

Open Innovation Process in UK FinTech: an exploratory study

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Abstract

To gain clarity about managing *openness* in innovation development and address the limited research on the Open Innovation Process in UK FinTech beyond the Open Banking concept, this inductive Case study research uses an integrated strategic theory perspective of the Resource-Based View, Industry-based View and Institution-based View to explore the Open Innovation Process (co-development of innovation) to develop an adoptable and adaptable model for UK FinTech firms. Primary data will be generated through interviews and survey questionnaires from UK FinTech firms and other players, and secondary data includes literature review and online public content. Beyond the toolkit for UK FinTech firms, the anticipated contribution includes advancement of FinTech and Open Innovation Literature, and reference inputs for UK FinTech Policy and emerging markets FinTech firms.

Keywords

Open Innovation, Open Innovation Process, UK FinTech, Collaborative Innovation, Business Models

Word Count

1983

Introduction

Beyond Open Banking, highlighting the Open Innovation Process (OIP)- the series of actions: *steps*, and *decisions* that OI collaborating UK FinTech partners must take to co-create and capture value from incremental or radical innovations (OECD/Eurostat) for operations or the markets, often embedded in Open Innovation practices, could help innovators identify and maximise a dynamic capability for sustainability in a digital world (OECD, 2023), invariably addressing the concerns and the risks of openness. Besides, the clarity about how FinTech firms, in practice, co-create and capture value with other ecosystem players outside of the regulator-led Open Banking: : the open data sharing practice through third Parties Application Programming Interfaces for innovative financial services (Dinçkol et al., 2023); (Department, 2024) can provide a comprehensive landscape for policy directives and investment purposes to amplify the Open Innovation leverage while addressing concerns of over-regulation (Long, 2017; TheCityUK, 2024), and balancing the need to create social value and incentives for entrepreneurial innovation (OECD, 2023) since innovation is critical to the UK Industrial policy development (*UK Innovation Survey Report 2022*) and the efforts at boosting the UK's international positioning relies on Open Innovation (OI) a paradigm shift in how firms traditionally innovate (Chesbrough, 2003) that involves purposive knowledge flows across organisational boundaries to develop new products, processes, and markets.

Though there is much agreement on the Open Banking and on the regulatory sandboxes: regulator-supervised multi-stakeholder agreed safe real-case small-scale target market environment for innovators to test product marketability and commercialisation with minimal regulatory barriers but with consumer interest protection, there is scarce empirical research on the OI Process in UK FinTech a possible indicator of the degree (breadth and depth) of adoption of Open Innovation, stemming from a lack of understanding of how it works in practice.

Thus, the four objectives of this study are to identify the adoption of OI (Open Innovation practices) by UK FinTech firms and other ecosystem players, identify what drives the engagement in the Open Innovation practices, develop a theoretical understanding of how OI operates, and establish the Open Innovation Process within the UK FinTech.

Literature Review

Change, Openness Philosophy, and Strategy Theories

Theoretically, change in the value concept and the openness philosophy will enable Open Innovation phenomenon which then drives related processes (Cassiman & Valentini, 2016); (Huggins et al., 2020) within strategic objectives of any or all actors within the UK FinTech. Additionally, research has shown that adoption and levels of openness are strategic decisions (Alam et al., 2022; Chesbrough et al., 2014), firms should have reputational, organizational, intellectual and human, and technological assets to capture value in collaborations and develop new business models (Dell'Era et al., 2020) and the capabilities and incentives of individual players can create a competitive situation despite standardisation (Dinçkol et al., 2023). Nevertheless, there are intra and inter-boundary dynamics in the innovation creation and management process (Yapa & Senathiraja, 2019). Hence, the dynamics of intra- and inter-organisational actors and resource capabilities may be more critical in customer value delivery and in building uniqueness for competitive advantage (Vanhaverbeke, 2017). Even so, the power dynamics of national governments will determine the business environment (OECD, 2023); (GOV.UK, 2024).

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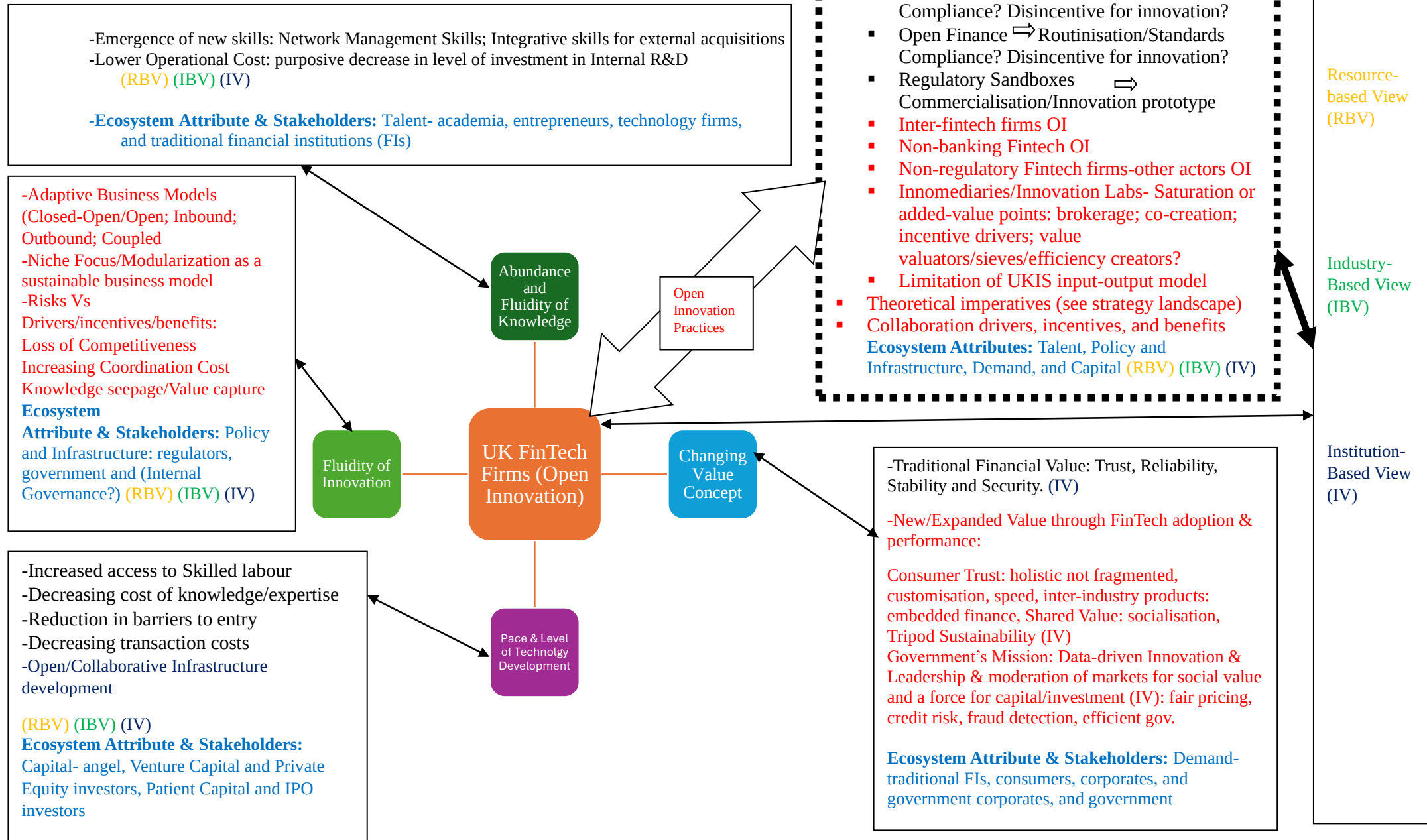
Historically, and arguably, the implementation and related enforcement of the Open Banking in the UK can be ascribed largely to institutional forces which in response to the larger societal needs that stemmed from the prior 2008 financial crisis highlighted the downside of unbridled competitions and its effects on both consumer and public trust. Thus, it stood to reason that if data was shared and accessible, fairness, transparency, and trust could be attained within the financial services consequentially creating isomorphic minimum standards of operation within subcategories or the whole industry, as a socially constructed (Theresa K. Lant and Joel A. C. Baum in Scott & Christensen, 1995) beliefs of individual entities and the government on the knowledge and actions required for financial system risk mitigation.

Evidently, the UK is a global leader in Open Banking, with over 23% of the total global value as of 2023 (Statista, 2024), that allows access to consumer-consented banking transactions through Application Programming Interfaces (APIs) to third-party financial services providers (Department, 2024). Furthermore, 'Open Banking is a key step towards unlocking competition in retail banking and the evolution of the UK's fast-growing innovative financial technology (fintech) sector – changing the face of retail banking for the benefit of millions of customers and small businesses.' (GOV.UK, 2021). The success of the regulator-led Open Banking reported by Department (2024) that as of November 2023 active open banking users were eight million from five million recorded in January 2022 indicates the possible positive impact of a broader scope of Open Innovation for UK FinTech and the economy and positions the UK as model for collaborative innovation even in a heavily regulated industry.

Within the UK's innovation positioning, the 2,500 UK FinTech firms ("Financial services,"), central to the UK Fintech ecosystem and operating within an established financial services industry (Dinçkol et al., 2023) are however challenged by a shortage of skills and funds arguably from the 'liabilities of smallness' (Vanhaverbeke, 2017) that potentially Open Innovation can address. Nevertheless OI is not without its risks including possible loss of innovation skills and cost of coordination (Puliga et al., 2023) and limited resources of SMEs for OI processes (Radziwon & Bogers, 2019). Moreover, there is limited knowledge related to the OIP within UK FinTech critical for strategic decision-making such as: Inter-fintech firms OI, Non-regulatory-Fintech firms-other actors OI, and Innomediary

value, besides the limited theoretical perspectives of explaining OI and its related processes available in literature with some proving inadequate because they solely have an internal focus (Yapa & Senathiraja, 2019), and giving rise to references to connect theory and practice in OI for policy making (Bogers et al., 2018) and integrate theories in addressing the OI phenomenon (Alam et al., 2022); (Bogers et al., 2017); (Herman & Nistor, 2020), and arguments for varied dimensions and integral constitution of OI (Banu et al., 2016; Bican et al., 2017; Toroslu et al., 2023; West & Bogers, 2014). *See Figure 1* (based on literature review and reflexivity) below.

Figure 1: UK FinTech Open Innovation Process Dashboard: exploring limited knowledge



Methodology

Built on an interpretivist ontology, this research is inductive: generating and testing theory from data analysis. The research uses the Case Study strategy to establish the Open Innovation Process phenomenon within UK FinTech. It collects and generates cross-sectional data, however retrospective recounts of interviewees and questionnaire respondents beyond the real-time accounts will facilitate the order and interactions of OI Process activities and decisions. The mixed methods: quantitative and qualitative data address the research questions.

Validity measures include construct/awareness of OI by participants, interview member-checks, theory and methodological triangulation, and reliability indices include expert reviews and evaluation. A Pilot Study also addressed any feasibility issues.

The Case Study Research Design

This exploratory process study is a single Case Study (Yin, 2018): Open Innovation Process in UK FinTech with embed cases of the participating units because it seeks to reveal areas of limited knowledge of the co-development of innovation beyond the classical innovation process. The research uses a purposive sampling strategy—using experience (observation/personal engagement) of Open Innovation as a criterion.

Data Methods and Sources

The revised data sources (addressing generalisability and accessibility/feasibility of adequate survey responses) for this research include:

Secondary data: from literature reviews and available relevant online publications. The participating firms must consent to the use of its internal and strategy documents in building the context for case development, and

Primary data are generated using survey questionnaires and interviews. The following comprise how the primary data will be generated:

Selected UK Fintech firms (targeted: Five firms- 25 interviews) and Innovation Lab (1 firm) will complete Open Innovation Process in UK FinTech Questionnaire (Case Firm) to generate broad OI ecosystem engagement, respondents' categorical insights, and to help the researcher to engage interviewees meaningfully, prior to being interviewed.

Interviews with other identified ecosystem players

Supplementary Data--Survey: UK FinTech Questionnaire (FinTech, FIs, users & other players)

Data Analysis and Interpretation

Based on the research questions, the OIP Conceptual Framework and the use of the mixed-methods following a convergent design (Creswell & Plano Clark, 2017), the results will be visualised using Microsoft Forms Excel summaries and PivotTables, alongside the quotes /narrations from respondents.

Subsequently, initial analytical frameworks will map the research questions with data from the mixed sources of data and ecosystem player type. Additionally, secondary data from the literature review and public data on the UK FinTech sector will provide contextual information and constitute the data triangulation for the analytic frameworks.

Furthermore, the three main strategic management theories provide the lens for theory development. Also, Qualitative Content Analysis involving chronology and logical/temporal phase development will facilitate theory and process model development.

Plan for Research development:

The research is at data collection and should have expanded insights from data analysis subsequently.

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