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The Evolving Role of Traditional Banks in the Fintech Era

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ABSTRACT

Traditional banks have long operated under a "fortress model" built on regulatory protection, proprietary infrastructure, and closed value chains, but fintech competition is pressing them toward open and collaborative ecosystems. Prior studies examine fintech disruption, open banking, and bank-fintech partnerships separately, leaving unclear how banks' strategic identity changes. **This study examines how incumbent banks reinterpret their** competitiveness and redesign their value proposition through cross-industry partnerships, Application Programming Interface (API)-based services, digital onboarding, and modular financial platforms. **A qualitative multi-case study was** conducted using document analysis of regulatory frameworks, strategic reports, and partnership announcements from 2021 onward, covering purposively selected banks in Asia and Europe. Thematic coding and a three-level rating of four analytical dimensions were used to derive three transformation archetypes, namely Digitalized Fortress, Hybrid Value Orchestrator, and Ecosystem Platform Leader. **The results show that** banks integrating digital capabilities, organizational ambidexterity, and innovation governance tend to reposition themselves as orchestrators, and that partnership quantity does not equate to transformation depth. The pace and depth of this shift vary with legacy system rigidity, cultural inertia, and regulatory openness. **The study concludes that** ecosystem integration is a potential but not universally inevitable trajectory, requiring strategic clarity, technological interoperability, and trust-based collaboration. The future of banking is thus defined not by digital adoption alone but by institutional adaptability and cooperative value creation.

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1. INTRODUCTION

The financial services industry has been reshaped by digital-native firms, changing consumer expectations, regulatory developments, and technological innovation. Traditional banks, historically protected by licensing barriers and capital requirements, have operated under a "fortress paradigm" in which competitive advantages derive from scale, trust, legacy infrastructure, and regulatory privileges. However, fintech firms offering agile, user-centric, and lower-cost solutions increasingly challenge this dominance in payments, lending, wealth management, and microfinancial services. Consequently, banks are moving beyond traditional value chains toward digital ecosystems characterized by interoperability, co-creation, open banking, and platform-based collaboration. Regulatory frameworks also influence these transformation pathways. In Indonesia, OJK

Regulation No. 21 of 2023 addresses digital services provided by commercial banks, while Bank Indonesia's National Open API Payment Standard (SNAP) promotes interoperability in payment systems. In the European Union, Regulation (EU) 2022/2554, known as the Digital Operational Resilience Act (DORA), strengthens digital operational resilience and information and communication technology risk management. These frameworks illustrate how regulation shapes technological integration, partnership governance, and ecosystem development [1]. Nevertheless, fintech does not necessarily replace traditional banks. Instead, competition increasingly coexists with collaboration and ecosystem orchestration. This raises important questions about whether the evolution from fortress-oriented banking to ecosystem participation is universal or contingent on digital readiness, regulatory maturity, and strategic intent, as well as which capabilities distinguish substantive transformation from digital adoption alone.

Previous studies have examined fintech disruption, open banking, digital banking, and bank–fintech collaboration as separate research streams. However, three gaps remain. First, these streams rarely explain how digital capabilities, collaboration strategies, and regulatory conditions jointly shape a bank's strategic identity. Second, existing typologies of incumbent responses [2] tend to classify individual strategic actions rather than the overall configuration and depth of transformation. Third, partnerships are often assessed through adoption outcomes, although their success should also be evaluated in terms of sustainable value creation and ecosystem integration maturity [3]. These gaps highlight the need for an integrated perspective that explains how organizational capabilities, collaboration governance, and institutional conditions shape banks' transformation pathways.

This study addresses these gaps through a qualitative multi-case study of incumbent banks in Asia and Europe, two regions that differ in regulatory environments and levels of digital financial maturity, which broadens the range of transformation contexts observed without aiming at a systematic regional comparison. It makes three contributions. Conceptually, it reframes bank–fintech relations from competitive replacement to strategic co-evolution. Analytically, it classifies banks into three transformation archetypes, namely the "Digitalized Fortress," the "Hybrid Value Orchestrator," and the "Ecosystem Platform Leader," based on technological openness, collaboration governance, business model orientation, and regulatory integration. These archetypes represent distinct configurations of strategic identity and transformation depth rather than a universal or linear sequence. Empirically, the study shows that ecosystem integration is contingent and non-linear, with governance and architectural orchestration, rather than partnership quantity alone, distinguishing substantive transformation from rhetorical commitment. The concepts of transformation capability, strategic identity, ecosystem integration, and platform leadership are defined and operationalized in the theoretical and methodological sections.

The findings also have interpretive implications for the United Nations Sustainable Development Goals (SDGs). Ecosystem integration through partnerships and digital onboarding relates to SDG 8, particularly Target 8.10 on expanding access to financial services and Target 8.2 on productivity through technological upgrading. Modular, API-enabled infrastructure that facilitates financial services for small enterprises is relevant to SDG 9, Target 9.3. Furthermore, the finding that coordinated governance, rather than partnership quantity, determines ecosystem integration depth relates to SDG 17, Target 17.17, which emphasizes effective partnerships. These connections are interpretive because this study does not directly measure SDG outcomes.

This study is guided by three research questions:

- **RQ1:** How do incumbent banks reinterpret their competitiveness and redesign their value proposition through partnerships, API-based services, digital onboarding, and modular platforms?
- **RQ2:** Which capabilities distinguish substantive transformation from digital adoption alone?
- **RQ3:** To what extent is the evolution from fortress-oriented banking to ecosystem participation contingent on legacy structures, collaboration governance, and regulatory conditions?

2. LITERATURE REVIEW

2.1. Traditional Banking Models

Traditional banking institutions historically operated under a vertically integrated and asset-centered business model where value creation depended heavily on regulatory licensing, interest based intermediation, payment infrastructure ownership, and wealth management advisory delivered through physical branches and

proprietary legacy systems. Although digitization initiatives began emerging over the last two decades, structural dependence on core banking systems, branch-centric customer acquisition, and multi-layered internal bureaucracies remained dominant characteristics that shaped operational resilience and risk governance [4]. Recent literature highlights that traditional revenue models particularly net interest margins, payment fees, and managed investment commissions are increasingly pressured by cost to income inefficiencies, technology maintenance burdens, and diminishing customer loyalty driven by digital expectations [5]. Scholars also argue that banks' historical market power was sustained through closed value chains and exclusive data ownership, which limited competition by restricting interoperability [6]. However, technological debt, siloed data architecture, and slow innovation cycles have become strategic liabilities that challenge incumbents' ability to modernize at competitive speed [7]. This body of literature suggests that the traditional model was structurally stable but increasingly misaligned with platform-driven value creation logic.

2.2. Fintech as a Disruptive Force

Fintech firms have leveraged cloud computing, AI, blockchain, biometrics, and application programming interfaces (APIs) to create modular, low-cost, hyper-personalized financial service delivery mechanisms that bypass conventional banking operational constraints [8]. Peer-to-peer lending platforms have introduced alternative credit assessment methodologies using behavioral and alternative data, challenging bank-centric credit scoring models [9]. Digital payment platforms built on rapid settlement, embedded finance, and super-app ecosystems have redefined user expectations regarding cost, speed, and convenience [10]. Meanwhile, robo advisory platforms have democratized wealth management by offering algorithm-based portfolio recommendations with significantly reduced advisory fees and minimal asset thresholds [11]. Literature post-2021 consistently characterizes fintech not merely as a technological extension, but as a business model innovation that uncouples traditional service bundles, enabling users to choose best-of-breed providers across financial functions [12]. Nevertheless, several studies caution against oversimplifying the disruption narrative, noting that fintech scalability depends on trust formation, regulatory alignment, and long-term financial viability [13].

2.3. Strategic Response to Disruption

Incumbent strategic responses to fintech disruption generally align with innovation management theories such as ambidexterity, dynamic capabilities, and innovation ecosystem governance. Recent literature identifies three macro response categories: defensive strategies (cost restructuring, pricing adjustments, channel digitization), transformative strategies (platformization, venture building, digital subsidiaries), and collaborative strategies (partnerships, joint ventures, API marketplaces, and Banking as a Service models) [14]. Studies indicate that defensive strategies yield temporary benefits but rarely change long-term competitiveness, whereas strategic collaborations accelerate learning and digital capability acquisition through shared innovation risk [15]. Regulatory frameworks such as open banking and digital identity ecosystems are identified as major catalysts that incentivize incumbents to adopt open innovation strategies and service unbundling, effectively shifting power from institution-centric services to consumer-centric platforms [16]. However, organizational inertia, cultural resistance, and misaligned risk appetite remain recurring inhibitors of strategic transformation [17].

2.4. Case Studies on Bank-Fintech Partnerships

Documented cases of bank fintech partnerships demonstrate diverse motivations, including customer acquisition, speed to market, data analytics enhancement, regulatory experiments, and embedded finance integration. Research after 2021 notes multiple successful partnership models such as: BBVA's open banking API strategy, DBS's digital ecosystem expansion in Asia, and JPMorgan's AI driven collaboration with fintech analytics vendors [18]. Studies highlight that partnership outcomes depend on governance design, data-sharing security, interoperability standards, and alignment of innovation time horizons [19]. Challenges frequently observed involve regulatory compliance asymmetry, negotiation power imbalance, cultural clashes, and unclear revenue sharing models [20]. Despite the risks, literature portrays partnerships as a mutually reinforcing trajectory where banks gain agility and innovation capabilities, while fintech firms gain legitimacy, customer base, and infrastructure scalability [21]. However, scholars warn that partnership success should not be measured solely through adoption metrics but through sustainable value creation, ecosystem integration maturity, and strategic learning outcomes [22].

2.5. Theoretical Perspectives Guiding the Analysis

Four theoretical perspectives are used to explain why banks follow different transformation pathways. Dynamic capabilities theory views competitive advantage as the ability to sense, seize, and reconfigure resources [23], informing the analysis of Technology Infrastructure and Business Model. Organizational ambidexterity explains how banks balance the exploitation of existing operations with the exploration of new opportunities through structural separation, providing a basis for understanding Collaboration Governance. Institutional theory highlights the possibility that organizations adopt practices ceremonially rather than substantively, informing the analysis of Regulatory Alignment. Meanwhile, platform and ecosystem theory emphasizes that value creation depends on aligning complementary actors within a shared governance structure rather than merely increasing their number, supporting the interpretation of partnership architecture and platformization outcomes [24].

2.6. Research Gap and Positioning of the Study

Prior research on traditional banking models, fintech disruption, and bank–fintech partnerships has developed largely in parallel [25]. Existing typologies of strategic response, such as defensive, transformative, and collaborative strategies [26], classify what banks do, whereas the archetypes proposed here classify the role a bank occupies in the ecosystem, based on its strategic identity and level of ecosystem integration. Research on digital transformation and platform ecosystems likewise emphasizes technology adoption or ecosystem structure [27], rather than how incumbents with legacy structures move toward ecosystem roles. Partnership studies also emphasize adoption outcomes, although success should be judged by sustainable value creation and ecosystem integration maturity [28]. This study addresses these gaps by integrating fintech pressure, legacy structures, capability gaps, and strategic response in one analytical framework (Figure 1), shifting the focus from technology adoption and partnership counts to the strategic identity banks assume in the ecosystem.

2.7. Definitions of Key Concepts

Transformation capability is a bank's capacity to reconfigure its technology, structures, and partnerships in response to fintech and regulatory change. Strategic identity is how a bank defines its role toward external parties, as a self-contained provider, coordinator, or co-creator. Ecosystem integration is the extent to which a bank embeds its services and governance in a multi-actor network rather than isolated bilateral arrangements [29]. Platform leadership is a bank's position as orchestrator of such a network, corresponding to the Ecosystem Platform Leader archetype.

2.8. Theoretical Propositions

Building on the perspectives above and Figure 1, four propositions explain how legacy structures, capability gaps, collaboration governance, and regulatory conditions shape archetype outcomes.

- **Proposition 1:** The more rigid a bank's legacy structures, the larger its capability gap, and the more likely it remains a Digitalized Fortress [30].
- **Proposition 2:** Explicit collaboration governance, such as digital subsidiaries, innovation labs, or venture arms, narrows the capability gap and increases the likelihood of becoming a Hybrid Value Orchestrator [31].
- **Proposition 3:** Unified architectural orchestration and a co-creator strategic identity, rather than partnership quantity, distinguish an Ecosystem Platform Leader from a Hybrid Value Orchestrator [32].
- **Proposition 4:** Regulatory openness strengthens the effect of internal capabilities and governance on ecosystem integration but cannot substitute for them [33].

3. METHODOLOGY

3.1. Research Design and Approach

This study adopts a qualitative multi-case study approach to explore how traditional banks reinterpret and transform their institutional, strategic, and business positioning in the fintech ecosystem era. A qualitative design is considered appropriate because the study focuses on context-specific strategic decision-making, organizational adaptation mechanisms, and partnership logic, which cannot be fully captured by purely quantitative causal models [34]. The unit of analysis is the institutional transformation mechanism, not the organization

per se, allowing interpretation across different market, regulatory, and technological environments. The research logic follows interpretive inquiry, combining document analysis, comparative case analysis, and pattern matching based on pre-defined analytical dimensions consisting of Technology Infrastructure, Collaboration Governance, Business Model, and Regulatory Alignment [35].

3.2. Case Selection and Data Sources

Case selection used theoretical purposive sampling of incumbent banks in Asia and Europe that showed varying degrees of fintech partnership maturity and digital ecosystem involvement. Three inclusion criteria were applied:

- documented digital transformation initiatives from 2021 onward;
- publicly verifiable partnership records with fintech entities;
- availability of accessible secondary data.

Asia and Europe were chosen because they differ in regulatory environment and digital financial maturity, which allowed transformation patterns to be observed across varied regulatory contexts. Documentary evidence was drawn from the four source categories in Table 1, namely corporate documents (annual and sustainability reports, regulatory submissions, official partnership announcements), industry and regulatory reports, peer-reviewed academic literature, and news and analyst databases, and was limited to documents published from 2021 onward. Documents were screened for relevance to the four analytical dimensions before coding. To reduce self-promotion bias, data triangulation was conducted through cross-source verification, contrasting bank reports with analytic commentary from independent research and regulatory watchdogs. Official bank and regulatory documents served as the primary evidence, whereas news and analyst sources were used mainly to confirm timelines and partnership details. Individual cases are not named and document counts are not reported, because the analysis focuses on cross-case patterns in publicly available documents.

Table 1. Data Source and Selection Rationale

Data Source Category	Description	Verification Mechanism	Expected Contribution
Primary secondary corporate documents	Annual & sustainability reports, digital strategy whitepapers	Cross-check with regulatory filings	Institutional framing & commitment evidence
Industry & regulatory reports	BIS, IMF, World Bank, WEF, EBA, OJK, MAS, FCA	Validated publication credibility	Comparative regulatory context
Academic peer-reviewed literature	Journals & conference papers $\geq$ 2021	Citation traceability	Analytical concepts & theoretical grounding
News & analyst databases	Reuters, Bloomberg, Dealroom, Crunchbase	Multi-source confirmation	Timeline & partnership data

3.3. Data Collection Procedure and Reliability Strategy

Data were collected through a three-stage documentary analysis consisting of portfolio compilation, relevance screening, and interpretive coding. NVivo-style thematic coding was applied through initial open coding, followed by axial coding and theoretical coding aligned with the research framework. Open codes were grouped into axial categories corresponding to the four analytical dimensions, and the coded evidence for each bank was then used to assign a level (1 to 3) on each dimension using Table 3. Reliability was strengthened through inter-coder reliability logic, even with a limited number of coders, by applying a consistency protocol and a reproducible rulebook. Construct validity was supported through data triangulation, conceptual alignment, and an audit trail linking codes, artifacts, and interpretation chronologically.

3.4. Analytical Framework and Interpretation Model

Analysis follows a pattern matching model, comparing real-world evidence with conceptual expectations derived from innovation ecosystem theory, dynamic capabilities theory, and platform strategy logic. The analytical dimensions considered include Technology Infrastructure, Collaboration Governance, Business Model, and Regulatory Alignment, which cover technology infrastructure transition, collaboration capability governance, business model reconfiguration, and regulatory alignment and compliance integration, respectively. To classify banks into the three transformation archetypes, each archetype is first defined operationally in Table 2. Each case is then rated on every analytical dimension using a three-level ordinal scale, from Level 1 (closed) to Level 3 (open), with the observable indicators for each level presented in Table 3.

Table 2. Operational Definitions of the Three Transformation Archetypes

Archetype	**Operational Definition**	**Role of External Partners**	**Literature Linkage**
Digitalized Fortress	Bank that modernizes internal processes and channels while preserving a closed value chain, proprietary data ownership, and institution-centric logic	Vendors and service providers	Defensive strategies
Hybrid Value Orchestrator	Bank that selectively integrates external fintech capabilities through bilateral partnerships and modular extensions while retaining control of core intermediation	Complementors	Selective collaborative strategies
Ecosystem Platform Leader	Bank that coordinates multiple partners through open APIs, shared infrastructure, and formal governance to create value across industries	Co-creators	Transformative and collaborative strategies

Table 2 defines each archetype by how the bank structures its value chain and the role it assigns to external partners, as vendors, complementors, or co-creators. Strategic identity is identified from how bank reports and partnership announcements describe these partners.

Table 3. Classification Criteria by Analytical Dimension and Level

Analytical Dimension	**Level 1 (Closed)**	**Level 2 (Selective)**	**Level 3 (Open)**
Technology Infrastructure	Internal modernization; APIs used internally	Modular core; selective APIs for specific partners	Open APIs and shared infrastructure for multiple partners
Collaboration Governance	No or ad hoc partnerships; in-house governance	Bilateral partnerships with partnership-specific governance	Multi-partner orchestration with formal ecosystem governance
Business Model	Product-centered; digitized existing products	Fintech services embedded as complementary features	Platform-based; shared value and cross-industry services
Regulatory Alignment	Compliance as a constraint; minimal open banking engagement	Open banking and e-KYC compliance; selective sandbox use	Open banking and digital identity integrated; compliance harmonized across partners

Table 3 shows the indicators used to rate each dimension. Transformation capability is assessed from the levels in Technology Infrastructure and Collaboration Governance, and ecosystem integration from the pattern of levels across all four dimensions. Archetypes are assigned by applying the following rules in order. Level 3 counts as meeting a "Level 2 or higher" condition.

- A bank is an Ecosystem Platform Leader if it reaches Level 3 in both Technology Infrastructure and Collaboration Governance, and in at least one of the other two dimensions.

- Otherwise, a bank is a Hybrid Value Orchestrator if it reaches Level 2 or higher in at least two dimensions. This includes banks with Level 3 in three dimensions that do not include both Technology Infrastructure and Collaboration Governance, because platform leadership requires open architecture and formal governance together.
- All other banks, with Level 2 or higher in at most one dimension, are Digitalized Fortresses.

Table 4 summarizes these rules and provides an overview of the criteria applied to ensure consistency in the classification and interpretation of the findings.

Table 4. Archetype Decision Rules

Condition	Archetype
Level 3 in Technology Infrastructure and Collaboration Governance, plus Level 3 in at least one other dimension	Ecosystem Platform Leader
Not above, and Level 2 or higher in at least two dimensions	Hybrid Value Orchestrator
Level 2 or higher in at most one dimension	Digitalized Fortress

The analytical logic of this study is summarized in Figure 1, which links fintech pressure, legacy bank structures, capability gap analysis, and strategic response mapping through four theoretical propositions (P1–P4).

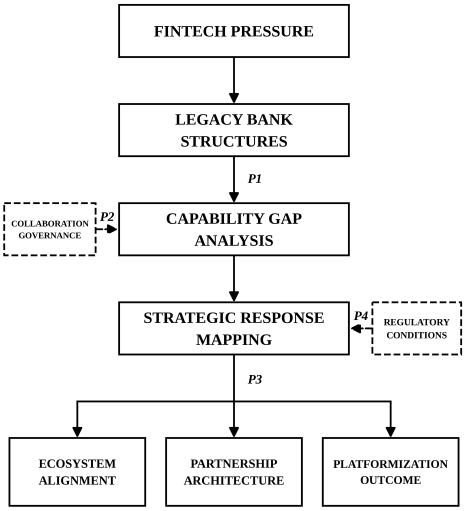


Figure 1. Analytical Flow Framework (Conceptual Model) with Theoretical Propositions (P1–P4)

Figure 1 summarizes the analytical logic. Fintech pressure acts on legacy bank structures, which shape the capability gap that banks must close. Collaboration governance and regulatory conditions shape this process, while the strategic response mapping identifies three outcomes, namely ecosystem alignment, partnership architecture, and platformization outcome. Propositions P1 to P4 describe the expected relationships.

3.5. Ethical Considerations and Limitations

Since this study uses publicly available secondary data, privacy risks are minimal. However, distinguishing verified evidence from strategic messaging and marketing claims is essential to reduce corporate narrative bias. The findings may not be generalizable to all banks because transformation pathways vary across regulatory, cultural, and technological contexts. The study does not test differences between Asia and Europe, and regional comparison is left for future research.

4. RESULTS AND DISCUSSION

This section presents the cross-case findings organized by the analytical dimensions and interprets them using the theoretical perspectives introduced earlier. Table 5 summarizes the evidence by dimension.

Table 5. Summary of Cross-Case Evidence by Analytical Dimension

Dimension	Cross-case evidence	Section
Technology Infrastructure	Readiness is higher where banks modernize through modularization, API enablement, and cloud adoption, and lower where branch dependence and manual KYC persist	4.1
Collaboration Governance	Only banks with explicit governance (digital subsidiaries, innovation labs, venture arms) show measurable progress; fragmented partnerships without orchestration show limited impact	4.1, 4.2
Business Model	Banks differ between plug-in embedding and co-developed solutions; only the third archetype shows cross-industry integration	4.2, 4.3
Regulatory Alignment	Meaningful evolution requires regulatory harmonization alongside technology, governance, and business model change	4.4

4.1. Legacy Banking Capabilities and Structural Constraints

The cross-case analysis reveals that traditional banks share a set of legacy strengths including regulatory legitimacy, trust-based brand capital, customer base scale, and multi-market operational resilience. However, these strengths coexist with systemic constraints such as monolithic core systems, siloed data architecture, hierarchical decision making-structures, and a compliance-centric risk culture that slows experimentation and digital service deployment. Evidence across cases shows that banks with a stronger ability to modernize infrastructure through modularization, API enablement, and cloud adoption tend to be more ready for transformation, whereas banks that depend on physical branches and manual KYC processes tend to be less ready. Although all examined institutions publicly communicate transformation commitments, only those with explicit digital capability governance frameworks (e.g., digital subsidiaries, innovation labs, venture arms) demonstrate measurable progress toward ecosystem integration rather than incremental digitization of legacy processes. These differences can be explained through dynamic capabilities theory, as banks vary in their ability to adapt resources and modernize legacy systems. Infrastructure improvements alone are insufficient without changes in governance and organizational priorities. Organizational learning also helps explain how experimentation and collaboration enable banks to develop the capabilities needed for digital transformation [36].

4.2. Fintech Collaboration Motives and Integration Dynamics

Findings indicate that collaboration with fintech is driven by three strategic motives:

- Acceleration of digital innovation without full internal R&D cost.
- Expansion of user experience value beyond traditional banking boundaries.
- Acquisition of data-driven capabilities including AI-based scoring and automated advisory.

Integration patterns differ significantly among cases: some banks adopt plug-in partnership models, mainly embedding fintech services as complementary features, while others build co-developed solutions through shared API marketplaces and digital venture platforms. However, integration success is dependent on the maturity of data interoperability, risk accountability alignment, and shared revenue logic. Cases with fragmented collaboration portfolios but lacking unified architectural orchestration demonstrate limited strategic impact, suggesting that partnership quantity does not equate to transformation depth. Platform theory explains that fintech partnerships create strategic value when integrated through shared systems and coordinated governance. Isolated partnerships may improve individual services but are less likely to support broader ecosystem transformation [37].

4.3. Strategic Role Repositioning and Business Model Transition

Thematic coding reveals three transformation archetypes that describe how banks reinterpret their institutional roles in the digital financial ecosystem:

- "Digitalized Fortress": internal modernization with closed business logic.
- "Hybrid Value Orchestrator": selective partnerships with modular platform extensions.
- "Ecosystem Platform Leader": multi-partner orchestration through shared infrastructure and open APIs.

Transformation is shaped not only by technological modernization but also by organizational capabilities, partnership governance, and regulatory conditions, which explains why banks reach different levels of ecosystem integration. This extends previous research on digital transformation and platform ecosystems by showing how these factors shape strategic repositioning.

Moving from Digitalized Fortress to Hybrid Value Orchestrator depends on modularizing core systems and enabling selective APIs, which lower switching costs, and on governance units (digital subsidiaries, innovation labs, venture arms) that let partnerships proceed outside the constraints of the core bank. Only the move to Ecosystem Platform Leader reflects full ecosystem logic, requiring unified architectural orchestration, shared revenue logic, and a strategic identity shift that treats partners as co-creators rather than channel extensions, so that learning accumulates across partnerships instead of remaining bilateral. Regulatory openness supports both transitions but does not replace these internal mechanisms.

4.4. Alignment with Analytical Framework and Research Questions

Findings are summarized against RQ1-RQ3. For RQ1, banks reinterpret competitiveness through selective or multi-partner integration (Section 4.3). For RQ2, explicit collaboration governance and unified architectural orchestration, not partnership quantity, distinguish substantive transformation (Section 4.2). For RQ3, ecosystem integration is contingent and non-linear, shaped by legacy constraints, governance, and regulatory openness (Sections 4.1 and 4.3). All analyzed banks demonstrate incremental digital transformation, but only those that align technology modernization, collaborative governance, business model reconfiguration, and regulatory harmonization show meaningful evolution beyond digitized legacy banking. Ecosystem transformation is therefore strategic, not merely technological, and not an unavoidable industry destiny, as explained by platform theory, dynamic capabilities, organizational learning, and institutional change [38].

The findings are consistent with the propositions: readiness is higher where legacy constraints are reduced through modularization (Proposition 1), progress appears mainly in banks with explicit capability governance (Proposition 2), fragmented partnerships show limited impact without unified orchestration (Proposition 3), and meaningful evolution requires regulatory harmonization alongside internal capabilities (Proposition 4). Regulatory context shapes these pathways differently: OJK Regulation No. 21 of 2023 and SNAP in Indonesia emphasize digital services and payment interoperability, whereas DORA in the European Union emphasizes operational resilience and ICT risk management. Such frameworks shape the conditions for collaboration but cannot substitute for internal capabilities. These are patterns from documentary evidence, not causal tests, and the study does not compare the prevalence of archetypes between the two regions.

5. MANAGERIAL IMPLICATIONS

The findings show that ecosystem transformation is strategic rather than purely technological, which carries several implications for bank managers, regulators, and fintech partners. Bank executives should first diagnose their institution's position among the three archetypes using the four analytical dimensions in Table 3, rather than assuming that ecosystem leadership suits every bank, and moving toward it requires treating external partners as co-creators instead of vendors. Because partnership quantity does not equate to transformation depth, banks should prioritize a coherent partnership architecture with shared systems and coordinated governance over a growing set of isolated bilateral arrangements, supported by modular core systems, cloud adoption, standardized open APIs, and data-sharing frameworks. Explicit digital capability governance, such as digital subsidiaries, innovation labs, or venture arms, should allow exploration to run alongside the core business, with clear risk accountability, agreed revenue-sharing logic, and performance metrics that shift from adoption counts to ecosystem integration maturity and sustainable value creation. Regulators can accelerate

this shift by harmonizing compliance requirements across partners, widening sandbox access, and encouraging interoperability standards, while recognizing differences in institutional readiness, and fintech firms should pursue trust-based collaboration with aligned innovation horizons and transparent data sharing. These implications also support SDG 8, SDG 9, and SDG 17 by promoting open, interoperable, and collaborative financial ecosystems.

6. CONCLUSION

This study finds that the competitive role of traditional banks in the fintech era is shifting from closed, vertically integrated institutions toward more open, collaborative, and digitally enabled financial ecosystems. Although most incumbent banks have initiated digital transformation, the cross-case analysis shows that they occupy three distinct positions: the Digitalized Fortress, which modernizes internally while preserving a closed value chain; the Hybrid Value Orchestrator, which integrates fintech capabilities selectively through bilateral partnerships; and the Ecosystem Platform Leader, which coordinates multiple partners as co-creators through open APIs, shared infrastructure, and formal governance. Movement across these archetypes depends on strategic identity adaptation, modular technology infrastructure, and partnership governance maturity rather than on the deployment of digital tools alone. The evolution from fortress to ecosystem is therefore a contextual and capability-driven pathway, not an industry-wide inevitability.

In response to RQ1-RQ3, banks reinterpret competitiveness through value co-creation, interoperability, and cross-sector collaboration rather than through asset control or product exclusivity. Partnership quantity does not equate to transformation depth: fragmented partnerships without unified architectural orchestration show limited strategic impact, whereas explicit innovation governance, cloud-based modular infrastructure, API standardization, and data-sharing frameworks enable substantive ecosystem integration. Regulatory openness strengthens this process but cannot substitute for internal capabilities. These patterns are consistent with Propositions 1 to 4 and relate, interpretively, to SDG 8, SDG 9, and SDG 17, but they derive from documentary evidence and do not constitute causal tests. The study also has limitations: it relies on secondary data, which leaves it exposed to corporate narrative bias despite triangulation; its purposive sample covers only Asia and Europe; and it applies no quantitative impact validation. Conclusions should therefore be read as contextual insights rather than universal generalizations.

Several directions for future research emerge from these limitations. First, future studies should collect primary data through interviews, surveys, or longitudinal fieldwork to validate the pathways proposed here. Second, mixed-methods designs could combine the qualitative archetype classification with quantitative testing of the four propositions. Third, comparing transformation trajectories across different levels of regulatory maturity would clarify how far regulatory openness shapes ecosystem integration. Finally, researchers could evaluate the economic performance of different collaboration models using metrics such as ecosystem transaction volume, customer lifetime value uplift, or innovation throughput, and extend the analysis to cross-industry ecosystems in mobility, health, and retail.

7. DECLARATIONS

7.1. About Authors

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7.2. Author Contributions

Conceptualization: MA, HH and SM; Methodology: HH; Software: HH; Validation: SM; Formal Analysis: HH; Investigation: HH and SM; Resources: MA; Data Curation: MA and HH; Writing-Original Draft Preparation: HH and SM; Writing-Review and Editing: SM; Visualization: HH; All authors, MA, HH, and SM, have read and agreed to the published version of the manuscript.

7.3. Data Availability Statement

This study used publicly available documents. Classification rules are in Tables 2 and 3; coding details are available from the corresponding author upon request.

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The authors did not receive any funding for the research, writing, or publication of this article.

7.5. Declaration of Conflicting Interest

The authors confirm that there are no conflicts of interest, financial or personal, that could have affected the results reported in this paper.

7.6. Declaration of Generative AI Use

The authors used Claude (Anthropic) for language editing and take full responsibility for the content.

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