

## Pre-Class Discovery Handout: Neobanks &amp; Open Banking

**Activity 1: The PSD2 Experiment**

*Scenario:* The European Payment Services Directive 2 (PSD2) forces banks to share customer account data with approved third-party providers (TPPs) via standardized APIs—if the customer consents. Imagine your bank just received this mandate.

- Q1:** List 3 concrete benefits of open banking for consumers.
- Q2:** List 3 risks of sharing financial data with third parties.
- Q3:** Who gains the most from PSD2—banks, fintechs, or consumers? Justify your answer in 2–3 sentences.

**Activity 2: Neobank Business Model Canvas**

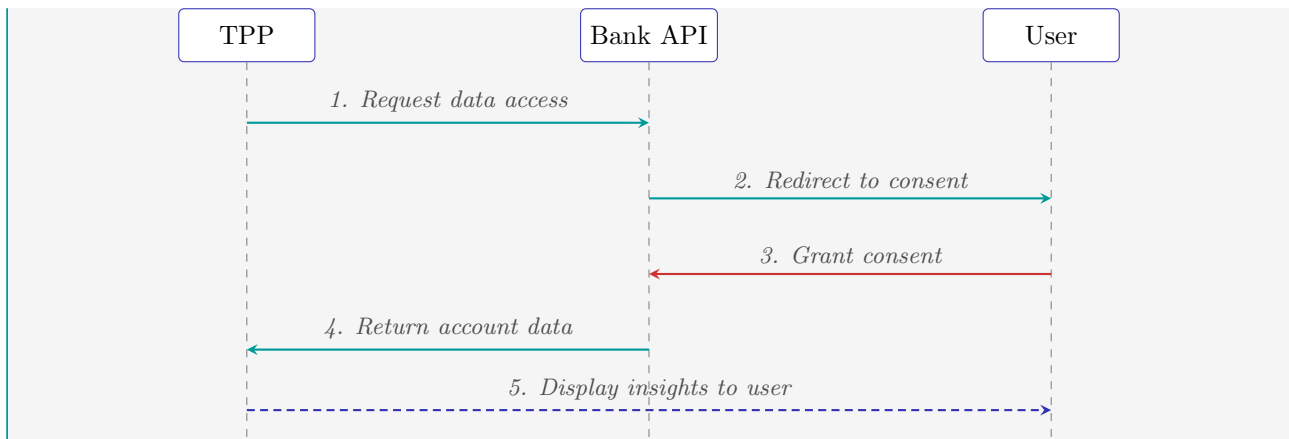
*Scenario:* Neobanks like Revolut and N26 have acquired millions of users yet struggle with profitability. Fill in the simplified business model canvas below.

Dimension	Your Answer
Revenue Sources	
Cost Structure	
Key Partners	
Customer Segments	

- Q1:** Fill in the canvas for a typical neobank (think Revolut, N26, or Monzo).
- Q2:** Why is neobank profitability so hard to achieve despite rapid user growth?

**Activity 3: API Detective**

*Scenario:* A third-party provider (TPP) wants to access a customer's bank account data via the Open Banking API. Study the flow below and answer the questions.



**Q1:** What data does the TPP typically request from the bank (account info, balances, transaction history)?

**Q2:** At which step does the user give consent? Why is this step critical for data protection?

**Q3:** What could go wrong if the consent mechanism is poorly implemented?

## Solutions

### Activity 1: The PSD2 Experiment

- A1:** (1) Comparison shopping—aggregators show accounts from multiple banks in one view. (2) Better financial products—fintechs use transaction data to offer personalized budgeting, lending, or insurance. (3) Lower costs—competition among providers drives down fees for payments and transfers.
- A2:** (1) Data breaches at third parties expose sensitive financial information. (2) Over-sharing—users may consent without understanding the scope of data access. (3) Regulatory complexity—different TPPs operate under varying standards, making consistent consumer protection difficult.
- A3:** Fintechs gain the most because PSD2 eliminates the distribution moat that incumbent banks relied on. Fintechs can now access customer data without building their own banking infrastructure, enabling rapid product innovation. Consumers benefit significantly too, but the competitive advantage shifts most clearly to agile technology firms that can move faster than legacy institutions.

### Activity 2: Neobank Business Model Canvas

- A1: Revenue:** Card interchange fees, premium subscription tiers (e.g., Revolut Metal), FX markup on non-premium transactions, lending interest, and partner commissions (insurance, crypto). **Cost structure:** Technology infrastructure, customer acquisition, regulatory compliance, card issuance, and customer support. **Key partners:** Card scheme networks (Visa/Mastercard), Banking-as-a-Service providers for banking licences, cloud infrastructure (AWS/GCP). **Customer segments:** Digital-native millennials/Gen-Z (18–35), frequent travellers, gig economy workers, and cost-sensitive switchers.
- A2:** Neobanks acquire users cheaply via referral loops but monetise each user weakly—interchange yields only a few EUR per month, and most users stay on free tiers. Meanwhile, compliance, fraud prevention, and customer support costs scale linearly with user growth, creating a persistent gap between revenue and cost per user.

### Activity 3: API Detective

- A1:** The TPP typically requests account identification data (IBAN, account holder name), current balances, and transaction history over a defined period (e.g., 90 days). Under PSD2, access scope must be explicitly specified in the consent request.
- A2:** Consent occurs at Step 3. This is the critical control point because it gives the user the power to approve or deny access. Without explicit, informed consent, data sharing would violate GDPR principles and undermine user trust in the entire open banking ecosystem.
- A3:** Poor consent design can lead to “consent fatigue” where users click through without reading, effectively granting blanket access. It can also enable dark patterns that nudge users toward sharing more data than necessary, or fail to provide clear revocation mechanisms, leaving users unable to withdraw consent once granted.