mars, ownership and control, and the initial public offering. The passage at about 30:59, where the presenter calls the speed of building Colossus “real execution on one part of the business” but says it does not settle what to train on it or whether the resulting product will lead the market (31:00), is the hinge of the video: the point at which the narrative moves from capabilities already demonstrated to chains that remain to be proven.

3.3 Claim Inventory

We segmented the transcript into claim units, each a statement that could in principle be true or false or that expresses a judgement. Statements repeated in the synthesis were coded once at first occurrence. Each unit was coded on three dimensions, summarised in Table 1. Claim type distinguishes facts, meaning reported events and figures presented as having occurred; estimates, meaning approximate or modelled quantities, including valuations and third-party estimates; forecasts, meaning statements about future events or intentions; illustrations, meaning hypothetical or round numbers offered to explain a point; and opinions, meaning the presenter’s interpretations and judgements. Attribution records whether the video names a primary source, such as a filing, a contract or a company update (A); names a secondary or third-party source, including a person’s own statement or an interested party (B); or names no source (C). Verifiability, in our sense, is therefore checkability from the video itself, not truth. The timestamp records where the unit begins.

Table 1. Coding scheme for the claim inventory

Dimension	Code	Definition	Example (time)
Claim type	F fact	A reported event or figure presented as having occurred	Falcon 1 reached orbit on its fourth attempt (6:20)
	E estimate	An approximate or modelled quantity, including valuations and third-party estimates	Brand value fell about 36% (16:43)
	FC forecast	A statement about future events, plans or intentions	Outside Optimus sales probably by end-2027 (21:08)
	I illustration	A hypothetical or round number offered to explain a point	70 versus 95 usable chips per 100 (35:54)
	O opinion	The presenter’s interpretation or judgement	Assumptions stack up (41:35)
Attribution	A primary	Names a filing, contract, official order or company report	IPO filing risk factors (40:59)

Dimension	Code	Definition	Example (time)
	B	Names a third party, an interested party or a	According to Nvidia
	secondary	person's own statement	(30:46)
	C none	No source named in the narration	Q2 capital spending of
			about 18.4 billion dollars
			(32:23)
Time	mm:ss	Start of the statement in the video	(31:08)

3.4 Consistency and Arithmetic Checks

Because most figures could not be traced to sources from within the video, we tested what could be tested internally. We re-computed every ratio or product the video states, compared figures that appear more than once, and derived simple implied quantities from figures the video gives, such as revenue implied by subscriber counts and average prices. Derived quantities are labelled as our calculations and use only the video's numbers.

3.5 Dependency-Chain Analysis

We coded the ventures and external parties on the video's map as nodes and the flows between them, whether of capital, products, customers or technology, as links. Each node was coded as operating, meaning it sells a product or service at scale according to the video, or unproven. Each link was coded on a four-level maturity scale described in Section 5, using the video's own evidence and timestamps. A venture or external party was included as a node if the video describes at least one flow between it and another node, and a link was included if the video states the flow and its direction at an identifiable timestamp. Neuralink, which the video discusses (22:37 to 23:19) without describing a flow to the other companies, is therefore not on the map, and Zip2 and PayPal appear only as the source of founding capital, as the video places them "in the history rather than on today's map" (23:22 to 23:29). For each planned capability, we traced the chain of upstream nodes on which it depends and counted the unproven ones. This analysis operationalises the video's distinction between solid and dashed lines (48:01).

3.6 Reflexivity and Limits of the Method

We approached the video as sympathetic but sceptical readers. We have no financial or professional relationship with the presenter or the companies discussed. The analysis is interpretive: other coders could segment claims differently, especially where a sentence combines a fact with a judgement. To limit this, we coded conservatively, treating a statement as a fact only when it was presented as a reported event or figure, and we report the full inventory so that readers can check our coding. Segmentation followed three rules. Figures describing the same event in one sentence were kept in one unit, while figures that could be checked separately were split into separate units. A figure restated later was coded at its first occurrence, and restatements that changed the figure were compared in the consistency checks (Table 2). A sentence combining a figure with a judgement was coded by its checkable element, and the judgement was coded as a separate opinion only where it carried an argument of its own. The coding was not duplicated by independent coders, so no inter-coder agreement statistic is reported. Type and attribution codes depend on what the video says and are the more robust; the boundary between facts and estimates is the least robust, because the video does not always signal approximation. Table 8 allows every code to be audited against its timestamp, and replication by independent coders is listed as future work in Section 9. We did not verify the video's figures against filings or news reports; doing so for very recent 2026 events is beyond the scope of a document analysis, and it would change the object of study from the argument to the events.

4. Findings I: What the Video Claims and How It Supports It

4.1 Overall Profile of the Claims

The inventory contains 93 claim units. Of these, 57 are facts, 13 are estimates, 3 are forecasts, 4 are illustrations and 16 are opinions. Figure 1 shows the distribution by type and attribution, together with the density of claims over the running time.

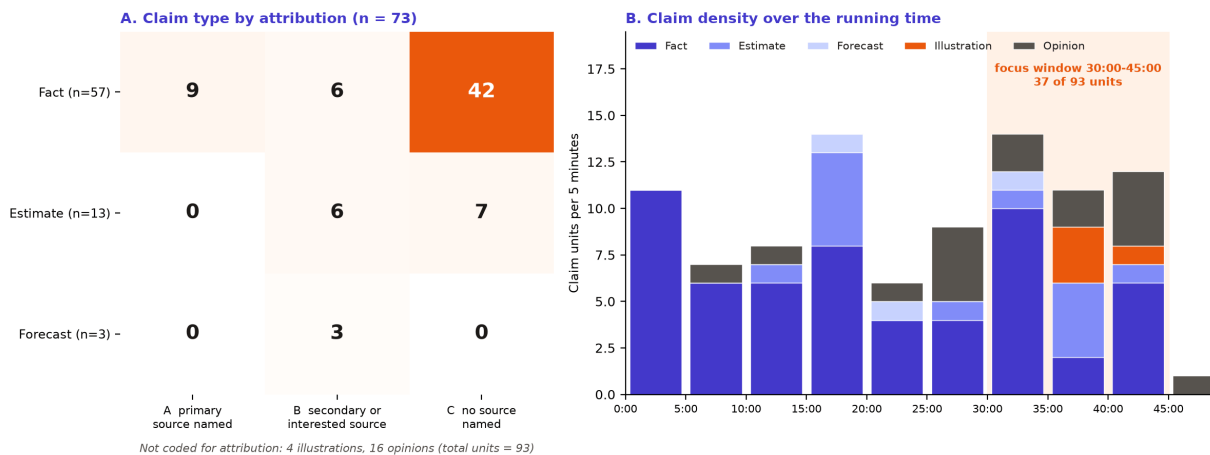


Figure 1. Coded claim inventory of the video (93 units). Panel A cross-tabulates the 73 factual, estimated and forecast claims by attribution: A, a primary source named; B, a secondary or interested source; C, no source named. Panel B shows claim density per five minutes, with the 30:00-45:00 focus window shaded.

Attribution is the most striking result. Of the 73 facts, estimates and forecasts, 9 are attributed to a named primary source, such as a NASA contract (6:44), Tesla’s 2025 pay package (27:43), SpaceX’s report of contracted AI sales (33:15), filings on Terafab’s cost (34:50), the regulatory request for orbital-computing satellites (38:28), the IPO filing’s risk factors (40:59) and Tesla’s own count of battery sales to SpaceX (43:24). Another 15 are attributed to a named secondary or interested source, such as Nvidia (30:46), the International Energy Agency (37:52), a Yale-led working paper (16:28), Brand Finance (16:43), a Reuters investigation (26:41) or Musk’s own statements (20:49, 39:12). The remaining 49, about two-thirds, carry no attribution in the video. They include many of the figures on which the argument depends most: Starlink’s subscribers and average price (9:48), the revenue and operating results of the connectivity, space and AI segments (10:00, 10:08, 32:00), SpaceX’s capital spending (32:23), Musk’s economic and voting stakes (42:40, 42:49) and the IPO proceeds (44:25). Several of these are almost certainly drawn from company reports, but the viewer is not told which, and a student who wants to check them must search independently.

The fifteen minutes from 30:00 to 45:00 are the densest part of the argument. They contain 37 of the 93 claim units, about 40 percent, in about 31 percent of the running time. Attribution is somewhat better there: of the 25 facts, estimates and forecasts in this window, 5 cite a primary source, 5 a secondary source and 15 none. The window also contains all four illustrations, because it is where the presenter turns from what exists to what is planned and has to reason with hypothetical numbers.

4.2 How the Video Signals Reliability

The inventory understates one of the video’s virtues: it often tells the viewer how much weight a figure can bear. It notes that Nvidia, the source of the Colossus build times, “has an obvious interest in the story” (30:48). It reports that some industry analysts consider the Yale-led estimate of lost Tesla sales too high (16:39). It sets Tesla’s description of its robotaxi service against independent trackers who counted far fewer driverless cars (19:09, 19:17). It flags Musk’s 120-hour

week as “his own account” (23:59). It calls the energy projection “a forecast” (38:05) and its orbital-computing numbers “round numbers for illustration, not a forecast” (40:08). And it contrasts Musk’s pitch for orbital computing with the IPO filing’s warning that the plans involve unproven technologies that may not achieve commercial viability (40:59).

These signals are good epistemic practice and are rarer in business media than they should be. They are, however, applied unevenly. Hedges cluster around third-party estimates and Musk’s statements, where scepticism is expected. The unattributed company figures, which carry the main financial argument, are presented plainly. A viewer could reasonably infer that the plainly stated numbers are the most reliable ones, when in fact their reliability cannot be judged from the video.

4.3 Internal Consistency and Arithmetic

Table 2 reports our consistency and arithmetic checks. Most of the video’s calculations hold. Connectivity revenue of about 4.3 billion dollars against space revenue of just under 1 billion is consistent with the opening claim that the internet business brings in more than four times the revenue of the space segment (0:14, 10:00, 10:08). The 15.8 billion dollars of AI capital spending out of 18.4 billion is indeed about 86 cents in the dollar (32:23). The orbital-computing illustration is internally correct: ten kilograms per kilowatt at four thousand dollars per kilogram gives forty thousand dollars per kilowatt, four times the ten thousand dollars cited for a ground facility (39:12 to 39:50).

Table 2. Internal consistency and arithmetic checks (derived values are our calculations from the video’s figures)

Check	Video figures (time)	Result	Comment
Connectivity vs space revenue	4.3 bn vs just under 1 bn (10:00, 10:08); ‘more than four times’ (0:14)	Consistent	Ratio above 4
AI share of capital spending	15.8 of 18.4 bn; ‘86 cents’ (32:23)	Consistent	$15.8 / 18.4 = 0.86$
Launch cost per kW	10 kg/kW x 4,000 USD/kg = 40,000 USD/kW (39:12-39:33)	Consistent	Arithmetic correct
Launch vs ground facility	40,000 vs 10,000 USD/kW; ‘four times’ (39:37-39:50)	Consistent	Comparison partial (Section 6.4)
Storage growth	‘almost 50%’ (0:11); ‘about 49%’ (17:52)	Consistent	Rounding
Tesla operating margin	about 1.4% in Q2 (15:36); ‘1.5%’ (18:42)	Minor inconsistency	Period of 1.5% not stated
Market values	Tesla ~1.5 trn (18:11); SpaceX 2 trn (44:37); combined ~3.5 trn (27:29)	Consistent	Caption reads ‘trading dollars’ at 18:12
SpaceX valuation over time	~1 trn at merger (31:15); 2 trn later (44:37)	Unexplained change	Doubling not discussed
Implied subscription revenue	12 m x 66 USD x 3 months = about 2.4 bn vs 4.3 bn connectivity revenue (9:48, 10:00)	Unexplained gap	Composition of remainder not stated
AI capital spending vs AI revenue	15.8 bn vs 2.6 bn per quarter (32:00, 32:23)	About 6 times	Infrastructure ahead of revenue
IPO proceeds vs capital spending	85.7 bn vs 18.4 bn per quarter (44:25, 32:23)	About 4-5 quarters	Operating cash flow not reported

Check	Video figures (time)	Result	Comment
Cursor price vs xAI value	60 bn vs 250 bn (33:18, 31:20)	About 24%	Both paid in stock
Voting vs economic stake	82-85% vs 42% (42:49, 42:40)	About 2 times	Control wedge
Caption artefacts	'Groq' (32:59, 33:04); 'reimbursement' (8:06); 'trading dollars' (18:12); 'chip' (41:49)	Transcript errors likely	Affects quoting and summarising

Three kinds of problem appear. The first is small inconsistencies. Tesla's second-quarter operating margin is given as about 1.4 percent (15:36), and three minutes later Tesla is described as "a car company with 1.5% operating margin" (18:42), without a period. The difference is trivial, but it shows how figures drift when they are restated.

The second is unexplained gaps that the video's own numbers reveal. Twelve million subscribers paying about 66 dollars a month (9:48) imply roughly 2.4 billion dollars of subscription revenue per quarter, by our calculation. The video reports about 4.3 billion dollars of connectivity revenue in the second quarter (10:00). The video does not say what makes up the difference, which by our arithmetic is close to half of the segment's revenue; hardware, enterprise or government contracts are plausible components, but the video does not mention them, and the gap matters because it determines how much of Starlink's strength comes from the subscription loop the video celebrates. Similarly, SpaceX's valuation is given as about 1 trillion dollars at the February merger (31:15) and as 2 trillion dollars later (44:37); the doubling within months is consistent with the claim that SpaceX became worth more than Tesla (0:35), but the video does not discuss what drove it.

The third is caption artefacts. The manually uploaded subtitles render Grok as "Groq" (32:59, 33:04), which is the name of a different AI-chip company; render what is probably "refurbishment" as "reimbursement" in the discussion of rocket reuse (8:06); and render what is probably "trillion" as "trading dollars" (18:12). These are faults in the transcript, not necessarily in the narration, but the transcript is the text that is searched, quoted and fed into summarising tools. A case built on a transcript inherits its errors.

4.4 What the Inventory Says About the Argument

Read as a whole, the inventory shows an argument with a clear evidential shape. The claims about proven links, such as Starlink's results and the share of launches that are internal, rest on reported numbers. The claims about planned links, such as Terafab's customers and orbital computing, necessarily rest on forecasts, intentions and illustrations. The central thesis itself is an opinion that synthesises both (47:29). This asymmetry is appropriate: one cannot have audited figures for a factory that has not been built. But it means the video's conclusion is more secure in its first half, "where a working capability supports the next one ... clearly yes" (47:29), than in its second, and the second half is where most of the money is going.

5. Findings II: Links That Work and Bets That Stack

5.1 From Solid and Dashed Lines to a Grading Scheme

The video's map distinguishes solid lines, connections that "already produce revenue", from those that "still need several very hard things to get right" (1:16, 1:19), and it ends by asking which dashed lines will turn solid (48:01). We turn that distinction into a grading scheme with two parts, which we call the Proven-Link versus Bet-on-Bet framework.

The first part grades each link by maturity. A Level 3 link, operating, connects two operating nodes through a flow the video quantifies or describes as current, such as internal launches carrying

Starlink satellites (10:21). A Level 2 link, contracted, rests on a signed agreement or completed transaction whose scale or economics are not yet shown, such as the compute rental to Anthropic (32:44) or the Cursor acquisition (33:18). A Level 1 link, planned, connects an operating node to an unproven one, such as Starlink's laser-linked constellation and a future orbital data centre (41:17). A Level 0 link, speculative, connects two unproven nodes or depends on another unproven link, such as Terafab supplying chips to a robot fleet that is not yet at work (36:48, 46:28).

The second part grades each planned capability by chain depth: the number of unproven nodes on its critical path. A capability with depth zero relies only on operating capabilities. A capability with depth one adds a single bet. A capability with depth two or more is a bet on a bet. Combining the two gives four types. Proven synergy combines a Level 3 link with depth zero. Contracted extension combines a Level 2 link with depth zero or one. Bridge bet combines a Level 1 link with depth one. And bet-on-bet chain covers Level 0 links and any capability with depth two or more. Where a link could fall into two types, the type with less proof is used: a contracted link counts as a contracted extension only if the contract's value does not depend on an unproven node, and otherwise it is coded with the planned or speculative link on which it depends.

5.2 The Link Register

Figure 2 shows the dependency map coded with this scheme, and Table 3 lists the links with their maturity, type and evidence. The map contains operating nodes, unproven nodes and external parties, and it marks one negative link that the video stresses: the shared dependence of every company on one leader's attention and reputation (27:41, 28:00).

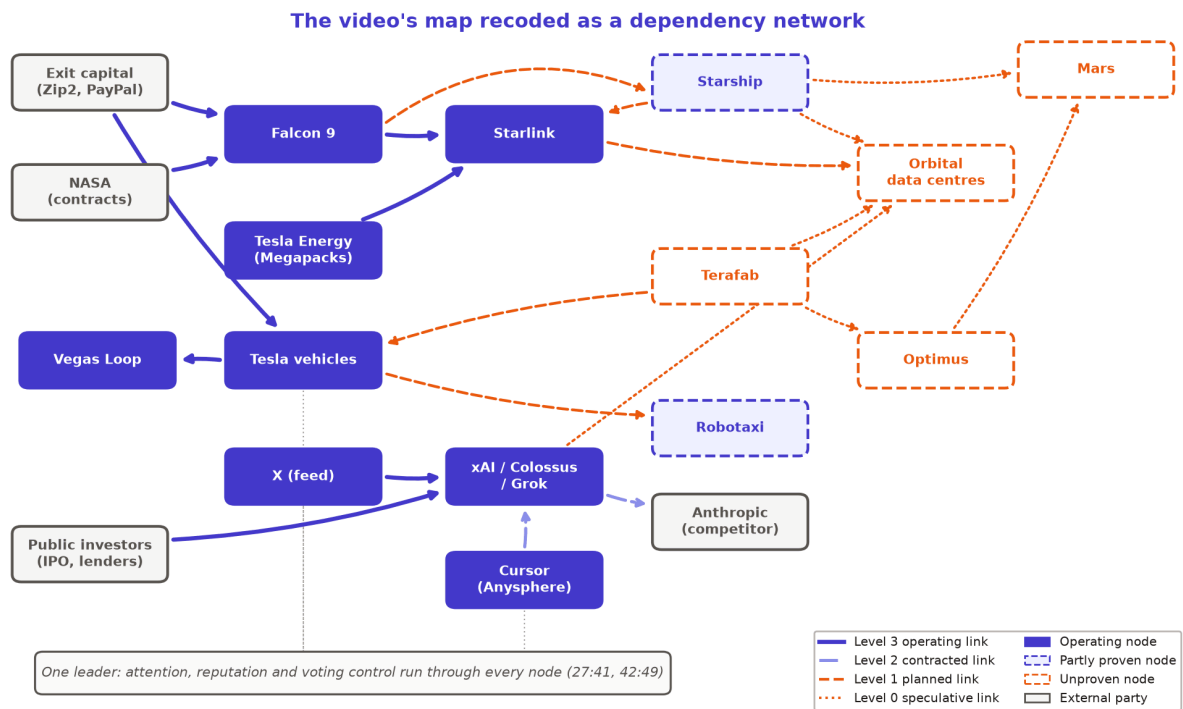


Figure 2. The video's map of the group recoded as a dependency network. Solid lines are operating links (Level 3), dash-dot lines contracted links (Level 2), dashed lines planned links (Level 1) and dotted lines speculative links (Level 0). Node styles distinguish operating, partly proven and unproven capabilities and external parties; all are coded from the video's own account.

Table 3. Link register: links on the video’s map graded by maturity and type

Link	Flow	Level	Type	Evidence (time)
Software exits to SpaceX and Tesla	Capital	3	Proven synergy (historic)	4:36, 5:34
NASA to SpaceX	Customer, milestone payments	3	Proven synergy	6:40-7:34
Falcon 9 to Starlink	Launch service (internal)	3	Proven synergy	10:21
Starlink to group cash	Operating profit	3	Proven synergy	10:00
Tesla Energy to SpaceX	Megapack sales	3	Proven synergy; related party	43:24
X to Grok	Distribution	3	Proven synergy (preference unproven)	29:17-29:29
Tesla cars to Vegas Loop	Vehicles	3	Operating; related party	21:59
Credibility to recruiting and capital	Reputation	3	Soft synergy	27:12-27:27
Colossus to Anthropic	Compute rental	2	Contracted extension; competitor as customer	32:44, 33:15
Anysphere (Cursor) to AI segment	Paid developer product	2	Contracted extension	33:18, 33:45
Tesla to xAI/SpaceX	Equity (2 bn)	2	Contracted; related party	43:34
Public investors to AI build-out	IPO capital	3	Funding link	44:25, 44:57
FSD fleet data to robotaxi	Data, software	1	Bridge bet	20:00-20:15
Starship to larger Starlink satellites	Launch	1	Bridge bet	11:52-12:21
Terafab to Tesla cars	Chips	1	Bridge bet; related party	34:25-34:36
Starlink lasers to orbital computing	Technology	1	Bridge bet	41:17
Terafab to Optimus	Chips	0	Bet-on-bet	36:48, 20:49
Terafab to orbital computing	Chips	0	Bet-on-bet	34:36, 41:27
Starship (cheap launch) to orbital computing	Launch	0	Bet-on-bet	39:53-40:12
AI demand to orbital computing	Customers	0	Bet-on-bet	41:20, 41:44
Rockets, energy and robots to Mars	All	0	Bet-on-bet	41:59-42:20
Leader to every company	Attention, reputation	-	Shared key-person exposure	27:41, 28:00, 17:02

Six links qualify as proven synergy on the video’s own evidence. Capital from the software exits bought the chance to attempt SpaceX and Tesla (4:36, 5:34). NASA’s milestone-based contracts gave SpaceX a demanding first customer (6:40 to 7:11). Falcon 9 launches supply Starlink, with 60 of 77 launches in the first half of 2026 described as internal (10:21). Starlink in turn generates operating profit for the group (10:00). Tesla sells batteries to SpaceX, about 400 million dollars’ worth of Megapacks in the first half of 2026 by Tesla’s count (43:24). And X provides Grok with a feed that people already scroll every day, a “real distribution advantage” that does not guarantee preference (29:17 to 29:29). Three further operating links complete the set in Table 3: Tesla

cars carrying passengers in the Vegas Loop (21:59), the soft link of credibility, through which past success eases recruiting and fundraising (27:12 to 27:27), and the funding link from public investors to the AI build-out (44:25, 44:57).

Three links are contracted extensions. The rental of Colossus 1 to Anthropic and the reported 14 billion dollars of contracted AI sales show that the infrastructure can earn outside revenue (32:44, 33:15), but the video does not report utilisation, which it names as the measure to watch (33:54). The 60 billion dollar all-stock purchase of Anysphere adds a paid developer product (33:18), but integration is hard and developers switch tools quickly (33:45). Tesla’s 2 billion dollar investment in xAI, converted into SpaceX shares after the merger, is a completed capital link of modest size (43:34).

The remaining links are planned or speculative. Terafab is announced, with a confirmed first phase of about 16.8 billion dollars (34:44), but its milestones, from a qualified process to sustained volume, all lie ahead (37:24). Its intended customers include cars, robots and computing in space (34:36). Starship has reached orbit and deployed satellites once, but the steps that change the economics, catching and reflying the upper stage and refuelling in orbit, are still ahead (11:52, 12:13). Orbital data centres depend on cheap and frequent launch, working chips, reliable spacecraft and customers (41:35). Mars depends on all of these and more (41:55).

5.3 Chains and Their Depth

Tracing chains shows how depth accumulates. Orbital computing has, on the video’s account, at least four unproven nodes on its critical path: Starship at low cost per kilogram, Terafab chips qualified for space, spacecraft that work reliably as data centres, and customers who prefer orbital to ground computing (41:35 to 41:46). Its chain depth is therefore four. Terafab’s own demand chain has depth two or more, because some of its expected customers, “a robot fleet or orbital data centers, are themselves future bets” (36:48). Optimus, which Musk said in January was not yet doing useful work (20:49), and whose outside sales he expects to begin by the end of 2027 (21:08), appears both as a downstream customer of Terafab and as the source of most of Tesla’s expected future value (18:47). Mars is the deepest chain on the map. On the video’s account it needs rockets for transport, energy systems for power and robots to help build, and then a self-sustaining settlement in which equipment is repaired far from its factories and radiation, health, food and life support become everyday operating problems (42:01 to 42:20). Counting Starship at full capability, energy systems working on Mars, Optimus, in-place repair and life support as separate unproven nodes gives a depth of at least five, shown as “5+” in Figure 3. The presenter’s own advice is to keep working on the pieces but to resist putting a date on the finished picture (42:22 to 42:26).

Depth matters for two reasons that the video states only in part. The first is probability. If each unproven node must succeed for the chain to work, the chance that the whole chain works is at most the chance of its weakest node, and if the nodes were independent it would equal the product of their individual chances, which falls quickly as nodes are added. The nodes are not independent, however: they share a leader, a capital base and an engineering culture. Shared resources can make success correlated, as when learning in one venture helps another, but they can also make failure correlated, as when a capital squeeze or a reputational shock hits every node at once. The video names the second possibility for reputation (17:02) and for the leader’s time (27:41), but it does not apply it to the chains.

The second reason is schedule. The presenter observes that if any element slips, “the whole schedule moves” (41:46). In a chain, the arrival date of the final capability is set by the latest arrival among its prerequisites, not by their average. A chain of four unproven nodes is therefore not only less likely to succeed than a single bet; it is also likely to arrive later than any of its parts would suggest. Owning more of the chain improves coordination, as the presenter notes (the captions read “chip” at this point), but “you also own more of what can go wrong” (41:49).

5.4 Mapping Synergy Against Risk

Figure 3 places each link on two axes: proof of the link, from speculative to operating, and the depth of the chain on which it sits. The resulting map has four regions. Proven synergy, in the corner of high proof and low depth, contains the launch-Starlink loop, NASA contracts, Starlink's cash generation and battery sales. Contracted extensions sit in the middle, with Anthropic, Cursor and Tesla's xAI stake. Bridge bets, with one unproven node, include Starship deployment of larger Starlink satellites and Terafab supplying Tesla's existing products. The bet-on-bet region, with low proof and high depth, holds orbital computing, Terafab's robot and orbital customers, and Mars. The coordinates are our ordinal coding, not measurements, and are meant to make the structure visible.

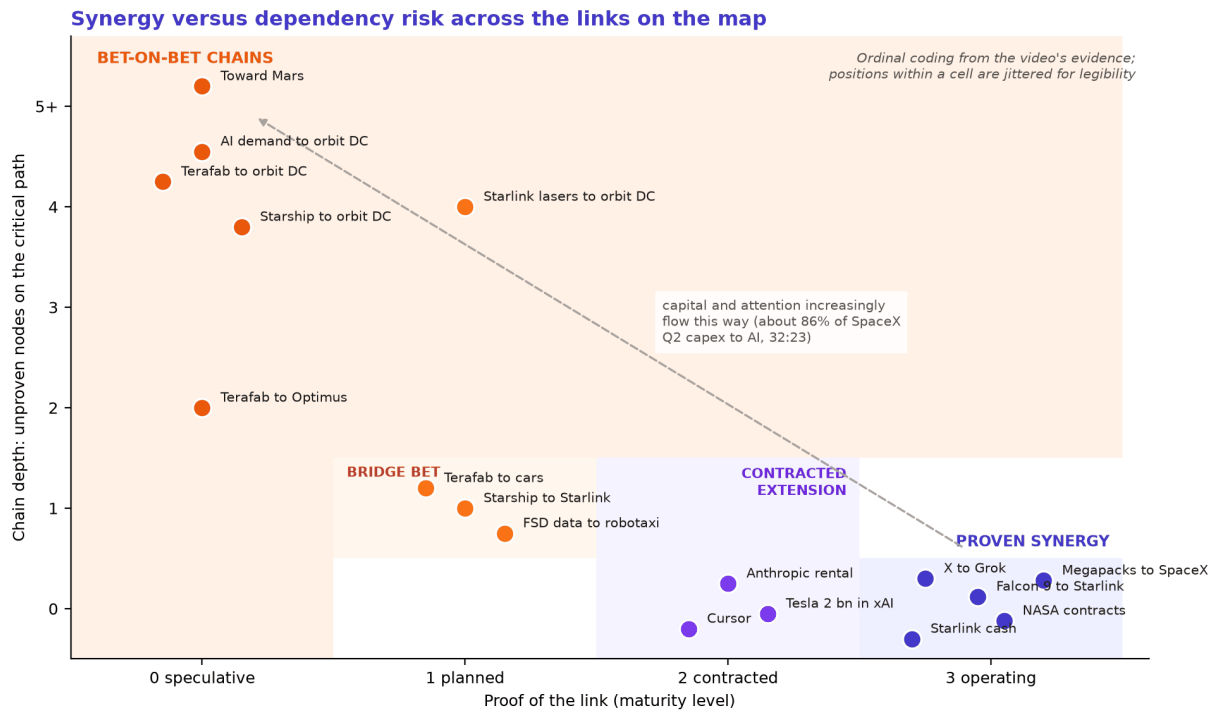


Figure 3. Synergy versus dependency risk. Each link is placed by the proof of the link (x) and the number of unproven nodes on its critical path (y), giving four regions: proven synergy, contracted extension, bridge bet and bet-on-bet chains. Positions are ordinal codes, not measurements.

Two features of the map deserve emphasis. First, money and attention are flowing disproportionately towards the bet-on-bet region. By the video's figures, about 86 percent of SpaceX's capital spending in the second quarter went to AI (32:23), while the AI segment lost about 1.3 billion dollars at the operating level (32:07). Second, the proven-synergy region is where the group earns the cash and credibility that finance the rest. That is the logic of the whole structure: a few strong links pay for many weak ones. The structure is rational, as venture portfolios generally are, but it means the proven links are carrying an increasing load, which is the point at which the video's thesis needs to be extended into the critiques that follow.

6. Six Critiques of the Narrative

The video already contains much of its own critique. Our aim in this section is not to repeat its caveats but to push six of them further than the video does, using its own figures. Table 4 summarises the critiques.

Table 4. Six critiques: the video’s position and our extension

Critique	Video’s position (time)	Our extension	Literature
Valuation vs cash	Separates revenue, fundraising and market value (44:10-44:47)	Stock has become the currency for acquisitions; a sentiment-dependent loop links proven and unproven regions	[17, 19]
Key person and control	Finite attention; dual-class trade-off (27:41, 43:09)	Control removes the mechanism that could correct key-person risk; voting about twice the economic stake	[10, 12]
Related-party flows	Not unusual; boards disclose; deals must suit both sides (43:47-44:08)	Pricing, cost sharing and capacity priority unexamined; competitor-as-customer signals capacity ahead of own demand	[11, 15]
Orbital computing	Launch cost decides; round numbers (39:08-40:12)	Comparison omits spacecraft cost, ground energy and lifetime; lifetime-cost inequality proposed	[20]
Captive demand	Terafab narrower than TSMC; demand rests on future bets (35:45, 36:42)	Captive demand converts market risk into correlated dependency risk and limits learning	[8, 13]
Labour and safety	Hours, ultimatum, injuries; safeguards needed (23:52-27:10)	Intensity is a hidden subsidy; bet-on-bet chains intensify pressure	[22, 27]

6.1 Valuation Is Not Cash, and Stock Is Becoming the Currency

The video makes a distinction that every student founder should learn: revenue is what customers pay, fundraising is new money from investors, and market value is what the stock market thinks a company is worth (44:10 to 44:25). It adds that the IPO’s 85.7 billion dollars is “capital to build with, not profit” and that a 2 trillion dollar valuation “isn’t a checking account” (44:33, 44:37).

The figures the video gives allow this point to be sharpened. At the second-quarter rate of about 18.4 billion dollars of capital spending (32:23), the IPO proceeds would cover roughly four to five quarters of investment, by our calculation, before counting operating cash flows that the video does not report for the group as a whole. The video does report segment operating results for the second quarter: an operating profit of about 1.7 billion dollars in connectivity (10:00), an operating loss of about 0.5 billion in the space segment (10:08) and an operating loss of about 1.3 billion in AI (32:07). Taken together, the three segments the video reports made a small operating loss of about 0.1 billion dollars, by our calculation, so in that quarter the profits of the proven region were absorbed by the losses of the space and AI segments. Operating profit is not cash flow, and the video reports neither group cash flow nor debt, so the coverage figure above is indicative only. AI capital spending of about 15.8 billion dollars in the quarter was about six times the AI segment’s quarterly revenue of about 2.6 billion (32:00), again by our calculation, and the reported 14 billion dollars of contracted AI sales (33:15), whose period the video does not specify, is smaller than a single quarter of AI capital spending. None of this shows that the spending is unwise; infrastructure is always built ahead of revenue. It shows that the AI expansion depends on continued access to outside capital, which the video acknowledges when it says that public investors and lenders now finance the next stage (44:57).

A further dependency is missing from the map. The video notes that a high valuation lets a company pay for acquisitions in stock, “as SpaceX did with Cursor” (44:40). The merger with xAI was also an all-stock deal (31:12). Shares have become the group’s currency for buying capabilities: the 60 billion dollars paid for Anysphere (33:18) is, by our calculation, close to a quarter of the 250 billion dollars at which xAI was valued in the merger (31:20). A currency whose value rests on expectations about bet-on-bet chains creates a loop: expectations support the share price, the share price buys capabilities, and the capabilities support expectations. Loops of this kind

amplify in both directions. The marks used in the loop also deserve care. The 250 billion dollar valuation of xAI was set in an all-stock merger between two companies led by the same person (31:12, 31:20), so the exchange ratio was itself a related-party term rather than a price tested between independent parties. Such a mark shows what the merging parties agreed, not what an outside buyer would pay, and the 60 billion dollar price of Anysphere, paid in the same shares (44:40), inherits that uncertainty. Tesla shows the same structure in a different form, trading at roughly 160 to 200 times expected, not past, earnings (18:14), an estimate the video does not attribute with an operating margin of about 1.4 percent and negative free cash flow in the latest quarter (15:36). The presenter states plainly that the price mostly reflects bets on self-driving and robots (18:31). In our framework, market value is itself a link on the map, connecting the proven region to the bet-on-bet region, and it is a link whose strength depends on sentiment.

6.2 Key-Person Risk Is Magnified by Control

The video treats key-person risk carefully. Musk is chief executive of two public companies worth a combined 3.5 trillion dollars or so while overseeing the AI lab, X and the private companies, and “his attention is finite” (27:29 to 27:41). His decisions, public statements, death and time become a shared exposure (28:00). The brand already carries risk from his public life, illustrated by estimates of lost sales, falling brand value and lower European registrations (16:17 to 17:09).

The video also explains control: Musk owns about 20 percent of Tesla and about 42 percent of SpaceX’s economic value, but SpaceX’s ten-vote insider shares give him about 82 to 85 percent of its voting power, so that “nobody can outvote him” (42:40 to 43:01). A structure of this kind, in which one class of shares carries more votes per share than another, is usually called dual-class control; we use the term in this sense below. It presents this as a trade-off: control permits decade-long projects without shareholder revolt, at the price that outside owners have little say (43:09 to 43:19).

What the video does not do is connect the two. Concentrated control does not only reduce outsiders’ voice; it removes the mechanism through which a key-person problem could be corrected. In a company with dispersed voting, a board under pressure from shareholders can limit a leader’s commitments, plan succession or rebalance attention. Where one person holds most of the votes, those corrections depend on the same person. By our calculation, Musk’s voting share at SpaceX is about twice his economic share. The wedge means that the person whose finite attention is the shared exposure is also the person who decides how that attention is allocated, including between SpaceX and Tesla, where his 2025 pay package rewards robots, robotaxis and self-driving subscriptions (27:43). Governance research associates strategic leadership and corporate governance with organisational performance and stability [10] and shows that consolidated structures need explicit risk governance and controls [12, 13]. The video’s map would be more complete with a line from the control structure to every node, labelled with the risk it carries.

6.3 Related-Party Flows Are Stated, Not Examined

The video lists the concrete links between the companies: Tesla sold about 400 million dollars of Megapacks to SpaceX in the first half of 2026; Tesla invested 2 billion dollars in xAI in January 2026, a stake that became well under 1 percent of SpaceX; and the two companies are building Terafab together (43:24 to 43:45). It then reassures the viewer that none of this is unusual, that each company has its own board and must disclose these dealings, and that every deal “has to make sense for both sides” (43:47 to 44:08).

This is the right rule, but stating the rule is not the same as showing that it is met. The video does not say how the battery sales were priced relative to other customers, how Terafab’s first-phase cost of about 16.8 billion dollars (34:44) is shared, who bears overruns in a full build-out that could cost several times more (34:50), or who gets priority on wafer capacity when supply is short. These questions matter because the two companies have different shareholders (44:03) and

because the same person leads both. Earlier links matter too: the Vegas Loop carries passengers in Tesla cars (21:59), so a private company controlled by the same leader is a Tesla customer.

The Anthropic deal deserves a separate reading. The video frames it as an echo of SpaceX launching other people’s satellites before its own (33:07 to 33:15). An alternative reading is that renting more than 200,000 GPUs (32:51) to a direct competitor signals that capacity was available beyond the needs of the group’s own models at that time. That can be good business, raising utilisation, which the video names as the key measure (33:54). It also shows that building infrastructure ahead of demand “only pays if the demand arrives” (33:49), and that the demand may come from rivals whose own success competes with Grok. Research on governance in AI-driven business ecosystems stresses transparency and accountability where data, platforms and competitors interact [14, 15], and studies of earnings management show why ownership structures warrant scrutiny of reported results [11]. To judge whether a related-party deal “makes sense for both sides”, an outside investor would need at least five elements: the price and terms compared with those offered to unrelated customers or suppliers; who approved the deal and whether the approvers were independent of the leader; how shared capacity, such as wafers or compute, is allocated when supply is short; how costs and overruns of joint projects are shared; and whether the deal was reviewed by the auditors of both companies. The video supplies none of these for the deals it lists, which is a limit of a public explainer rather than a fault of the presenter, but it means the viewer cannot judge the rule the video states.

6.4 The Orbital-Computing Arithmetic Is Correct but Partial

The orbital-computing passage is the most quantitative in the video, and the arithmetic is internally correct (Table 2). Its purpose is explicitly limited: to show why “the whole idea rests on Starship” (40:12). We accept that purpose and examine what the comparison includes and leaves out, as summarised in Table 5.

Table 5. What the orbital-computing comparison includes and leaves out

Element	In the video’s comparison?	Where mentioned (time)	Effect if included
Launch price per kg and mass per kW	Yes	39:12-39:33	Basis of the comparison
Ground facility per kW	Yes	39:37-39:44	Basis of the comparison
Spacecraft hardware (panels, radiators, structure, shielding)	Listed, not costed	38:51-39:05	Raises orbital cost
Ground electricity over life	No	Energy bottleneck discussed at 37:52-38:19	Main argument for orbit; could favour orbit
Useful life and obsolescence	Qualitative	40:14-40:28	Raises orbital cost per year
Networking for training	Qualitative	40:30-40:49	Limits orbit to some workloads
Future ground costs	Qualitative	40:51-40:57	Moving benchmark
Scale, spectrum and crowding	For Starlink only	11:34-11:42, 38:28	Regulatory and operating risk
Company’s own caution	Yes	40:59-41:07	Unproven technologies

The comparison sets the launch cost per kilowatt of orbital capacity against the cost per kilowatt of a ground facility, “the building, power equipment, and cooling” (39:37 to 39:44). Three asymmetries follow. First, the orbital side counts only launch; the satellite’s own solar panels, radiators, structure, power electronics, communications and radiation protection are listed (38:57 to 39:05) but not costed, so the orbital cost per kilowatt is understated. Second, the ground side counts the facility but not the electricity that flows through it over its life, which is precisely the cost that orbit is supposed to avoid. The comparison therefore omits the main argument for orbit as well as several costs of orbit. Third, the two sides have different lifetimes. A ground facility can host several generations of chips; an orbital data centre is largely unrepairable and may be “outclassed within a few years” (40:22 to 40:28), so its launch and hardware costs must be recovered over a shorter useful life.

A fair comparison is therefore a lifetime cost per unit of computing delivered. In symbols, orbit becomes competitive when $(p \times m + S) / L_o$ is no greater than $F / L_g + e \times u$, where p is the launch price per kilogram, m the spacecraft mass per kilowatt, S the cost of spacecraft hardware per kilowatt other than chips, L_o the useful life in orbit, F the ground facility cost per kilowatt, L_g the ground facility’s life, e the ground energy price and u the annual energy use per kilowatt, with chip costs assumed equal on both sides. The video supplies p , m and F (39:12 to 39:44) but not S , L_o , L_g , e or u . The inequality makes clear that cheap launch is necessary but not sufficient: orbital lifetime, hardware cost and the price of ground energy matter as much, and ground energy prices depend on exactly the grid connections and permits that the video identifies as bottlenecks (38:13 to 38:19).

Two further limits are noted in the video and should be weighed more heavily. Training large models requires thousands of chips exchanging data constantly, which is much harder across satellites than inside one building, so orbit may suit inference and in-space data processing better than training (40:30 to 40:49). And orbital computing competes with whatever ground computing will cost when the orbital service is ready (40:51 to 40:57). Scale raises its own questions: the request to operate up to one million satellites for orbital computing (38:28) is, by our calculation, about ninety times the roughly 11,000 Starlink satellites the video mentions (10:50), with implications for spectrum, crowding and replacement that the video raises for Starlink (11:34 to 11:42) but not for orbital computing.

6.5 Captive Demand Converts Market Risk into Dependency Risk

The video’s treatment of Terafab is admirably careful. It distinguishes design from manufacturing, explains yield with a made-up example (35:54), separates logic, memory and packaging (36:32), and warns that semiconductor process knowledge “doesn’t come along for free” (37:08). It contrasts Terafab with TSMC, whose advantage includes customers’ trust and the fact that it does not compete with them, and which in 2025 made more than 12,000 products for 534 customers using 305 process technologies (35:13 to 35:35). It concludes that Terafab, built mainly to supply Musk’s own businesses, is a narrower target that could still be valuable (35:45 to 35:48).

Our critique concerns what captive demand does to risk. Securing supply for one’s own products is usually presented as reducing market risk: the factory does not have to win customers. But when the internal customers are themselves unproven, captive demand converts market risk into dependency risk. The fab’s utilisation, which determines its cost per working chip, depends on how fast robots, robotaxis and orbital data centres scale (36:42 to 36:59). A merchant fab with hundreds of customers diversifies that risk across many demand curves; a captive fab concentrates it on a few correlated ones. Captive demand also removes the learning and price discipline that come from serving many designs. TSMC’s breadth of products and process technologies is a measure of accumulated learning as well as of market reach. Finally, the participation of Intel, whose role “hasn’t spelled out” (34:39), is the one external element that could change the picture, and its terms are not known from the video.

6.6 Labour and Safety Are Costs Carried Off the Balance Sheet

The video does not avoid the human side. It reports Musk’s account of a 120-hour week while sleeping at a factory (23:52), his November 2022 demand that Twitter staff commit to long, intense hours or leave (26:25), and a 2023 Reuters investigation documenting at least 600 SpaceX workplace injuries since 2014, adding correctly that this neither shows that long hours caused each injury nor gives a current injury rate (26:41 to 26:52). It concludes that the advantages of urgency, mission and technical involvement “only last in organization that surfaces bad news and protects people under pressure” (27:04 to 27:10).

We extend this point in two ways. First, intensity functions as a hidden subsidy. Hours worked beyond a normal week, and risks borne by workers, contribute to speed without appearing in the financial figures that dominate the rest of the video. A complete account of how the empire builds difficult things would treat them as part of the cost base. Second, the bet-on-bet structure tends to increase this pressure. When several unfinished projects depend on one another arriving on time (47:35), every delay threatens the chain, and the organisational response is likely to be more urgency. The video warns that “if every target needs a crisis, crisis has become the operating model” (24:26). Chains make that outcome more likely. The point applies with special force to Neuralink’s implanted device and to vehicles on public roads, which “can’t accept the same kind of failure” as an uncrewed rocket over the ocean (25:30 to 25:36). Research on leadership, stress and performance [22], founders’ well-being [25] and occupational safety [27, 28] supports treating these as central, not peripheral, costs.

7. Where the Video Is Strong, Where It Is Weak and What It Leaves Out

Table 6 summarises our assessment. We highlight five strengths, four weaknesses and several omissions.

Table 6. Strengths, weaknesses and omissions of the video’s argument

Category	Item	Evidence (time)
Strength	Rejects the lone-genius story; credits teams, NASA and Shotwell	4:08, 6:40, 12:43, 26:01
Strength	Separates revenue, fundraising and market value	44:10
Strength	Flags interested sources and labels illustrations	16:39, 30:48, 40:08
Strength	Gives measurable milestones for each dashed line	20:17, 22:30, 33:54, 37:24
Strength	Applies the learning-curve argument consistently	30:14, 37:05
Weakness	About two-thirds of factual and quantitative claims unattributed	Section 4.1
Weakness	Minor inconsistencies and unexplained gaps	15:36 vs 18:42; 9:48 vs 10:00
Weakness	Partial orbital-computing comparison	39:08-40:12
Weakness	Binary solid/dashed lines hide degrees and compounding	1:16, 48:01
Omission	Environmental and local footprint of data centres and launches	Not discussed
Omission	Dependence on government contracts and approvals	Mentioned, not examined
Omission	Safety and governance of AI products in the feed	Not discussed
Omission	Succession planning	Death listed as exposure (28:05)
Omission	Scale and terms of lending	Lenders mentioned (44:57)
Omission	Perspectives outside US investors and engineers	Largely absent

The video’s first strength is that it refuses the myth of the lone genius. It notes that Musk had been replaced as PayPal’s chief executive before the sale (4:08), that he joined rather than founded

Tesla (12:43), that NASA was a demanding customer whose milestone payments mattered (6:40 to 7:11), that Gwynne Shotwell has run SpaceX’s operations and customer relationships for years (26:01) and that the rest is “never a neat staircase” (46:03). Second, it separates the three kinds of money (44:10). Third, it marks interested sources and its own illustrations. Fourth, it offers measurable milestones for each dashed line: cities, cars, paid rides and cost per ride for robotaxis (20:17 to 20:29); cost per mile of tunnel and riders per day for the Loop (22:30); a qualified process, working chips, usable yields and sustained volume for Terafab (37:24 to 37:29); and utilisation for the AI infrastructure (33:54). Fifth, it applies its own learning-curve argument consistently: the know-how of AI labs (30:14) and of chip manufacturing (37:05) cannot simply be bought.

Its weaknesses are, first, the attribution gap documented in Section 4, which leaves most of its financial figures uncheckable from the video; second, small inconsistencies and unexplained gaps, such as the composition of connectivity revenue; third, the partial orbital-computing comparison; and fourth, the binary of solid and dashed lines, which hides intermediate states such as contracted but unproven links and does not convey how risk compounds with chain depth.

The omissions are partly a matter of scope; no video can cover everything. Still, several are material to the thesis. The video does not discuss the power, water or local environmental footprint of very large data centres or of frequent launches. It does not examine how far the group depends on government contracts and regulatory approvals, although it mentions both NASA orders and the request to operate a million satellites. It discusses advertisers’ concerns about X (28:35 to 29:01) but not the safety and governance of the AI products built into the feed. It does not discuss succession, even though it lists the leader’s death as a shared exposure (28:05). It mentions lenders (44:57) but not their scale or terms. And its perspective is that of investors and engineers in the United States; customers, workers and communities elsewhere appear rarely. For a creative-economy audience in Indonesia, that last omission matters most, because the question there is not whether to invest in the Muskonomy but what to learn from it.

8. Lessons for Indonesian Creative Campuses

8.1 Why the Lessons Transfer at All

The differences of scale are obvious. A campus portfolio does not raise tens of billions of dollars or launch rockets. But the structural question is the same at every scale: does a link between two ventures let a working capability support the next one, or does it make one unfinished project depend on another? Indonesian creative campuses already run linked portfolios of studios, startups, incubators, community programmes and industry partnerships [1,35], and policy now asks them to work through hexa-helix collaboration [33]. Figure 4 sets out our copy, adapt and avoid framework, and Table 7 maps each lesson to the hexa-helix actor best placed to act on it. Two helices need particular mention because the case turns on them. Media actors, including campus media and creators who cover student ventures, shape which links appear solid; they can apply the claim inventory to their own coverage and report a venture’s announced plans separately from its operating record. Finance actors, including angel networks, banks and venture funds, decide which chains are funded; where Indonesian creative-economy financing allows intellectual property to be used as collateral, a ledger of which links are operating and which are planned helps lenders value the right assets and avoid lending against a chain of unproven ones.

Table 7. Copy, adapt and avoid: lessons for Indonesian creative campuses and the hexa-helix actor best placed to act

Mode	Lesson	Campus application	Lead actor
Copy	Build the proven loop first	Studio serves campus startups, then outside clients, with internal prices	Academia

Mode	Lesson	Campus application	Lead actor
Copy	Demanding first customer with milestones	Milestone-based procurement by local government or SOEs	Government, business
Copy	Question, delete, simplify, speed up, automate last	Built into project and incubator curricula [36]	Academia
Copy	Separate revenue, fundraising and valuation	Pitch and crowdfunding templates [21,37]	Finance, academia
Adapt	Share infrastructure, measure utilisation	Open studios and labs to creative SMEs; report utilisation	Academia, community
Adapt	Mission-driven recruiting with protections	Limits on hours, fair credit, channels for bad news [26]	Academia
Adapt	Founder close to work plus a second line	Every venture names an operations lead	Business, academia
Adapt	Integrate only where demand is proven	Shared regional facilities serving many SMEs	Government, business
Avoid	Bet-on-bet chains	No venture with two or more unproven nodes unless it has a fallback customer	Academia, finance
Avoid	Control without checks	Separate roles of mentor, judge and investor	Academia
Avoid	Undisclosed related-party flows	Written, disclosed terms for staff-student and unit-unit deals [16]	Academia, government
Avoid	Announcements treated as achievements	Reward dashed-to-solid conversions, not launches	Media, academia

8.2 What to Copy

Build the proven loop first. Starlink’s strength is that it gave the rocket “a steady reason to fly” while subscribers paid every month (9:34 to 9:41). A creative campus can look for the same pattern: a production studio that first serves its own student startups’ content needs and then sells to outside clients, or a design lab whose prototyping service supports incubated ventures before it is offered to local small businesses. The link should be priced, even internally, so that its value is visible.

Seek a demanding first customer who pays against milestones. NASA’s role in SpaceX’s early years was not charity: payments were tied to progress and delivery (7:01 to 7:04), and a credible order book changed every conversation with suppliers and investors (7:06 to 7:15). Local governments, state-owned enterprises and established firms can play this role for campus ventures through milestone-based procurement, an approach consistent with the creative-economy policy emphasis on partnership. Studies of Indonesian incubators identify access to funding, mentoring and networks as success factors [1], and campus research continues to examine the determinants of incubator success [34]; an anchor customer can provide all three.

Teach the method, including its order. The five steps the video reports, question the requirements, delete unnecessary parts or steps, simplify, speed up and automate last (24:31 to 24:44), are a useful discipline for student projects, as is the insistence that every test needs a question and a way to measure the answer (25:24 to 25:28). Lean-startup approaches already common in Indonesian entrepreneurship education share this spirit [36].

Separate the three kinds of money in every pitch. Student founders often present valuation, grants and sales as if they were one quantity. The video’s distinction between revenue, fundraising and market value (44:10) belongs in every incubator’s pitch template, alongside the visual and narrative clarity that effective pitch decks require [37] and the disclosure that investors on crowdfunding platforms need [21].

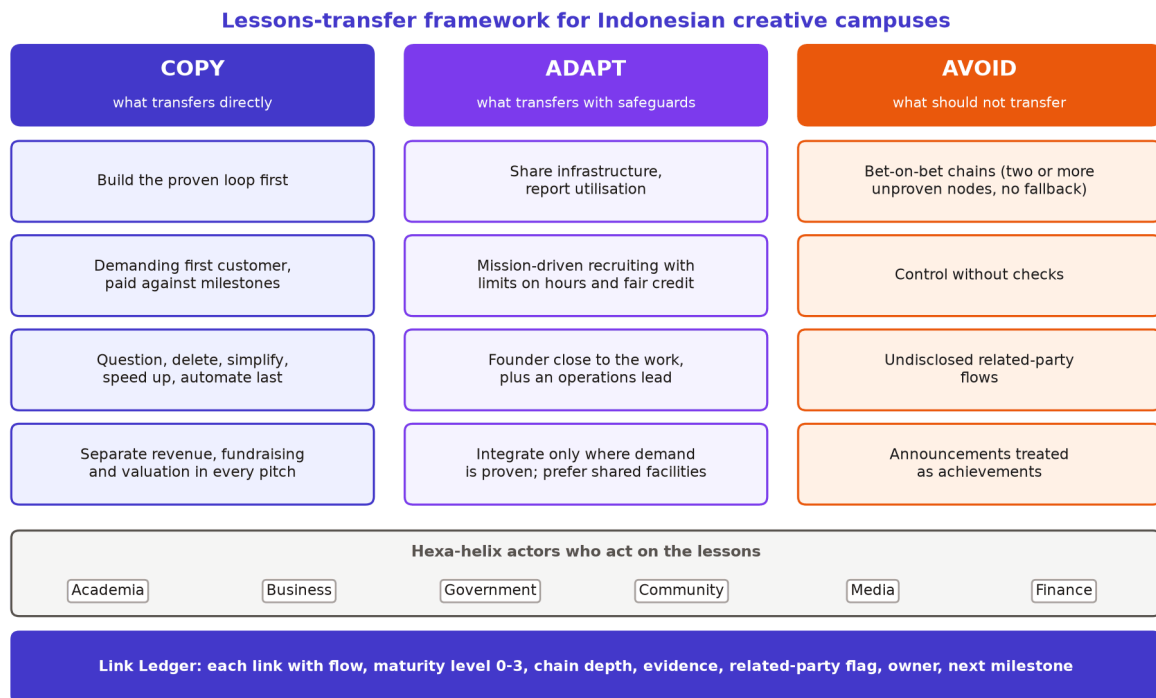


Figure 4. Lessons-transfer framework for Indonesian creative campuses: what to copy, what to adapt with safeguards and what to avoid, the hexa-helix actors who act on each lesson, and the Link Ledger that records links across a campus portfolio.

8.3 What to Adapt

Share infrastructure, but measure utilisation. Renting Colossus capacity to an outside firm shows how shared infrastructure can earn revenue (32:44). Campuses invest in studios, maker spaces and computing labs that are often idle; opening them to small creative businesses and community users can raise utilisation and revenue. The adaptation is to adopt the video’s own test: report utilisation, not just capacity (33:54).

Use mission to recruit, but protect people. A clear mission attracts talent (25:45 to 25:58), and campuses have missions that matter. But the costs reported in the video, from 120-hour weeks to workplace injuries (23:52, 26:41), have campus analogues in unpaid student labour, deadline crunches and burnout. Mission-driven projects need limits on hours, fair credit and channels for bad news, the conditions the video itself names (27:04 to 27:10) and that research on startup employees’ well-being and retention supports [25, 26].

Keep the founder close to the work, but build a second line. Technical involvement speeds decisions (24:07 to 24:16), but a founder through whom every hard question passes becomes the bottleneck (24:18 to 24:24). The figure of Gwynne Shotwell (26:01) is as important a lesson as Musk himself: every campus venture needs an operations lead who can run it while the founder is elsewhere. Research on leadership in digital transformation points in the same direction [5, 23].

Integrate vertically only where demand is proven. If a campus wants to build its own production facility, the Terafab lesson is to secure many customers, not one, and to prefer shared regional facilities that serve many creative small businesses, closer to TSMC’s model of serving 534 customers (35:29) than to a captive plant.

8.4 What to Avoid

Avoid bet-on-bet chains. A student venture whose only planned customer is another unbuilt venture has a chain depth of at least one; a venture that depends on a platform that depends on a

grant that has not been awarded has a depth of two. Our practical rule is that no venture should enter an incubator’s portfolio with two or more unproven nodes on its critical path unless it also has a fallback customer.

Avoid concentrated control without checks. On a campus, the analogue of dual-class control is a lecturer or programme head who sits on every venture’s decision-making body, controls access to facilities and judges outcomes. Clear roles and independent review protect both students and staff.

Avoid undisclosed related-party flows. When a lecturer’s firm buys services from a student startup, when an incubator takes equity in ventures it also evaluates, or when two campus units share a facility, the terms should be written down and disclosed, as the video says each Musk company must do (43:54). Governance research on digital business and AI stresses exactly this kind of transparency [14, 16].

Avoid treating announcements as achievements. “An announcement doesn’t skip to the end” (37:31). Campus showcases, competitions and media coverage reward announcements; incubators should reward the conversion of dashed lines into solid ones.

8.5 A Link Ledger for Campus Portfolios

To make the framework usable, we propose a simple Link Ledger, kept by each incubator or creative-campus unit. Each row records a link between two ventures or between a venture and a partner, with its flow type (capital, product, customer or technology), its maturity level from 0 to 3, the chain depth of the capability it supports, the evidence for its current level, a related-party flag, the person responsible and the next milestone that would raise its level. Reviewed each term, the ledger shows where the portfolio’s strength lies, where its risks concentrate and which dashed lines are turning solid. It also produces the kind of linkage data that creative-economy policy now asks for, at the level of the ventures that make up the ecosystem. Machine-learning studies of startup ecosystems and collaboration suggest that structured historical data of this kind can improve decision-making [9, 38].

A hypothetical example shows how the ledger works. Suppose a campus animation studio produces paid explainer videos for the university’s own media unit, a link at Level 3 because the work is delivered and paid for. The studio plans a merchandise line based on its characters, which depends only on the studio’s existing work and a supplier yet to be contracted: a Level 1 link with depth one, a bridge bet. A student team also proposes an augmented-reality app that would use the characters, would be hosted on a campus platform still under development and would be financed by a grant not yet awarded: depth two, a bet-on-bet chain. The ledger supports a clear decision: fund and protect the operating link, set a milestone for the bridge bet, such as a signed supplier agreement, and ask the app team to find a customer or a fallback that does not depend on the unbuilt platform before it enters the portfolio. The example is illustrative and involves no real ventures.

8.6 Critical Media Literacy as a Creative-Campus Skill

The method of this paper is itself a lesson. Students increasingly learn about ventures from video explainers, and the claim inventory we used, which classifies each statement as fact, estimate, forecast, illustration or opinion and records its source and timestamp, can be taught in a single workshop. A workshop can follow five steps. Students choose a ten-minute segment of an explainer or pitch video and segment it into claims; code each claim by type and by whether a source is named; recompute one ratio or derived quantity from the video’s own figures; draw the links the video describes, solid for operating and dashed for planned; and finally write one paragraph on what the video leaves out. Applied to explainers, pitch videos and founders’ interviews, it trains the habit the video recommends in its closing: to respect what has been built while asking hard questions about the next promise (47:44 to 47:48). For a creative economy that runs on stories,

the ability to read a story as an argument is a core skill. Creative-economy studies emphasise digital literacy as a condition of growth [30,31], and the same holds for literacy about digital media itself.

9. Limitations and Future Research

This study has five limitations. First, it analyses a single text, and its findings concern that text’s argument, not the companies themselves. Second, the figures for 2026 are taken from the video and were not independently verified; some may be revised, and our derived calculations inherit any errors. Third, the claim inventory was coded by the authors without a formal intercoder reliability test; we have published the inventory so that others can recode it. Fourth, the coordinates in Figure 3 and the chain depths in Section 5 are ordinal judgements based on the video’s evidence, not measurements. Fifth, the transfer of lessons from a group valued in trillions of dollars to campus portfolios is necessarily analogical.

Future research could compare the video’s figures with company filings once they are available, replicate the claim inventory with independent coders and report their agreement, apply the Proven-Link versus Bet-on-Bet framework to other conglomerates and to Indonesian business groups, test the Link Ledger in campus incubators to see whether it changes portfolio decisions, and assess whether teaching the claim inventory improves students’ critical evaluation of business media.

10. Conclusion

The video examined in this paper argues that the companies around Elon Musk are best understood through the links between them, and it concludes that links between working capabilities add strength while chains of unfinished projects add risk. Our analysis supports that thesis and extends it. A coded inventory of 93 claim units shows a careful but unevenly sourced argument: the video marks interested sources and its own illustrations, but about two-thirds of its factual and quantitative claims are unattributed, and the 2026 figures are reported here as the video states them. The Proven-Link versus Bet-on-Bet framework grades links by maturity and capabilities by chain depth, and it shows that the group’s cash and credibility come from a small number of proven links while its capital and attention flow increasingly to chains of depth two or more.

Six critiques extend the video’s own caveats: valuation is becoming the group’s currency as well as its measure; concentrated voting control magnifies key-person risk; related-party flows are stated rather than examined; the orbital-computing comparison omits energy, hardware and lifetime; captive demand turns market risk into dependency risk; and labour and safety costs are carried off the balance sheet. For Indonesian creative campuses, the lesson is neither to imitate nor to dismiss. Build the proven loop first, seek demanding anchor customers, teach the method with its safeguards, share infrastructure and measure its use, and keep a ledger of the links in every portfolio. Above all, watch which dashed lines turn solid, and do not let several of them depend on each other at once.

Appendix A. Coded Claim Inventory

Table 8 lists all 93 claim units coded in Section 4, in order of appearance. Types: F fact, E estimate, FC forecast, I illustration, O opinion. Attribution: A named primary source, B named secondary or interested source, C no source named in the video; illustrations and opinions are not coded for attribution. Claims are paraphrased; times give the start of the statement in the video.

Table 8. Full coded claim inventory (paraphrased; figures as stated in the video, not independently verified)

ID	Time	Claim	Type	Attr.
C01	0:06	Tesla delivered fewer cars in 2025 than in 2024 but deployed almost 50% more battery storage	F	C
C02	0:14	SpaceX's internet business brings in more than four times the revenue of its space segment	F	C
C03	0:23	The group behind Grok agreed to rent computing capacity to Anthropic, a direct competitor	F	C
C04	0:32	SpaceX stock has been tradable since June and is worth more than Tesla	F	C
C05	2:11	Starlink has about twelve million subscribers	F	C
C06	2:16	In February 2026 SpaceX merged with xAI, which already owned X	F	C
C07	2:27	In August SpaceX added Anysphere, the company behind Cursor	F	C
C08	3:00	Terafab is a chip factory Tesla and SpaceX are building together in Texas	F	C
C09	3:48	Compaq bought Zip2 in 1999	F	C
C10	3:59	eBay bought PayPal in 2002 in a deal valued at roughly 1.5 billion dollars	F	C
C11	4:08	Musk had been replaced as CEO by Peter Thiel in 2000	F	C
C12	5:00	SpaceX was founded in 2002; Musk joined Tesla as lead investor and chairman in 2004	F	C
C13	6:20	Falcon 1 failed on its first three attempts; the fourth reached orbit in September 2008	F	C
C14	6:44	NASA's commercial cargo agreement started at 278 million dollars and grew to 396 million	F	A
C15	6:53	A 2008 contract worth 1.6 billion dollars bought 12 cargo missions	F	A
C16	7:29	In September 2026 NASA ordered three more crew missions worth 946 million dollars	F	A
C17	9:48	By end-June 2026 Starlink had about 12 million subscribers, double a year earlier, paying about 66 dollars a month	F	C
C18	10:00	In Q2 connectivity revenue was about 4.3 billion dollars with about 1.7 billion operating profit	F	C
C19	10:08	The space segment brought in just under 1 billion dollars with an operating loss of about 0.5 billion	F	C
C20	10:21	Sixty of seventy-seven Falcon launches in H1 2026 were internal missions	F	C
C21	10:43	Amazon Leo had roughly 400 production satellites by July; Starlink has around 11,000	E	C
C22	11:10	New Glenn had flown three times; a May ground-test explosion damaged its pad	F	C
C23	11:52	On 28 September, flight 14, Starship reached orbit and released 26 Starlink satellites; one engine shut down early	F	C
C24	13:29	Model 3 and Model Y made up about 97% of 2025 deliveries	F	C
C25	15:10	Tesla delivered 1.64 million vehicles in 2025 (down about 9%); revenue about 95 billion dollars; operating margin about 4.6%	F	C
C26	15:25	Q2 2026 deliveries were a record 480,000, up 25% year on year	F	C
C27	15:36	Q2 operating margin was about 1.4%, free cash flow negative; capital spending expected above 25 billion dollars this year	F	C
C28	16:02	BYD sold about 2.26 million fully electric passenger vehicles in 2025	F	C
C29	16:28	A Yale-led working paper estimated 1 to 1.26 million lost US sales (late 2022 to April 2025)	E	B
C30	16:43	Brand Finance estimated Tesla's brand value fell about 36% in 2025	E	B
C31	16:51	By one industry tally, European registrations fell by more than a quarter in 2025	E	B
C32	17:49	Tesla deployed 46.7 GWh of storage in 2025, up about 49%	F	C
C33	18:14	Tesla trades at roughly 160 to 200 times expected earnings; GM about 5, Toyota about 10	E	C

ID	Time	Claim	Type	Attr.
C34	18:42	Tesla is a car company with 1.5% operating margin	F	C
C35	18:47	Musk expects most of Tesla's future value to come from Optimus	FC	B
C36	19:09	Tesla says robotaxi operates in seven metro areas, with unmonitored rides in Austin and Florida	F	B
C37	19:17	Independent trackers counted a few dozen driverless cars at most	E	B
C38	19:37	Waymo runs about 4,000 driverless vehicles in more than a dozen metros, about half a million paid rides a week	F	C
C39	20:49	In January Musk said no Optimus robots were doing useful work yet	F	B
C40	21:08	Musk said outside Optimus sales will probably begin by end-2027	FC	B
C41	22:15	The Vegas Loop had 11 stations, more than 4 million riders since 2021, plans for 100+ stations approved	F	C
C42	22:49	More than 20 people had received the Neuralink implant by early 2026	F	C
C43	23:52	In a 2018 CBS interview Musk said one week hit 120 hours	F	B
C44	26:41	A 2023 Reuters investigation documented at least 600 SpaceX workplace injuries since 2014	F	B
C45	27:29	Tesla and SpaceX are worth a combined 3.5 trillion dollars or so	E	C
C46	27:43	Tesla's 2025 pay package targets 1 million robots, 1 million robotaxis and 10 million FSD subscriptions	F	A
C47	28:46	In 2021 advertising was about 4.5 billion of Twitter's roughly 5.1 billion revenue, close to 90%	F	C
C48	29:37	Musk helped found OpenAI in 2015; xAI launched in 2023	F	C
C49	30:46	According to Nvidia, the first 100,000-GPU system was built in 122 days and training began 19 days after the first rack	F	B
C50	31:08	The February 2026 all-stock merger valued SpaceX at about 1 trillion and xAI at about 250 billion dollars	F	C
C51	31:25	Musk argued space will eventually be the cheapest place to run AI	FC	B
C52	31:36	xAI needed tens of billions of dollars for computing hardware	E	C
C53	32:00	Q2 AI segment revenue about 2.6 billion (more than triple), operating loss about 1.3 billion; includes compute services and X ads	F	C
C54	32:23	SpaceX capex about 18.4 billion in Q2, about 15.8 billion into AI (about 86 cents per dollar)	F	C
C55	32:44	In May SpaceX gave Anthropic access to Colossus 1 (200,000+ Nvidia GPUs) to raise Claude usage limits	F	B
C56	33:15	SpaceX reported about 14 billion dollars of contracted AI sales	F	A
C57	33:18	In August SpaceX closed a 60 billion dollar all-stock purchase of Anysphere	F	C
C58	34:25	Terafab was announced in March 2026 to make logic, memory and advanced packaging in Texas	F	C
C59	34:39	Intel signed on in April; its role has not been spelled out	F	C
C60	34:44	A first phase of about 16.8 billion dollars was confirmed in August; filings describe a full build-out costing several times more	F	A
C61	35:26	In 2025 TSMC made more than 12,000 products for 534 customers using 305 process technologies	F	C
C62	35:54	Made-up yield example: 70 versus 95 usable chips per 100	I	
C63	37:52	IEA: data centres used about 485 TWh in 2025; central projection roughly doubles by 2030	E	B
C64	38:28	SpaceX asked US regulators to operate up to one million satellites for orbital computing	F	A
C65	39:12	Musk's planning figure: about 100 kW of computing per tonne of satellite (about 10 kg per kW)	E	B
C66	39:21	A customer on a reusable Falcon 9 pays about 3,000 to 5,000 dollars per kg (call it 4,000)	E	C
C67	39:29	Launching each kW therefore costs about 40,000 dollars	I	
C68	39:37	A ground facility commonly runs about 10,000 dollars per kW	E	C
C69	39:46	Launch alone costs roughly four times a whole ground facility	I	

ID	Time	Claim	Type	Attr.
C70	40:00	At a few hundred dollars per kg, launching a kW drops to a few thousand dollars	I	
C71	40:59	SpaceX's IPO filing describes orbital plans as unproven technologies that may not achieve commercial viability	F	A
C72	42:40	Musk owns about 20% of Tesla and about 42% of SpaceX economic value	F	C
C73	42:49	SpaceX insiders hold ten-vote shares; Musk has about 82 to 85% of voting power	F	C
C74	43:24	Tesla sold about 400 million dollars of Megapacks to SpaceX in H1 2026, by Tesla's count	F	A
C75	43:34	Tesla invested 2 billion dollars in xAI in January 2026; the stake became well under 1% of SpaceX	F	C
C76	44:25	The June IPO raised about 85.7 billion dollars after fees, the largest listing ever	F	C
C77	44:37	SpaceX carries a 2 trillion dollar valuation	E	C
O01	9:41	Starlink is the clearest place where the pieces genuinely feed each other	O	
O02	10:30	Internal launches are like owning the trucking company your store depends on	O	
O03	24:18	When every hard question waits for the founder, the founder becomes the bottleneck	O	
O04	25:38	The iteration slogan does not transfer without safeguards	O	
O05	26:58	Urgency, mission and technical involvement only last where bad news surfaces and people are protected	O	
O06	27:12	Credibility may be the most transferable asset in the empire	O	
O07	29:07	X can be strategically useful without proving the purchase was a good financial return	O	
O08	30:14	Accumulated know-how is hard to buy	O	
O09	33:45	The strategy is plausible, but integration is hard and infrastructure ahead of demand pays only if demand arrives	O	
O10	36:42	Forecasting Terafab's demand means forecasting how fast other projects succeed	O	
O11	37:05	Organisational skills transfer; semiconductor process knowledge does not come for free	O	
O12	41:35	Assumptions stack up; owning more of the chain means owning more of what can go wrong	O	
O13	42:22	Resist putting a date on Mars because the first pieces are visible	O	
O14	43:09	Concentrated control enables decade-long projects but outside owners have little say	O	
O15	44:33	IPO money is capital, not profit; valuation is not a checking account	O	
O16	47:29	Links between working capabilities strengthen the empire; chains of unfinished projects add risk	O	

Declarations

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Conflicts of interest. The authors declare no conflicts of interest. They have no financial or professional relationship with the presenter of the video analysed or with any company discussed in it.

Data availability. No new data were collected. The analysis is based on a publicly available video and its time-stamped transcript, cited in the text. The coded claim inventory is reproduced in Appendix A (Table 8). Figures for 2026 are reported as stated in the video and were not independently verified.

Ethics. The study analysed a public document and involved no human participants.

Use of AI tools. AI-based tools were used to assist with transcript handling, literature screening, drafting, editing, figure preparation and formatting. The authors reviewed and verified all content, including every timestamp, figure and reference, and take full responsibility for the manuscript.

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