Why is the future of finance a question about values, not just technology?

Technology is a tool, not a destination:

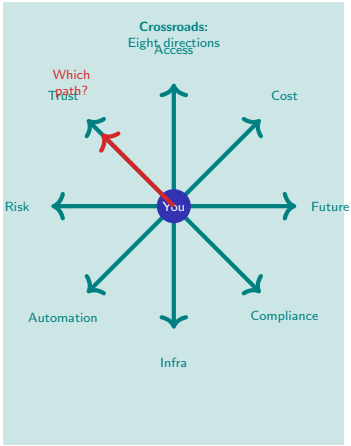
- Blockchain can enable financial inclusion or surveillance
- AI can democratize investing or amplify bias
- Automation can lower costs or destroy jobs
- Open banking can empower users or extract more data

The same technology serves opposite ends:

- Central bank digital currencies can be privacy-preserving or tracking tools
- DeFi can bypass gatekeepers or enable fraud at scale
- Algorithmic lending can expand access or reinforce discrimination
- Real-time payments can reduce friction or enable predatory pricing

Values shape outcomes:

- Should finance prioritize efficiency or resilience?
- Who owns the data: individuals or platforms?
- Is financial exclusion a market failure or a business model?
- Do we regulate for safety or for innovation?

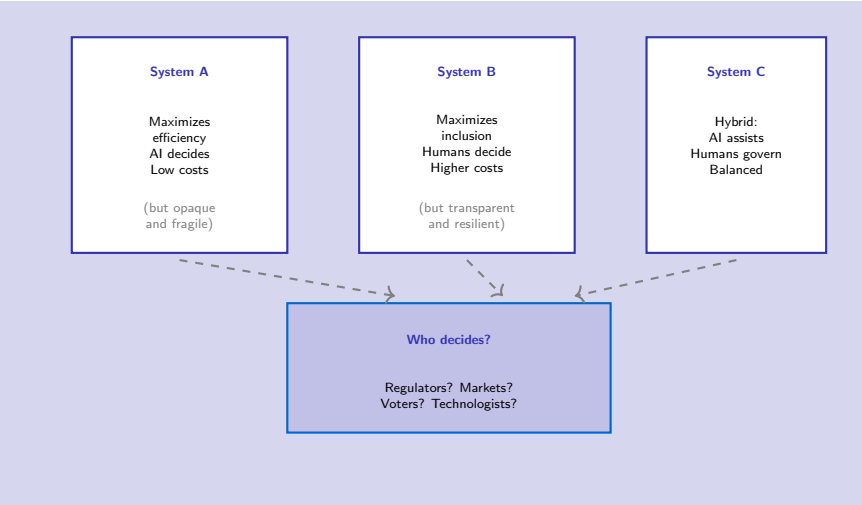


A person stands at a crossroads with eight signposts representing the course modules. The future depends on which path we choose.

Every technology in this course can be deployed to expand access or concentrate power. The outcome depends on regulatory choices, business incentives, and

(c) Joerg Osterrieder 2025–2026

What kind of financial system do you want to live in – and who gets to decide?



The question is not which technology wins but which values we encode into financial infrastructure. The answer is a political and social choice, not a technical inevitability.

(c) Joerg Osterrieder 2025–2026

What are the major forces shaping the future of finance?

Technology convergence:

- AI, blockchain, APIs, cloud, and IoT are no longer separate
- Embedded finance, autonomous systems, programmable money
- Real-time settlement and atomic compliance

Regulatory divergence:

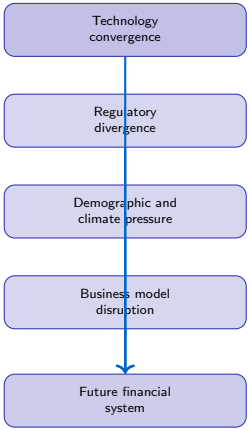
- EU regulates comprehensively (GDPR, AI Act, crypto frameworks)
- US remains fragmented and politically contested
- Asia selectively adopts technology while controlling platforms
- Global standards (ISSB, TCFD) meet local variation

Demographic and climate pressure:

- Aging populations demand retirement solutions
- Climate risk reprices assets and shifts capital flows
- Financial exclusion persists for billions
- Trust in institutions declines, demand for transparency rises

Business model disruption:

- Incumbent banks face margin compression and tech competition
- Platform economics replace vertically integrated firms
- Open banking unbundles and rebundles financial services



(c) Joerg Osterrieder 2025–2026

How does a scenario planning framework help navigate uncertainty about the future?

Step one: Identify key uncertainties

- Which variables are most impactful and most uncertain?
- For finance: technology adoption speed, regulatory stringency

Step two: Build a two-by-two matrix

- Horizontal axis: technology (rapid vs gradual)
- Vertical axis: regulation (permissive vs restrictive)
- Four quadrants represent four distinct futures

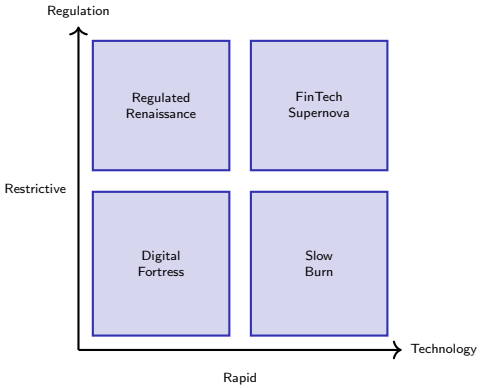
Step three: Develop narratives for each scenario

- What does finance look like in this world?
- Who wins, who loses, what risks emerge?
- What strategic choices would succeed here?

Step four: Identify robust strategies

- What actions work across multiple scenarios?
- Where should you hedge, where should you commit?
- How do you monitor which scenario is unfolding?

Not prediction: Scenario planning does not forecast the future. It prepares you for multiple possible futures.



(c) Joerg Osterrieder 2025–2026

How might the financial system look under radically different regulatory and technology paths?

FinTech Supernova (rapid tech, permissive regulation):

- AI-native banks with zero human employees
- DeFi handles major derivatives volume
- Stablecoins dominate cross-border payments
- Systemic fragility: nobody understands interconnections

Regulated Renaissance (rapid tech, restrictive regulation):

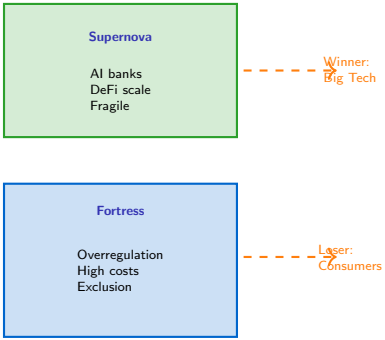
- Strong AI regulation governs all financial models
- CBDCs are primary digital currency
- Open banking is mandatory globally
- Innovation slows but stability increases

Slow Burn (gradual tech, permissive regulation):

- Banks modernize slowly, most still run legacy systems
- FinTech finds niches but does not displace incumbents
- Crypto remains speculative, AI improves back-office
- Financial exclusion persists

Digital Fortress (gradual tech, restrictive regulation):

- Regulation so strict innovation moves offshore
- Compliance costs rise to 15 percent of revenue



What happens when multiple disruptions collide – and nobody planned for the combination?

The Jenga tower problem:

- Financial systems are increasingly complex and interdependent
- Each technology is tested in isolation
- Nobody stress-tests for simultaneous shocks

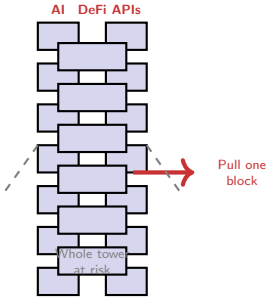
Example convergence failures:

- AI credit models fail during pandemic when historical data becomes irrelevant
- DeFi protocols collapse when stablecoin de-pegs trigger liquidation cascades
- Real-time payments enable fraud at unprecedented speed
- Open banking APIs create new attack surfaces for cyber criminals

The regulation lag:

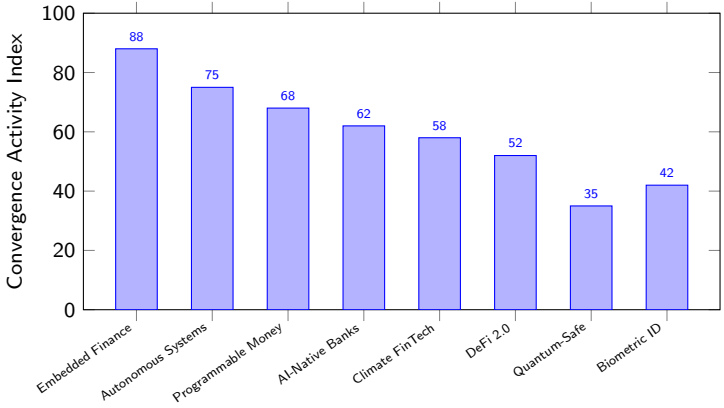
- Regulators test AI, blockchain, and open banking separately
- Systemic risk emerges at the intersections
- By the time rules catch up, damage is done
- Financial crises happen when combinations fail

Lesson: Convergence creates power but also fragility. Test for interactions, not just individual components.



Technologies stack like Jenga blocks. Pull one (regulation failure, tech breakdown) and the structure wobbles.

Where are the course's eight themes converging in real-world developments?



Index combines: venture funding, regulatory attention, patent filings, academic publications, industry adoption. Embedded finance leads because it combines modules 1, 2, and 6. Quantum-safe finance scores low because it remains speculative.

Convergence is not uniform. Some combinations are already mainstream; others remain experimental.

(c) Joerg Osterrieder 2025–2026

Who shapes the future of finance – and who is left out of those decisions?

Who has a seat at the table:

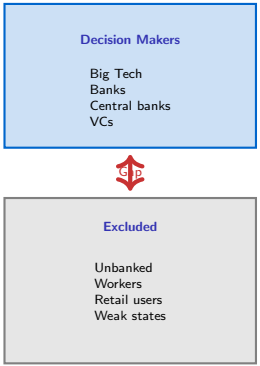
- Big Tech (Apple, Google, Amazon) building financial platforms
- Incumbent banks lobbying regulators
- Central banks designing digital currencies
- FinTech venture capitalists funding startups
- Global standard-setters (ISSB, Basel Committee)
- Large institutional investors demanding ESG

Who is excluded from the conversation:

- The 1.4 billion unbanked people
- Small merchants paying platform fees
- Workers displaced by automation
- Retail investors without financial literacy
- Communities facing algorithmic bias
- Countries with weak regulatory capacity

The representation gap:

- Financial innovation serves those who can pay or lobby
- Access does not equal voice in design decisions



(c) Joerg Osterrieder 2025–2026

Five questions every digital finance professional should ask about any emerging trend

Question one: What problem does it solve?

- Is this solving a real pain point or searching for a use case?
- Does it address cost, access, trust, risk, automation, infrastructure, compliance, or future uncertainty?

Question two: Who benefits and who is harmed?

- Follow the money: who captures value?
- Who bears the risks and externalities?
- Does it expand access or concentrate power?

Question three: What happens if adoption overshoots?

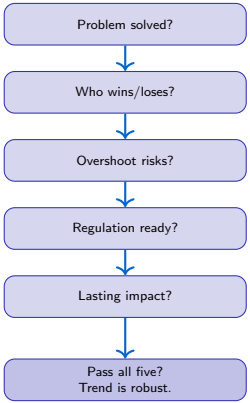
- At scale, does the solution create new systemic risks?
- Does it amplify inequality or fragility?
- Can the infrastructure handle mass adoption?

Question four: Is the regulatory framework ready?

- Does this operate in a legal gray zone?
- Will regulators allow it at scale?
- Is compliance automated or bolted on?

Question five: Will this matter in a decade?

- Is this a lasting shift or temporary hype?



(c) Joerg Osterrieder 2025–2026

Your Challenge

Scenario selection: Choose one of the four futures from slide 5: FinTech Supernova, Regulated Renaissance, Slow Burn, or Digital Fortress.

Your task:

1. Write a one-page brief describing the financial system in this scenario.
2. Identify which technologies dominate and which are sidelined.
3. Explain who wins (firms, regulators, consumers, specific demographics) and who loses.
4. List the skills you would need to thrive in this world.

Guiding questions:

- What does a typical retail banking experience look like in this scenario?
- How do regulators enforce compliance?
- What are the biggest systemic risks?
- Which course modules (1-8) are most relevant to careers in this future?
- If you had to invest in one skill today to prepare, what would it be?

Reflection:

- Compare your scenario to current trends. Which elements are already emerging?
- What policy choices or events would push us toward this scenario?
- Would you want to live in the world you described? Why or why not?

This exercise demonstrates that the future is not predetermined. Strategic foresight requires imagining multiple worlds and preparing for uncertainty.

Scenario thinking trains you to see the future as a choice, not a forecast.

(c) Joerg Osterrieder 2025–2026