# Activity 7B: Disruption Mapping – SOLUTIONS

Digital Finance Intensive Course | Prof. Dr. Joerg Osterrieder

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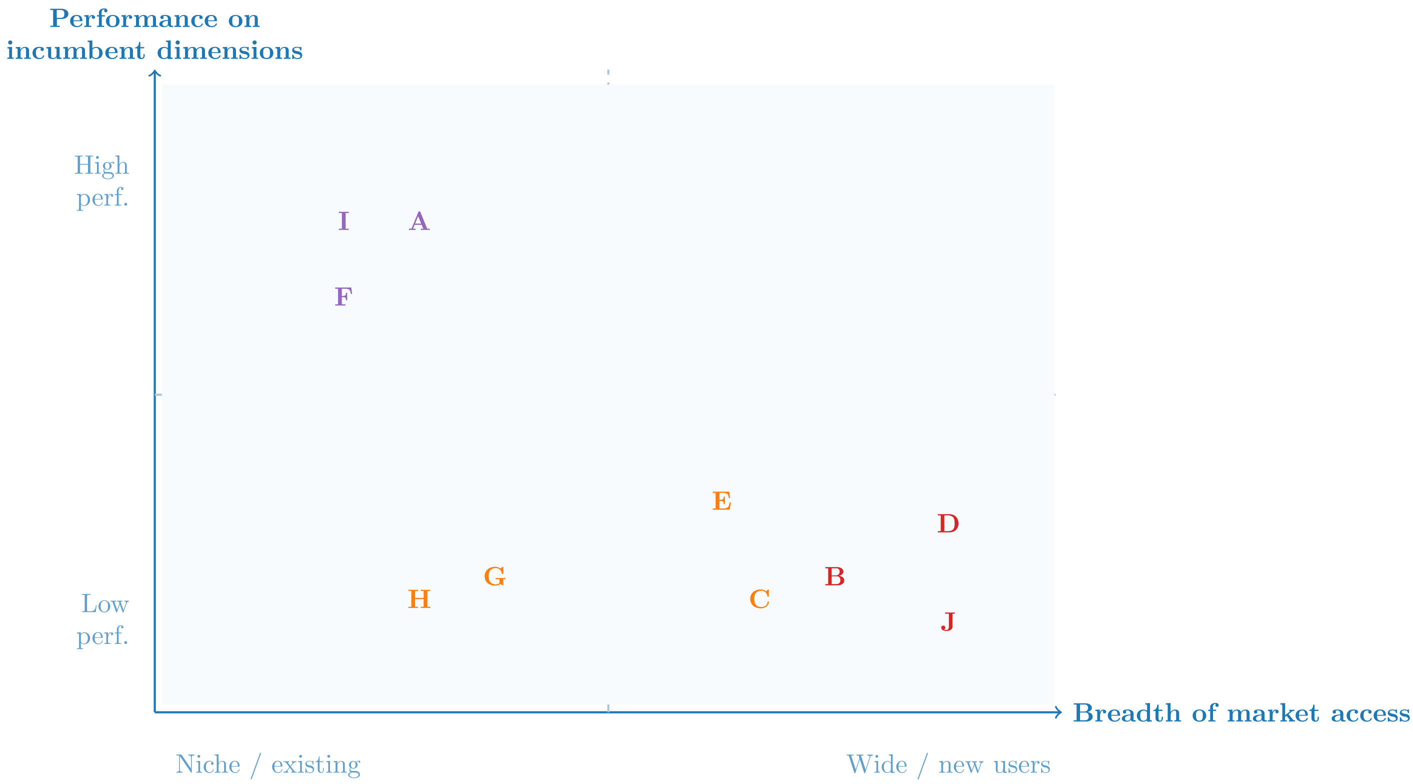
**Grading note.** Disruption classification is inherently contested – Christensen himself disagreed with commentators on many cases. Accept well-reasoned alternative placements, provided the student names the correct mechanism. The key criterion is: does the student correctly identify *which user segment* the company initially served and whether that segment was an incumbent's customer or a non-consumer?




**Note on coordinate placement:** The matrix above shows approximate quadrant positions. Accept any placement within the correct quadrant that reflects the student's reasoning. The arrows representing disruption trajectories (Uniswap G, Ant Group J moving toward top-right over time) are more important than precise positioning within the quadrant.

## Placement justifications (model answers)

**A (Revolut): Radical/premium innovation (top-left).** Revolut launched as a premium travel card for existing bank customers (narrow user base), offering genuinely better performance on FX fees (0% vs. 3-5% incumbent rate) but serving the same demographic. Metal card and premium tiers confirm this is sustaining innovation aimed at sophisticated, high-spending customers – not non-consumers or over-served mass market. Accept: "low-end disruption" for the entry multi-currency card (served customers over-served by expensive FX); accept trajectory argument showing Revolut moving toward sustaining as it adds premium features.

**B (Nubank): Low-end disruption (bottom-right).** Nubank entered the Brazilian market with a zero-fee credit card targeting the mass market (100m+ customers) including many previously unbanked or underserved by incumbent banks. The card was *simpler* than a traditional bank credit product but served a vastly wider audience. Christensen's low-end disruption applies: incumbents (Bradesco, Itau) were over-serving high-margin corporate clients and ignoring cost-sensitive mass-market consumers. Accept: “new-market disruption” for the unbanked segment specifically.

**C (Robinhood): New-market disruption (bottom-right, moderate breadth).** Robinhood served non-consumers: millennials who wanted to invest but found existing brokerages too complex, too expensive (commission per trade), or too intimidating. Zero-commission mobile trading removed the primary access barrier. Performance on incumbent dimensions (research tools, asset variety, margin rates) is lower – it is a simpler product for a new segment. Accept: “low-end disruption” if student argues over-served retail investors at full-service brokerages were the target.

**D (Wise / TransferWise): Low-end disruption (bottom-right, wide).** Wise served the existing international transfer market with a cheaper, slightly slower, simpler product (no branch, no SWIFT margin, real exchange rate). Incumbents (HSBC, Barclays) were over-serving customers who wanted speed and brand trust; Wise captured the cost-sensitive segment. Wide breadth: global, accessible via web and mobile. Not new-market (customers already doing international transfers), but a direct low-end attack on incumbent margins.

**E (Stripe): New-market disruption initially (bottom-right); trajectory toward sustaining (top-right).** Stripe’s initial target was non-consumers: developers and startups who could not accept payments at all (too complex, too slow to integrate legacy gateways). This is Christensen’s canonical non-consumption case. However, Stripe Terminal, Stripe Treasury, and Stripe’s enterprise client base (Shopify, Amazon) now represent high-performance, high-functionality services for existing large merchants – sustaining innovation. **Contested:** See class discussion prompt. Full marks for any well-reasoned single placement with acknowledgment that Stripe has evolved across quadrants.

**F (Plaid): Infrastructure layer (top-left, niche, high performance on tech dimensions).** Plaid does not serve end consumers directly; it provides bank data infrastructure for 7,000+ fintech apps. On incumbent dimensions relevant to developers (API reliability, data coverage, speed of integration), Plaid performs at a high level. Its market is narrow: B2B infrastructure. The “incumbent” it disrupts is banks’ exclusive proprietary data access (pre-Open Banking). **Contested:** Whether Plaid belongs on the disruption matrix at all is a legitimate debate (see contested classification 2). Full marks for arguing it should be placed on a *platform power* or *infrastructure* framework instead.

**G (Uniswap): New-market disruption (bottom-left/centre).** Uniswap serves users no CeFi exchange serves: permissionless, KYC-free, global, 24/7. The non-consumer is anyone without a Coinbase or Binance account (e.g., DeFi natives, anonymity-preferring traders). Performance on incumbent dimensions is lower (no customer support, higher gas costs, impermanent loss risk for LPs). Placement is bottom-left (low performance, moderate breadth – the “new” users are still mostly crypto-native, not new to finance).

**H (Aave): New-market disruption (bottom-left).** Aave serves borrowers/lenders who cannot or will not use traditional lending (KYC-free, collateral locked in crypto, no credit check). Performance on traditional lending dimensions is low (over-collateralised, no fixed rate certainty, smart contract risk). Breadth is currently narrow (crypto users only). Placed slightly left of Uniswap because the user base is even more niche (DeFi power users vs. casual traders). **Contested:** See class discussion prompt 3.

**I (Circle / USDC): Radical/premium innovation (top-left).** Circle/USDC serves a narrow, high-performance niche: institutional clients and developers who need a regulated, audited stablecoin for treasury management and on-chain settlements. It performs better than cash on programmability and settlement finality. Its market is not wide – most consumers use USDC indirectly via apps, not directly.

Trajectory: if stablecoin adoption broadens (e.g., Visa settlement in USDC), Circle moves toward top-right sustaining innovation.

**J (Ant Group / Alipay): New-market disruption initially; then low-end disruption of banking.** Alipay began as a trust escrow for Taobao buyers – non-consumers of financial services in e-commerce. After tipping, it expanded to Yu'e Bao (money market), Huabei (credit), and insurance. The initial placement is bottom-right (wide new-market: 1bn+ users who previously had no payment mechanism for e-commerce). Ant then moved up-market into bank-competitive products (low-end disruption of retail banking's credit card, savings, and wealth management products). Ant Group is the most multi-trajectory company on the list – accept any placement that identifies at least two phases.

## Class debate: instructor notes

**Contested 1: Stripe.**
**Best argument for "disruptor":** Stripe's initial product (7-line API for startups) is textbook non-market disruption. New-market disruptors do not need to stay in that quadrant permanently. **Best argument for "sustaining innovator":** Stripe now competes feature-for-feature with Braintree (PayPal), Adyen, and Worldpay for enterprise clients who were already accepting cards. It has ascended the performance trajectory and now serves the *same* clients incumbents targeted. **Synthesis:** Christensen's model does not require a company to occupy one quadrant permanently. Stripe executed a classic disruptive trajectory: entered bottom-left (non-consumers), then moved up-market. The question "is Stripe still a disruptor?" misunderstands the theory – it was a disruptor, it succeeded, and success looks like arriving in the top-right. That is the disruption thesis fulfilled, not disproved.

**Contested 2: Plaid.**
**Best argument for placing on matrix:** Plaid disrupts the *data access incumbent* (banks held proprietary customer data and extracted rent via exclusive fintech partnerships or refusal to share). Plaid is a disruptor of that bottleneck, not a consumer-facing service. The "incumbent" is the bank's data monopoly, and Plaid's customer is the fintech developer. **Best argument for not placing it:** The disruption matrix assumes a competitive product market. Plaid operates as infrastructure, and its competitive dynamics are better modelled as a *platform power analysis* (data aggregator with network effects) or a *regulatory capture analysis* (PSD2/Open Banking as the mechanism, not competition). Forcing it onto the matrix obscures rather than illuminates. **Instructor note:** This is the strongest "category error" argument on the list. Students who identify the framework mismatch should receive full credit even if they leave Plaid off the matrix.

**Contested 3: Uniswap and Aave.**
**Best argument for "new-market disruption":** Permissionless global access genuinely serves non-consumers: the 1.7bn unbanked, developers in jurisdictions where CeFi is banned, and users who prioritise censorship resistance as a feature. No incumbent served this segment by design. **Best argument for "niche innovation":** Empirically, most Uniswap volume is from existing crypto traders moving between positions, not from genuinely new-to-finance users. The DeFi Summer 2020 volume was dominated by yield farmers recycling existing crypto capital. This is not non-consumption – it is *re-consumption* by existing players. **Evidence threshold:** For DeFi to cross the disruption threshold, a majority of volume would need to come from users who were previously excluded from CeFi. Stablecoin-denominated lending to merchants in underbanked markets (e.g., M-Pesa + Aave hybrid) would be compelling evidence. Current evidence does not meet this threshold. **Verdict: niche innovation for now, disruption potential pending.**

**Pattern across all 10 companies:** The clearest disruptors (Nubank, Ant Group, Robinhood) share one trait – they explicitly targeted a user who incumbents considered *not worth serving*: the unbanked Brazilian, the Taobao buyer without a bank account, the millennial who never opened a brokerage. The most contested cases (Stripe, Plaid, DeFi protocols) involve either B2B infrastructure or trajectory ambiguity. The matrix works best as a diagnostic for a *moment in time* – companies move.