

Fintech Ecosystem

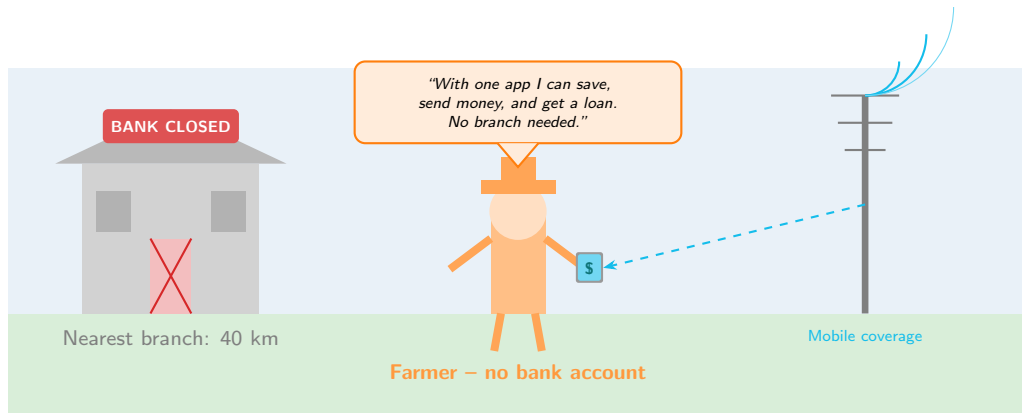
10-Slide Mini Lecture

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Why the Ecosystem Matters: The Unbanked Farmer



1.4 billion adults remain unbanked globally (World Bank 2023) – yet two-thirds own a mobile phone. The ecosystem exists to close this gap.

A Nudge You Didn't Notice

The Invisible Architecture of Your Banking App

Every time you open your bank or fintech app, choices have already been made *for* you. Which account is shown first? What action is highlighted in green? What does the default saving rate say?

Open your banking or payments app *right now*. Look for:

- **A default** – pre-filled amount, pre-ticked option
- **A social cue** – “Most customers choose. . .”
- **A colour signal** – green = good, red = danger
- **A simplification** – one big button, clutter removed
- **A loss frame** – “You could be saving \$X more”
- **A goal prompt** – “Set a savings goal”

Quick Exercise

Is the nudge you found **benevolent** (helping you) or **manipulative** (pushing a product)? Who decides?

Behavioural design is embedded in every fintech product. Understanding it is the first step to evaluating whether an ecosystem serves users or exploits them.

What Drives the Fintech Ecosystem? Four Growth Engines

Growth Driver	What It Enables	Example	Status
Smartphone penetration	Delivery channel for financial services without physical infrastructure	M-Pesa (Kenya), Nubank (Brazil)	Mature
API & Open Banking	Interoperability; fintechs access bank data with user consent	PSD2 (EU), CDR (Australia)	Expanding
Cloud & AI infrastructure	Low-cost scalable compute; personalised credit, fraud detection	Stripe, Affirm, Chime	Accelerating
Regulatory sandboxes	Controlled testing of novel products before full licensing	FCA (UK), MAS (Singapore)	Growing

The Compounding Effect

These four drivers reinforce each other: open APIs attract startups, regulators channel them into sandboxes, all delivered via the smartphone in every pocket.

No single driver created the ecosystem – the intersection of all four simultaneously after 2010 was historically unprecedented.

Who Do Users Trust? Five Dimensions of Fintech Trust

	Traditional Bank	Fintech Startup	Big Tech (e.g. Apple)
Institutional Trust	High centuries of history	Low must be earned	Medium brand trust, not finance
Technology Trust	Medium legacy systems visible	High cloud-native, fast	High billion-user platforms
Data Privacy	Medium regulated; opaque use	Medium varies; startups share data	Low data monetisation model
Brand Trust	High household name	Low unfamiliar brand	High global consumer brand
Regulatory Trust	High fully supervised	Low-Med licence gaps common	Low-Med financial services novel

Trust is multi-dimensional. Fintechs that partner with licensed banks can borrow institutional and regulatory trust while contributing technology trust.

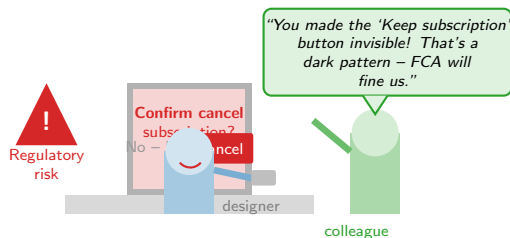
Choice architecture is not inherently good or bad. The ethical filter is what distinguishes fintech that empowers users from fintech that exploits them.

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Take-up; [out,fill=mlred!20,draw=mlred] (drk) at (3.8,-2.5) Dark Pattern
          (if filter fails);
[arr,mlgreen] (eth.east) – (sav.west); [arr,mlblue] (eth.east) – (ins.west); [arr,mlred,dashed]
          (eth.east) – (drk.west);
[font=,text=mlred,text width=2.8cm,align=center] at (3.8,-3.15) Hidden fees, deceptive
          opt-out flows;

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When Design Becomes Manipulation: Dark Patterns



Dark Pattern Types in Fintech

Roach Motel: Easy to sign up, very hard to cancel.

Confirmshaming: "No thanks, I don't want to save money."

Hidden Costs: Fees revealed only at final checkout.

Misdirection: Highlight the option you want the user to *avoid*.

Regulatory Response

FCA (UK) 2023 Consumer Duty requires firms to prove good outcomes for customers.

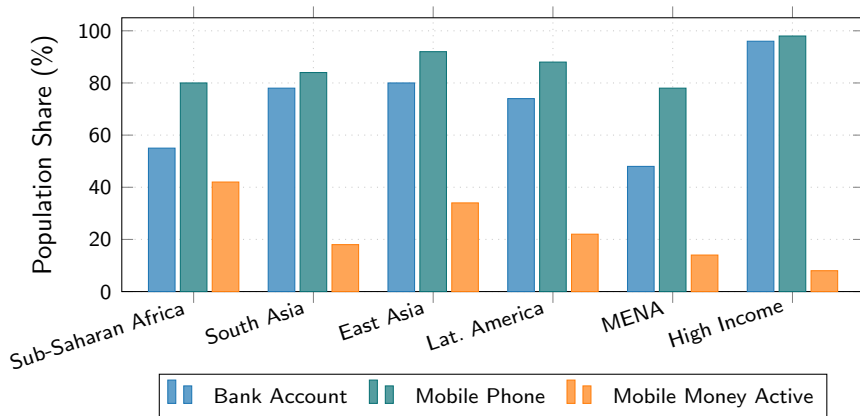
CFPB (US) targets "junk fees" and subscription traps.

EU Digital Services Act covers deceptive interfaces.

The line between persuasion and manipulation is a regulatory frontier. Fintech designers now face the same scrutiny as pharmaceutical advertisers.

Where Is the Gap? Financial Inclusion by Region

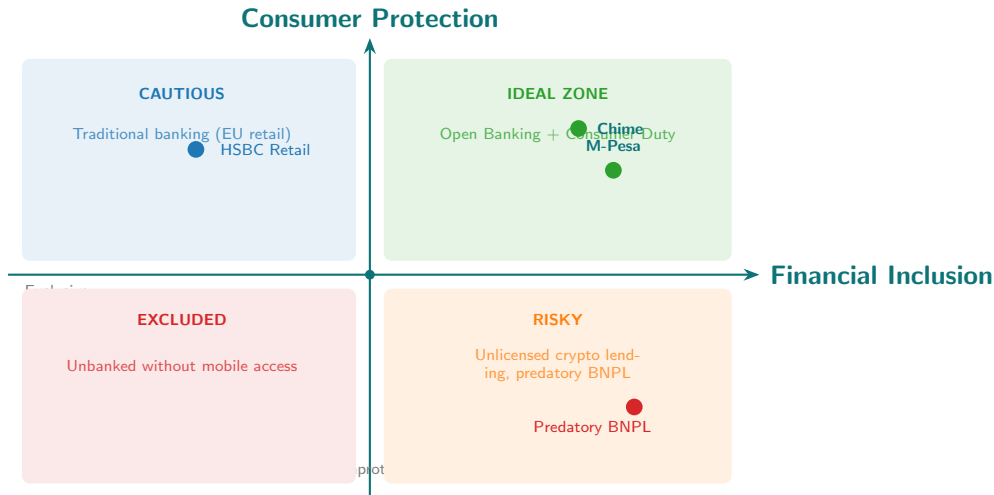
Bank Account vs. Mobile Phone Ownership – Illustrative by Region



Illustrative figures based on World Bank Global Findex 2021 and GSMA State of Mobile 2023 trends. Mobile money active = at least one transaction per 90 days.

The "mobile gap" (phones minus bank accounts) is largest in Sub-Saharan Africa and MENA – and represents the biggest addressable market for mobile-first fintech.

The Ecosystem Trade-off: Inclusion vs. Protection



Policy goal: move the ecosystem toward the top-right quadrant – high inclusion AND high protection. The two are not inherently in tension.

So What? Five Questions to Evaluate Any Fintech Ecosystem

Who is excluded?

- 1 Map the unbanked or underserved population the ecosystem could reach.

What trust dimension is missing?

- 2 Is the gap institutional, technical, data privacy, brand, or regulatory?

Which growth driver is primary?

- 3 Smartphone, API, cloud/AI, or regulatory sandbox?

Does behaviour design serve users?

- 4 Apply the ethical filter: transparent, reversible, user-beneficial?

Is the inclusion–protection balance right?

- 5 Place it on the quadrant: ideal zone or risky/cautious/excluded?

When to Use This

- Evaluating a VC pitch
- Writing a policy brief
- Assessing a job offer at a fintech
- Completing the Day-5 Workshop C exercise

Worked Example

M-Pesa Kenya (2007)

Excluded: rural unbanked

Trust gap: institutional

Driver: smartphone

Behaviour: simple USSD defaults

Quadrant: moves toward ideal

These five questions distil L01–L02 into a reusable diagnostic. You will return to them in every lecture that follows.

Act: Apply the Ecosystem Evaluation to a Fintech You Use

Your Task (15 Minutes)

Choose **one fintech product** you use regularly. Work through the five-question framework:

- 1 **Excluded population:** Who was this built for? Who does it still fail to reach?
- 2 **Trust gap:** Which trust dimension did it have to overcome, and how?
- 3 **Growth driver:** Which of the four engines powers it?
- 4 **Behavioural design:** Find one nudge. Benevolent or dark?
- 5 **Quadrant placement:** Draw it on the 2x2. Ideal zone? How to get there?

Reflection Prompts

- As the **regulator**: what would you require to change?
- As the **founder**: what would you do to serve the excluded?
- Is this product **creating** or **capturing** value?

Next Lecture – L03

Payments & Digital Currencies

From cash to crypto: how value moves in a digital ecosystem.

Prepare: read your payment app's fee schedule.

The ecosystem is not fixed: products move on the quadrant as regulation tightens, trust grows, or technology improves. Your job is to track the direction of travel.