Interdisciplinary Research in FinTech: Bridging Computer Science, Economics, and Management

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Abstract: Financial technology has revolutionized the entire financial industry wide-reaching owing to the use of technology which makes financial services faster, secured and accessible to the whole world. While there have been increasing studies, most of the studies only consider FinTech from one disciplinary point of view; computer science, economics or management, and thus a holistic view is hardly possible. In this paper, we conducted a Systematic Literature Review (SLR) of 45 peer-reviewed studies using six leading scholarly databases, to present the interdisciplinary connections of computer science, economics and management in the FinTech field. The review reveals that only six of 45 studies do so and there is seen as much scope for research into combining two or more disciplines. Computer science, economics and management all contribute the necessary layers of innovation, viability and sustainability respectively, according to analysis. Based on these findings, this paper introduces an Interdisciplinary FinTech Development Framework and two research propositions: (1) A multi-disciplinary input facilitates the creation of more innovative and sustainable FinTech solutions; and (2) More innovative and sustainable FinTech solutions deliver improved operational efficiency and customer results when these solutions are established in an interdisciplinary framework. The research findings provide practical insights for professionals, researchers, and decision makers to create inclusive, secure and sustainable digital financial ecosystems.

Keywords: FinTech, Computer Science, Economics, Management, Interdisciplinary Research, Blockchain, Artificial Intelligence Financial Inclusion, Systematic literature Review.

1. Introduction

The financial services sector in the last decade has been totally changed by digitalization, which has provided a framework across the world for how business is conducted. Financial Technology is a combination of technology and finance, which is used to describe the advanced practice of digital technologies to enhance, automate and liberalize financial services and processes [21]. FinTech has put individuals, businesses and institutions more than ever in control of and access to, financial services. Some of the more prominent venues for this evolution include mobile banking, digital payment platforms, blockchain banking and settlement systems, and Artificial Intelligence driven investment advisory-tools.

The use of AI and ML, Block-chain, Big- Data Analytics, Cloud-Computing and IoT in financial services has improved financial service efficiency, accessibility, transparency and security of all four in serial [4]. AI systems provide personalised financial insights, real-time fraud detection and predictive analytics; blockchain provides secure and decentralized transaction record-keeping, tainter-proof

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documentation; and big data analysis permits for handling large amounts of data, both structured and unstructured, in support of informed decision-making and better client experience [2,3].

Though, technological innovation is only a part of what is needed to make sure that FinTech solutions will be viable and sustainable. The success of FinTech systems is directly affected by economic conditions such as the market structure, behaviour of consumer, financial inclusion dynamics, the manner of investments, as well as by the regulatory environment [7,8]. Specifically, behavioural economics examines the light on the relationship between trust, risk perceptions and adoption intention as a way to explain the adoption of digital financial products. In addition to technical and economic factors, management skills play a key role in successful steps towards the usage of FinTech: leadership, strategic planning, organizational culture, risk control and management of change are all important factors that determine the results of FinTech adoption and ongoing performance [11,12].

The study of FinTech so far has been carried out mostly in a disciplinary element. Computer scientists specialize in distributed ledger technologies, automation systems, cyber security architectures and the design of algorithms. Economists discuss the impact of FinTech to the financial market, financial development, financial inclusion and regulation. Digital transformation strategies, leadership challenges and barriers to implementing digital transformation are topics of investigation by research scholars. While each stream has formed useful knowledge, the nature of each stream's work (which is done in isolation), means that important 'interdependencies' across technological, economic and managerial aspects are not always captured [1].

Looking at the idea of a vast and/or increasingly complex world of digital finance an interdisciplinary approach is needed, that is accompanied by an integrated approach. All the above should apply to a valid payment platform using a blockchain: the platform should be technologically solid, economically viable, compliant with market regulations and managed by an organisation. The peer-to-peer lending (P2P) platform, powered by an artificial intelligence system, must merge sophisticated algorithms with economic-based credit assessment models and a solid organisation control. A one-discipline approach assumes that one of them is independent of the others and cannot possibly teach the other, which are essential interactions to take into account. Consequently, this paper brings an interdisciplinary perspective into the FinTech phenomenon and highlights the intersection between three main disciplines: Computer Science, Economics and Management, specifically intending to provide an integrated FinTech framework that will help researchers, practitioners, and policy makers fill the research gaps.

In this study, we make main contributions to the FinTech literature: (1) This is a rigorous SLR quantifying the extent to which FinTech research is split up across disciplines; (2) To propose an Interdisciplinary FinTech Development Framework integrating the roles of computer science, economics and management; (3) Two

research propositions based on the findings to inspire further empirical studies on FinTech.

2. Literature Review

2.1 Computer science in FinTech

The technological underpinning of FinTech is computer science, which offers the tools and systems that allow efficiency, security, and accessibility to improve financial services. All these technologies collectively revolutionized the delivery of the financial services [1,4] including Artificial Intelligence and Machine Learning, blockchain, big data analysis, cloud -computing, cybersecurity. Predictive analytics, fraud detection in real time, personalized financial services, robo advisory, and automated trading are some of the applications of AI and ML. Blockchain offers an auditable, tamper-proof record of the transactions, minimized fraud and optimized settlement efficiencies. By leveraging big data analytics, financial institutions can gain insights on huge accounts of data that are varied in nature, enhancing investments, risks management and customer segmentation [2].

The ability of data-driven financial decision making, its dependent on big data technologies was demonstrated by Chen et al. [2]. Bui and Ho [3] reported the use of Artificial-Intelligence in different areas of services of finance (namely, lending, insurance, investment management and customer relationship management), validating the role of AI in operations efficiency and customer satisfaction. In their research, Gaining Insight into the Biggest Technological Enablers of Digital Financial Transformation, Gai, Qiu and Sun [4] identified which they believe to be the three most vital technologies enabling digital financial transformation: blockchain, cloud computing and cybersecurity. They argue that one of the most important things during digital financial transformation is secure and scalable infrastructure. To understand the FinTech development in China, Chen and Bellavitis [5] conducted a study that indicated FinTech development resulted in financial inclusion and innovation with the AI, blockchain and mobile being the major drivers of this change, which also led to the strategic role of technology-based ecosystems.

The development of the computer science has similarly covered the means for the development of decentralised finance (DeFi), digital currencies, smart financial systems, which not only provide customer-centric service but also have lower operational expenses [17,20]. As a literature always tells, however, without an innovation of technical nature, it is impossible. Along with the economic viability, also the regulatory alignment, consumer acceptance and organisational readiness are co-requisites for Sustainable FinTech [7,18].

2.2 Economics in FinTech

To analyse how this impact the broader picture of FinTech for financial systems, markets and society, economic analysis is fundamental. The role of the digital-financial

services on competition, financial inclusion, consumers welfare, and macroeconomic development have been studied. The mobile banking and electronic payment systems have proven to have a significant role in enabling the financial incorporation that was previously lacking in those segments of the population that was not served well in the context of developing economies, which is one of the pieces of evidence regarding the inclusive economic potential of FinTech [6].

Behavioural economics provides an additional perspective – trust, usefulness, ease of use, incentive structures have all been found to be key FinTech adoption factors. Regulatory economics explores the impact of law, regulation and government policy on the formation and spread of FinTech solutions, with great importance on how to foster innovation and protect consumers, while maintaining financial system stability.

Through his work, Philippon [7] showed how FinTech contributes to making financial intermediation more efficient, allowing to lower transaction and operational costs. Based on these findings, Frost et al. [8] discovered that BigTech and FinTech platforms are changing the dynamic of the competition, the structure of the markets, as well as accessing financial services all over the globe. According to the study by Haddad and Hornuf [9] economic, technological and regulatory factors are the most important country factors which initiate the development of FinTech market. Ozili [10] agrees that in principle digital finance creates observable positive effects in regards to financial access, and thus indirectly economy's development for low-income and unbanked people. Böhme et al. [17] also delved into the economic and governance aspects of blockchain based currencies, analyze blockchain based currencies giving background analysis of financial systems that are decentralized.

2.3 Management in FinTech

The organizational environment in which FinTech innovations can be achieved with success and sustain is part of research on management. The managerial capabilities, defined as managerial skills, which consist of the ability to plan, interface, manage and maintain the culture, innovate and risk governance are identified as enablers of successful DT [11,12].

According to Schindler [11] creating a culture that favors innovation, redesign business models and optimize the customer engagement approach are essential to the transformation captured by FinTech and the success of a digital transformation project conditions invariably rely on the support of the management. Lee and Shin [12] suggested a FinTech-ecosystem approach, and showed that the cooperation of financial institutions, technology providers, regulators and customers is key to achieving a sustainable development of FinTech. Arner, Barberis and Buckley [13] determined that the right governance and regulatory frameworks must be put in place to navigate the challenges arising from innovation from digital financial services and strategic leadership is essential to navigating and balancing digital innovation and regulatory compliance. McWaters and Galaski [14] noted that organizations can work together to

form clusters of cooperative alliances and innovation ecosystems that can help financial institutions' access to the new technology and provide solutions that cater to the clients. In addition, Zetzsche et al. [18] explored regulatory sandboxes and smart regulation as regulatory level mechanisms that promote responsible FinTech innovation. Empirical evidence in the collective literature indicates that organisations tend to be more efficient in their operations, more innovative in their performance and are satisfied with their customers when they invest in technology, as part of their strategic management processes.

2.4 Summary: Research Gap

Only 6 of the 45 studies included in this SLR addressed integration of two or more disciplines as shown in Table 1 in Section 5, which quantified how disciplinal division has been identified in this SLR. The computer science (n=18), economics (n=14) and management (n=13) disciplines are well-developed with individuals working within each stream but research as a whole is inadequate, which hinders the development of integrated and cross-disciplinary FinTech solutions. The present paper is targeted towards redressing the same.

3. Conceptual Framework

This paper makes an effort to suggest an Interdisciplinary FinTech Development Framework (IFDF) with three pillars – computer science, economics and management – which are mutually dependent to achieve sustainable FinTech innovation and development.

The following is a summary of the framework in Table 1.

Table 1. Interdisciplinary FinTech Development Framework (IFDF): roles, applications, and outcome contributions of the three disciplinary pillars.

Dimension	Core Technologies / Concepts	FinTech Application	Outcome Contribution
Computer Science	Artificial intelligence and ML, Block Chain, Big-Data Analytics, Cloud-Computing, Cyber Security.	Fraud Detection, Credit scoring, Robo advisory DeFi, Smart contracts	Innovation: New products, more speedy and secure services

Dimension	Core Technologies / Concepts	FinTech Application	Outcome Contribution
Economics	Market Structure, Behavioural Economics, Financial Inclusion and Regulatory Economics	Three categories of hastened adoption of digital payments worldwide, and lots of negative competition analysis, and then access for the unbanked.	The economic viability, cost effectiveness, welfare increase, market access
Management	Risk governance, organizing culture, change management, strategic leadership	Road map for the digital transformation, FinTech ecosystem partnerships, compliance frameworks	Operational sustainability: scalable deployment, regulator compliant and aligned with stakeholders.
Interdisciplinary Synergy	Incorporate all three domains:	AI lending (algorithm + credit model + governance)	Operationally sustainable, economically viable and innovative FinTech solutions.

In the context of FinTech, the IFDF believes that those with all three traits are more likely to be adopted to large scale, accepted by the regulators, and thus have an impact on society going into the future. At the other end of the spectrum, solutions created with a single-disciplined approach are expected to show typical weaknesses: technologically advanced but not necessarily affordable products (from a computer science perspective); economically viable but technologically out-dated services (from an economic perspective); or well-run and customer-friendly but not innovative organisations (from a management perspective).

Two FinTech case studies are used to illustrate the framework. Digital lending platforms (e.g., Kiva [16] and Tala) combine computer science to develop creditworthiness algorithms with microeconomics to create a risk-appropriate lending model and design, coupled with management to devise ways to connect with customers and deliver good services. Remittance services based on blockchain technology (e.g. Ripple, Stellar [20]) also bring together distributed ledger technology, transaction cost

analysis and cross-border market incentives (economics), strategic partnerships, and ecosystem management (management). The two cases illustrate that the integration of the interdisciplinary was not just additive, but also really synergic, in each respect, one dimension reinforces another.

The following figure illustrates Interdisciplinary FinTech Development Framework.

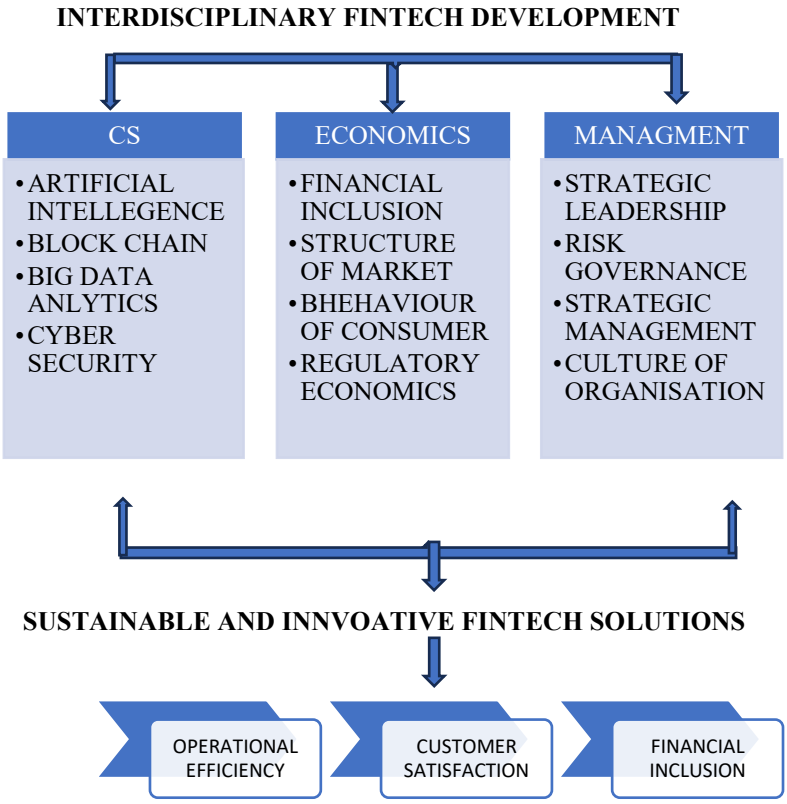

Figure1: Interdisciplinary FinTech Development Framework

4. Research Objectives and Propositions

1) What is the research about? and 2) Is the research needed?

4.1 Research Objectives

This study has five research objectives:

- RO1: To study the literature on FinTech from the perceptions of Computer Science, Economics, and Management and recognize the extent of interdisciplinary incorporation among these disciplines.

- RO2: To analyse the application of big data analytics by FinTech firms and the usefulness of applying big data analytics to identify the market trends and enhance the investment outcomes.
- RO3: To examine how financial technology influences market competition and financial inclusion.
- RO4: Explore impacts of behavioural economics on user trust and adoption of FinTech products and services.
- RO5: To make an interdisciplinary synthesis of the technical, economic and managerial aspects into efficiency, inclusivity and sustainability in financial services.

4.2 Research Propositions

Based on the "SLR approach" followed above (which is exploratory and theory-building as opposed to hypothesis-testing), the following two research propositions are put forth for further empirical research:

P1: Solutions developed from an interdisciplinary collaboration embedding Computer Science, Economics and Management result in innovative, economically viable and operationally sustainable FinTech solutions that surpass disciplinary viewpoints.

P2: Organizations leveraging multi-disciplinary input, from technical design to economic assessment and managerial strategy, in their FinTech development processes, outperform organisations that take a "one discipline" approach to developing their FinTech solutions.

These propositions are all based on the IFDF and the patterns seen in the SLR synthesis. These are presented purposefully as propositions, as opposed to testable hypotheses, because the SLR methodology that was used in this study does not produce primary data, but it is suggested that these should be tested in the future.

5. Research Methodology

5.1 Research Approach

In this study, Systematic Literature Review (SLR) was used, as refuted in Kitchenham et al. [15]. SLR is a methodical, transparent and replicable process to retrieve, appraise, and summarise research literature on a specified topic. It is especially useful when applied in disciplines where related research is scattered amongst a variety of computer science, economics, and management journals and conference papers, as is the case in FinTech – an interdisciplinary field. This SLR method reduces the risk of selection bias by clearly defined search strategies and inclusion/exclusion criteria, thus providing a more robust and comprehensive evidence base.

The search strategy and a description of the coverage of the databases used.
Six internationally recognized research repositories like Scopus, Web- of- Science, IEEE Xplore, Google-Scholar, Springr Link and ScienceDirect existed for literature. The choice of these databases was based on their content seeing that they aimed at providing varied coverage of peer-reviewed journals in the field of this study. The following searching string was used:
On the one hand, ("FinTech" OR "financial technology") AND ("computer science" OR "artificial intelligence" OR "blockchain") AND ("economics" OR "financial inclusion" OR "management" OR "organizational strategy")
Only English language documents (2010-2024) were included in the search. Upon initial searching, 847 records coming from all databases were discovered.

5.2 PRISMA Screening Process

A four-phase PRISMA process was used for screening. The complete PRISMA flow is listed in Table 2.

Table 2. PRISMA screening flow: record counts and decisions at each phase of the systematic literature review.

SLR Phase	Action / Criterion	Result / Detail
Phase 1: Identification	Search databases	Scopus, WoS, IEEE Xplore, Google-Scholar, SpringerLink
	Search terms	("FinTech" OR "financial technology") AND ("computer science" OR "AI" OR "blockchain") AND ("economics" OR "management" OR "financial inclusion")
	Initial records retrieved	847 records
Phase 2: Screening	Duplicates removed	214 duplicates removed → 633 screened
	Title & abstract screening	490 records excluded (off-topic, no FinTech focus)
	Records eligible for full-text review	143 full-text articles assessed
Phase 3: Eligibility	Full-text exclusions	98 excluded: 41 opinion/non-empirical, 31 non-peer-reviewed, 26 pre-2010 with no foundational relevance
	Studies included in SLR	45 studies included in final synthesis

SLR Phase	Action / Criterion	Result / Detail
Phase 4: Synthesis	Thematic classification	Technology (n=18), Economics (n=14), Management (n=13)
	Cross-disciplinary studies	Only 6 of 45 studies integrated two or more disciplines

Forty-five studies were finally used in the synthesis. The main areas of computer science, economics, and management, had 18, 14, and 13, respectively, of these. Especially, only six studies directly combined two or more disciplines testifying there's a research gap that calls forth this paper.

Inclusion in Exclusion Criteria

Studies were selected when they (a) discussed FinTech from the computer science, economics, and/or management perspectives; (b) were published in English in either a peer-reviewed journal or conference proceedings; and (c) provided empirical evidence, a case study, either a systematic review, or presented a conceptual framework with a scholarly basis. Studies were omitted if they were lacking in empirical or conceptual rigour (such as opinion articles or editorials); lacked peer-review; or were not related to “financial technology.”

5.3 Analytical Approach

Thematic content analysis of the included studies was performed consisting of four steps: (1) Coding Key Themes: Themes derived from the studies were identified by coding, which included the categories AI adoption, blockchain integration, digital banking, financial inclusion, and organizational strategy. (2) Categorizing Findings: The coded themes were divided into the three disciplinary categories: computer science, economics, and management. (3) Synthesizing Insights: Cross-disciplinary patterns, correlations, and best practices were identified. (4) Mapping Research Gaps: The fourth step involved systematically identifying the topics where integrated, cross-disciplinary studies were lacking. The second coded classification of a 20% random sample of the included studies revealed a strong level of intercoder reliability ($\kappa = 0.81$).

5.4 Theme Identification and Conceptual Framework Expansion

The progress of the IFDF followed an organized thematic synthesis approach. First, the selected studies were coded using open coding methods to recognize recurring themes. Second, alike codes were assembled into categories with respect to dimensions of CS, Economics, and Management. Next associations among these groups were analysed towards identifying the areas of interdisciplinary merging. Lastly, these relationships were created into the proposed IFDF, which explains how technological innovation,

economic practicality, and supervisory sustainability together contribute to effective FinTech implementation. This process established that the outline emerged thoroughly from the literature instead of being developed merely through conceptual basis.

6. Findings and Discussion

6.1 Technology–Economics Integration

The SLR report data indicates that technology constitutes one of the factors for the growth of Fin-Tech with AI, ML, blockchain, and big data analytics transforming financial services in applications such as detection of fraudulent activities, credit evaluations, and customer services through strengthening efficiency, speed, and security of financial operations [1,2,3,4]. Yet the review also shows that for the effective implementation of these technologies, they depend on economic considerations – customer willingness to adopt the technology, pricing approach, market demand, financial inclusion dynamics – as well as the technology itself [6,7,8].

These interdependencies are evident in AI powered lending platforms, which require robust ML models and economic lending models as well as the market structure to give rise to demand for alternative lending [9,10]. Likewise, economics of transaction costs and effects of network externalities are of the essence when it comes to a successful payment system based on blockchain technology [17]. The results showed that only 6/45 included studies mentioned in their design language that technological and economic aspects were included in the research, which means that cross-disciplinary research designs that reflect and capture such interactions are needed.

There's a third, frequently overlooked, pillar of FinTech success, the review says—the management. Yet, many organisations despite having been spending significant resources on technology have not realised the expected benefits of FinTech implementation because of a lack of strategic planning, employees require training or change management is not properly managed [11,14] . Leading is needed to set the stage and ensure technologic investments realise business goals, while a culture of the organisation that appreciates innovation is a sure sign of successful FinTech adoption [11,12].

In the FinTech context, risk management is a very pertinent management activity, with issues of cyber security, privacy of data and compliance being seen as constant management purposes in the day-to-day of this institutional reality, and thus requiring specific governance structures [13,18]. As seen from the reviewed literature, organisation with the matured digital governance that comprise both regulatory compliance as well as innovation/digital strategy bear better outcomes than those operating both functions separately.

A primary conclusion of this SLR is that all six studies that combined two or more disciplines reported positive outcomes – both in terms of effectiveness of solutions and

rates of adoption and impact on society – that were more positive than the single-discipline-based studies. This pattern complements Proposition P1, and is in line with the IFDF proposed in Section 3. Specifically:

- The innovation layer is given by computer science, which in turn gives rise to various products and services in finance that are not feasible in the conventional finance institutions such as AI, blockchain and big data analytics.
- Economics gives us the viability layer – market conditions, price structures and patterns of consumer behavior are important and used by the economics to understand whether a technology innovation is viable.
- Management contributes to the sustainability level: Strategic leadership, organisational design and risk governance play a part in the successful implementation of technically and economically viable innovations and their sustainable scale-up.

There's more than a multiplicative relationship between these three layers. As shown by Schindler [11] and Lee and Shin [12] FinTech solutions that encompass all three dimensions are systemically resilient, that is, they have the ability to be resilient to three kinds of changes: technological change, economic change, and regulatory change, which are nonexistent in a single-discipline solution.

Based on the available data and published reports, there has been an observed advancement of the Financial Technology ecosystem.

Apart from the 3-pillar model, the SLR outlines several cross-cutting trends of the modern FinTech environment:

- MDT's have a consistently high capability for innovation and a fast pace of problem resolution to support P2.
- Economic analysis is now much more likely to be used later in the development process (post-lab) than at the front end (pre-lab) of FinTech development to inform technology investment decisions and market entry strategy [8,9].
- Employ TSH Digital Literacy Training and deploy structured Change Management Programmes, which can dramatically decrease resistance to FinTech adoption in Financial Institutions [14].

In today's times, ‘customer-centricity' has become the predominant approach to designing – the systems must be designed in a manner to involve all three fields: computer science (user experience and data personalisation), economics (value proposition and pricing), and management (service delivery and relationship management) [12,19].

7. Conclusion

In this paper, we have argued originated on a methodical review of 45 peer-reviewed literature that interdisciplinary research in the field of CS, economics, and management is not only valuable but a must for sustainable, inclusive, and effective FinTech solutions. The Interdisciplinary FinTech Development Framework (IFDF) proposed here provides a structured conceptualization of how the three pillars (innovation, viability and sustainability) reinforce each other and nestle into one another to create FinTech solution(s) that can attain large-scale opportunity and impact at society level.

Only 6 of 45 included studies explicitly did two or more disciplines, which is a confirmation of how siloed the current literature is and how great the opportunities are lying at the point where two disciplines get in touch with each other. From the computer science perspective, computer scientists and economists who collaborate can better understand what technological capabilities provide economic value; from the economic perspective, economists and management researchers can better understand the organizational conditions for inclusive deployment of FinTech; and from the integrated perspective, Computer Scientists, Economists and Management researchers can be best positioned to develop integrated solutions, which the digital financial ecosystem needs.

Practitioners can find a diagnostic tool with the three-pillar structure: organizations can apply the three pillars to discovery check their FinTech projects for disciplinary myopia, and determine where best to invest in talent, partnerships, or governance could help bring results. From a policy maker perspective, the framework emphasizes the need to involve technologists, economists and management practitioners together in the effective regulation of FinTech and that for the purpose of building a combination of such expertise, regulatory sand boxes and innovation labs are useful institutional forms.

An empirical test of P1 and P2 should be attempted in the future using mixed-methods research design, such as a large-scale survey study of FinTech firms or a longitudinal case study which examine the performance of a interdisciplinary development process versus a single discipline development process. Also, empirical research is needed to analyze the impact of interdisciplinary integration on specific indicators of performance – financial inclusion indicators, curve of product adoption, compliance costs, satisfaction indicators – that would make it possible to quantify the synergies registered in this review.

8. Limitations of the Study and Recommendations

- The findings are resulted from secondary data obtained from published literature, and so cannot be relied on the quality, completeness, and methodological accuracy of the studies.
- Though several databases were used, relevant studies published in languages other than English or outside of the selected databases may not have been involved.

- The optional IFDF is theoretical in nature and has not been authorized empirically through primary data.

Forthcoming studies should assess the proposed concepts using quantitative surveys, qualitative analyses, and longitudinal research involving FinTech companies, financial institutions, and technology providers. These kinds of studies would deliver stronger empirical evidence regarding the efficiency of interdisciplinary methods in improving FinTech innovation, adoption, and sustainability.

9. Recommendations

- Promote multi-institutional research partnerships (between universities, industry and policy institutes) that are specifically oriented to answering FinTech questions identified in an integrated technologic, economic and managerial fashion.
- Bring interdisciplinary FinTech curriculum (both undergraduate and postgraduate) to the forefront, include core computer science, economic, and management content in coherent and professionally oriented programmes.
- Create interdisciplinary innovation labs in financial institutions to collaborate between data scientists, economics and strategic managers in co-developing and piloting FinTech solutions from the ground up.

Design regulations that explicitly reference multi-disciplinary expertise, including technical viability analysed, cost of impact in economy and governance of organisations as part of the package for finTech approvals.

References

1. Gomber, P., Koch, J. A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. Journal of Business Economics, 87(5), 537–580.
2. Chen, M., Mao, S., & Liu, Y. (2014). Big data: A survey. Mobile Networks and Applications, 19, 171–209.
3. Bui, Q. T., & Ho, L. (2019). Artificial intelligence applications in FinTech. International Journal of Financial Studies, 7(2), 1–18.
4. Gai, K., Qiu, M., & Sun, X. (2018). A survey on FinTech. Journal of Network and Computer Applications, 103, 262–273.
5. Chen, L., & Bellavitis, C. (2020). FinTech in China: A review and research agenda. Pacific-Basin Finance Journal, 62, 101386.
6. Lee, D. K. C. (2020). Financial inclusion and FinTech: A global perspective. Emerging Markets Finance and Trade, 56(10), 2311–2328.
7. Philippon, T. (2016). The FinTech opportunity. NBER Working Paper No. 22476.
8. Frost, J., Gambacorta, L., Huang, Y., Shin, H. S., & Zbinden, P. (2019). BigTech and the changing structure of financial intermediation. Economic Policy, 34(100), 761–799.

9. Haddad, C., & Hornuf, L. (2019). The emergence of the global FinTech market: Economic and technological determinants. Small Business Economics, 53, 81–105.

10. Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. Borsa Istanbul Review, 18, 329–340.

11. Schindler, J. (2017). FinTech and the transformation of the financial industry. Business & Information Systems Engineering, 59, 69–76.

12. Lee, I., & Shin, Y. J. (2018). FinTech: Ecosystem, business models, investment decisions, and challenges. Business Horizons, 61(1), 35–46.

13. Arner, D. W., Barberis, J., & Buckley, R. P. (2016). FinTech, RegTech, and the reconceptualization of financial regulation. Journal of Banking Regulation, 19(4), 273–289.

14. McWaters, R. J., & Galaski, R. (2017). The future of FinTech: A paradigm shift in small business finance. World Economic Forum.

15. Kitchenham, B. A., Dyba, T., & Jorgensen, M. (2004). Evidence-based software engineering. Proceedings of the 26th International Conference on Software Engineering (ICSE), 273–281.

16. Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. W. W. Norton & Company.

17. Bohme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, technology, and governance. Journal of Economic Perspectives, 29(2), 213–238.

18. Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. N. (2017). Regulating a revolution: From regulatory sandboxes to smart regulation. Fordham Journal of Corporate & Financial Law, 23(1), 31–103.

19. Hendershott, T., & Riordan, R. (2013). Algorithmic trading and information. Journal of Financial Markets, 16(4), 712–740.

20. Iman, N., & Saeed, A. (2019). Blockchain in financial services: A comprehensive review. Journal of Risk and Financial Management, 12(4), 197.

21. Schueffel, P. (2016). Taming the beast: A scientific definition of FinTech. Journal of Innovation Management, 4(4), 32–54.