

# **E-FINANCE: STATUS, INNOVATIONS, RESOURCES AND FUTURE CHALLENGES**Manuchehr Shahrokhi, Craig Fellow Professor of Finance—California State University - Fresno\*

Content may be subject to copyright.

ABSTRCT

This paper provides an overview of the status, evolution, innovations, technology infrastructure, administrative and support systems, resources, growth, impacts, effectiveness, risks, and challenges of e-Finance. The research method used includes a critical review of archival literature --scholarly and journalistic – organizing and presenting them in a systematic way. All areas of e-finance and applications of the Internet technologies to financial services industry are covered. It discusses how organizations could benefit from such innovations and e-finance systems and infrastructure and technology. Furthermore, the paper discusses the impacts of e-finance models, infrastructure, challenges and risks that the financial services industry faces. It identifies areas of further research in e-finance technology, regulation, and the interface of financial services industry—legacy and new -- with the dynamic Information Technology Industry (ITI) -- consisting of manufacturers and suppliers of computers, telecommunications, business equipment, software, and IT services, the Internet industry -- the Internet and wireless industries.

**Keywords:** Electronic Finance; e-Finance; e-banking; e-trading, e-payments, Internet Finance.

**JEL:** D83, G20-29, & M15

E-Finance paper Manuchehr Shahrokhi.pdf

## I. INTRODUCTION

Global integration, deregulation, advances in the Internet technologies are dramatically changing the structure and nature of financial services. Internet and related technologies are enabling new financial service providers to compete more effectively for customers.

The technological changes are accelerating financial sector development by lowering the costs, increasing the breadth and quality, and widening access to financial services. It can considerably

micreasing the preatm and quanty, and widening access to initialicial services, it can constuerably improve efficiency and decrease the costs of internal business functions such as expense reporting, contract labor management, and time-and-billing procedures.

Allen et. al. (2002) define E-finance as "the provision of financial services and markets using electronic Communication and computation. E-Finance activities include all types of financial activities carried out over the cyberspace or other public networks, such as online banking, electronic trading, provision and delivery of various financial products and services such as insurance, mortgage and brokerage."<sup>1</sup>

Andrew Fight (2002) defines e-Finance "all which relates to the linking of business, finance, and banking via electronic means, encompassing information gathering, processing, retrieval, and transmission of data as well as the transmission, purchase, and selling, of goods and services.<sup>2</sup>"

\* Author is the founding editor of the Global Finance Journal and Executive Director of the Global Finance Association - Conference. His contact information: shahrokhi@glofin.org; 1-559-278-4058.

<sup>&</sup>lt;sup>1</sup> See Franklin Allen et. al. (2002) in the References <sup>2</sup> See Andrew Fight (2002) in the References

## Citations (61)

References (66)

... Customer satisfaction is a critical marketing approach since it connects multiple stages of a consumer's buying transaction in a single transaction ([13], p.147). Electronic financial services are driven by several factors, including technology, globalization, regulation, entrepreneurship, money, and competition ([14], p.367). Therefore, a new reality will form the future of digital banking, where e-money can be easily moved without needing a financial institution to facilitate the transfer of funds ([14], p.391). ...

... Electronic financial services are driven by several factors, including technology, globalization, regulation, entrepreneurship, money, and competition ( [14], p.367). Therefore, a new reality will form the future of digital banking, where e-money can be easily moved without needing a financial institution to facilitate the transfer of funds ( [14], p.391). ...

... Due to the vulnerability of the digital banking industry to a range of cyberattacks, security has become a priority. Banks are expected to maintain and upgrade security measures such as virus controls, password protection, intrusion detection, and technical system updates regularly, according to federal regulations ( [14], p.392). Banks' expanded digital offerings necessitate developing more comprehensive technology solutions that are safe, secure, and dependable. ...

Exproring Customer Awareness towards Their Cyber Security in the Kingdom of Saudi Arabia: A Study in the Era of Banking Digital Transformation

Article Full-text available

Jan 2023

Amar Johri · Shailendra Kumar

View Show abstract

... Finance is becoming an increasingly knowledge-intensive industry and the skills and competencies required to succeed in the sector are evolving (Alt, Beck, and Smits 2018; Montgomery, Squires, and Syed 2018; Shahrokhi and Dandapani 2008; Shim and Shin 2016). There will be increased demands to upskill and reskill employees. ...

... Skills will be needed to use technology, interpret and utilise the outputs of technology and to perform new tasks that emerge. The development of many industries, including finance, has always been accompanied by the adoption of new technologies (Alt, Beck, and Smits 2018;Dosi 1990;Werthamer and Raymond 1997;Jacobides 2005; Shahrokhi and Dandapani 2008; Zheng et al. 2019;Doherty and Stephens 2019). The term 'Fintech' is based on a combination of the words 'financial' and 'technology'. ...

Hard and soft skill needs: higher education and the Fintech sector

	Show abstract
an in ins	Moreover, with the development of economic life and the expansion of commercial dealings, which was matched by increase in dealing with cheques due to its characteristics such as the ease of carrying them, as they replace money, addition to the speed in circulation, individuals have the right to withdraw the value of the cheque from any banking stitution that is specified. This is what is supposed to be dealt with cheques within the framework of the legal image at was drawn for them as a commercial paper that replaces money (Shahrokhi, 2008)
	INAL CASES RELATED TO CHEQUES IN THE LIGHT OF THE OMANI LITIGATION PROCEDURES FACILITATION PURSUANT TO ROYAL DECREE NO. 125/2020    Full-text available   Full-text available
Apr 2	
	med Hasania · Chami Yassine
View	Show abstract
an in ins	Moreover, with the development of economic life and the expansion of commercial dealings, which was matched by increase in dealing with cheques due to its characteristics such as the ease of carrying them, as they replace money, addition to the speed in circulation, individuals have the right to withdraw the value of the cheque from any banking titution that is specified. This is what is supposed to be dealt with cheques within the framework of the legal image at was drawn for them as a commercial paper that replaces money (Shahrokhi, 2008)
	INAL CASES RELATED TO CHEQUES IN THE LIGHT OF THE OMANI LITIGATION PROCEDURES FACILITATION PURSUANT TO ROYAL DECREE NO. 125/2020
Artic	
Apr 2	
	ami Yassine
View	Show abstract
Sł eit an	Based on the documents we grasped, scholars differed in their opinions toward the definition of internet finance. nahrokhi (2008), Xie and Zou (2012) maintain that internet finance is a third financing model which is different from her the indirect financing of commercial bank or the direct financing in capital market. Instead, Chen (2014), Wang d Zhang (2015) point out that internet finance is an extension and upgrading of traditional financial service, and is gulatory arbitrage taking advantage of the defect of China' financial system, instead of the so-called "new finance"
The ii	npact of internet finance on commercial banks' risktaking: Theoretical interpretation and empirical test
Artic	
Apr 2 Guo F	021 Pin⊸Shen Yue
View	
Does Artic Feb 2	divities of enterprises. On the other hand, relying on digital technologies, DF has unparalleled advantages in data occasing and analysis  digital finance enhance industrial green total factor productivity? Theoretical mechanism and empirical test  Full-text available  2023 · ENVIRON SCI POLLUT R  ei Lyu · Baotong Gu · Jinning Zhang
View	Show abstract
be Pe ke ke	Akumulasi nilai transaksi dan perkembangan pembayaran digital yang cukup fantastis, mengisyaratkan adanya berapa faktor penentu yang menjadikan fintech sangat diminati oleh para pelaku bisnis, maupun penggunanya. rtama, [4] menyebutkan bahwa perkembangan teknologi dibidang keuangan memungkinkan para penyedia jasa uangan untuk berkompetisi lebih efektif, meminimalkan biaya, meningkatkan kualitas jasanya. Kedua adalah yakinan dari para pelanggan yang bersedia untuk lebih terbuka dan optimis untuk mengadopsi fintech, karena anya inovasi yang selalu bisa diunggulkan [3]
Unae	rstanding the Challenges and Opportunities of Financial Technology to Enabling SMEs Potential
Artic	le Full-text available
Artic	020 iana Fitri
Apr 2	
Apr 2	Show abstract
Apr 2	
Apr 2 Alf View sm inr tha	
Apr 2 Alf View sm inr tha rec en	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of novative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain at integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)
Apr 2 Alf View  sm inn that recent that recent that recent that recent that recent that the that the the that the the that the the that the the the that the the that the the the the the the the the the th	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of novative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain at integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)
Apr 2 Alf	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of an expectation of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)
Apr 2 Alf  Alf  View  sminr tha rec en  Can c from  Artic  Dec 2	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of novative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain at integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)  ligital finance reduce carbon emission intensity? A perspective based on factor allocation distortions: evidence Chinese cities
Apr 2 Alf  Alf  View  sminr tha rec en  Can c from  Artic  Dec 2	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of novative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain at integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)  Iligital finance reduce carbon emission intensity? A perspective based on factor allocation distortions: evidence Chinese cities    Full-text available   Full-text ava
Apr 2 Alfa Alfa Alfa Alfa Alfa Alfa Alfa Alfa	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those rall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of novative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain at integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)  Ingital finance reduce carbon emission intensity? A perspective based on factor allocation distortions: evidence Chinese cities  The Full-text available
Apr 2 Alf View sm inr that recen Artic Dec 2 Gango View Resear	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of novative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain at integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)  Ingital finance reduce carbon emission intensity? A perspective based on factor allocation distortions: evidence Chinese cities  The Full-text available  2022 · ENVIRON SCI POLLUT R  2023 · ENVIRON SCI POLLUT R  2039 · Ziyu Ding · Mao Wu · Wang Haisen  Show abstract  Therefore the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from
Apr 2 Alf	Second, digital finance is both low cost and highly efficient, which increases the innovation efforts especially of those hall and mediumsized enterprises in the tail of the risk distribution. Digital finance can improve the flow and turnover of rovative capital by enabling mobile payments, online transactions, etc. and thus drive the formation of a process chain not integrates the retrieval of the demand for, communication surrounding, and matching related to financing, thereby ducing financing costs (Shahrokhi 2008). This further increases the financing available to small and mediumsized terprises and thus their R&D innovation (Kaplan and Zingales 1997)  Itigital finance reduce carbon emission intensity? A perspective based on factor allocation distortions: evidence chinese cities  The Full-text available  Wang Haisen  Show abstract  Wang Haisen  Show abstract  Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and Countermeasures of Third-Party Payment on Commercial Banks—Evidence from the Influence and C

 $https://www.researchgate.net/publication/235285086\_E-finance\_status\_innovations\_resources\_and\_future\_challenges$ 

View Show abstract

An in-depth analysis of the entrepreneurship of rural Chinese mothers and the digital inclusive finance

Article

Jun 2023 · TELECOMMUN POLICY

KaiChao Shao  $\cdot$  Ruixue Ma  $\cdot$  Joseph Kamber

View

Show more

Recommendations Discover more

#### Article

Retail depositors, conduct of business and sanctioning

July 2009 · Journal of Financial Regulation and Compliance

Peter Cartwright

Purpose The purpose of this paper is to consider whether a move from self-regulation in the form of the Banking Code to statutory regulation by the Financial Services Authority (FSA) of retail banking conduct of business is to be supported.

Design/methodology/approach The paper begins by examining the nature of the self-regulatory process and then considers its strengths and weaknesses in the ... [Show full abstract]

Read more

#### Article

Gender stereotyping in financial advisors' assessment of customers

December 2012 · Journal of Financial Services Marketing

Ingalill Soderberg

This article presents the results of a comparison of male and female advisors' assessment of their customers. The findings from the empirical material, consisting of 361 advisors' answers to a questionnaire, show significant evidence that advisors assess their customers differently depending not only on customer gender, but also according to their own gender. The investigated variables are the ... [Show full abstract]

Read more

### Conference Paper

Research Directions on the Role and Impact of ICT in Microfinance

February 2010

Robert J. Kauffman · Frederick J. Riggins

Information and communication technology (ICT) is an important driver in the microfinance industry. Microfinance providers, both non-profit microfinance institutions (MFIs) and for-profit banks, provide financial services to the poor, and are critical for economic development in developing nations. As the industry matures, MFIs face a competitive environment, forcing them to balance the goals of ... [Show full abstract]

Read more

## Article

 $\label{thm:continuous} Financial\ crimes: Prohibition\ in\ Islam\ and\ prevention\ by\ the\ Shari\ 'a\ Supervisory\ Board\ of\ Islamic...$ 

July 2010 · Journal of Financial Crime

Siti Faridah Abdul Jabbar

Purpose The purpose of this paper is to establish that financial crimes are unlawful (haram) in Islam and accordingly, the responsibilities of the Sharia's Supervisory Boards of Islamic financial institutions include the prevention and control of financial crimes. Design/methodology/approach The paper presents an analogy (qiyas) of the injunctions in the Qur' an and ... [Show full abstract]

Read more





Company

Support

Business solutions

About us
News
Careers

Help Center

Advertising Recruiting  $\ @$  2008-2023 Research Gate GmbH. All rights reserved.  $\mathsf{Terms} \cdot \mathsf{Privacy} \cdot \mathsf{Copyright} \cdot \mathsf{Imprint}$