



Full length article

# Blockchain Technology Adoption by Bangladesh Capital Markets: An Empirical Analysis

Abu Sayeed Ahmed \*, Kannan Loganathan

Faculty of Business and Technology, University of Cyberjaya, Malaysia

\*Corresponding e-mail: [2103\\_3489@st.cyberjaya.edu.my](mailto:2103_3489@st.cyberjaya.edu.my)

## Article Info

Received: 01.10.2024

Accepted: 15.10.2024

Available online: 07.12.2024

## Keywords:

Capital Markets, Block Chain, Technology, Behavioural Determinants

## DOI:

<https://doi.org/10.59857/IJABS4906>

## ABSTRACT

The adoption of the block chain technology in capital markets of Bangladesh engaged an insightful processing of the financial services offered to the customers. This demonstrates the potential use of block chain while implying the determinants of effort expectancy, facilitating condition, performance expectancy, social influence, behavioural intention and use behaviour (EE, FC, PE, SI, BI and UB). The research examines and evaluate the relationship of these aspects while employing quantitative research method (PLS-SEM model) against the simple random sample of 384 from capital market regulator, broker, and investor with key stakeholders. The finding of the determinants indicates the significant relationship among the stakeholders of capital markets for employing block chain in capital markets of Bangladesh. The moderate effects of performance expectancy, effort expectancy, social influences are reflected on the behavioural intention. The finding also shares the societal influence and a person's behavioural intention are effective determinants to employ blockchain technology. This research has significant implications for the financial managers in capital markets, with future works to be considered on the given usage of blockchain technology in Bangladesh developing markets. It is recommended that relationship between the individual behavioural approach is in requirement of training for to apply advanced analytics in the financial businesses using the cutting-edge methods of digital working.

## 1. Introduction

The capital markets have traditionally been regarded as instrumental in facilitating the resource allocation in nations. Thus, the depth of a nation's financial system has for decades been considered a backbone of providing investment alternatives for the smallest to the largest long-term investor. Such opportunities are availed through a range of financial assets, with varying liquidity levels and maturity periods enabling the interaction of both investors and fundraisers with varying investment objectives and preferred investment horizons (Didier *et al.* 2021: Firth 2020). In addition, new investors are attracted by the general confidence exhibited by existing investors in a specific market which lures them and other economic agents to defer current consumption in

preference of future potential gains. The returns are typically in the form of favorable price changes of the financial assets at disposal, or other cash inflows associated with holding the asset under consideration.

The sophistication is evidenced by the increasing interdependency of financial markets (Didier *et al.* 2021). At one time, countries were resistant to consequences of crisis occurring in one part of the world. However, the increased interconnectedness of economic value chains resulting from globalisation have eroded this insulation by increasing contagion risks between major and minor capital markets (Luo *et al.* 2021, Foglia *et al.* 2020). Thus, scholars are concerned with the insufficient theoretical orientation especially for the different financial services (Ali *et al.* 2020). The concern extends to capital market players in which much of the investigations are expected from the regulators though with the help of the capital market players. The majority of studies on blockchain usage have barely touched on any theoretical foundations when examining the phenomenon (Ali *et al.* 2020, Schär 2021). Hence, academics are worried about the inadequate theoretical framework, particularly with regard to the various financial services (Ali *et al.* 2020). The nation has recently launched a National Blockchain Strategy and requires policy inputs on the use cases for consideration (Eduardo Demarco, 2020: Gorkhali & Chowdhury, 2022). There is currently limited research investigating the adoption of the technology in the Bangladesh capital markets. Current academic studies have only provided a use case in healthcare (Rezina *et al.* 2017), financial inclusion (Nusrat 2021) and energy (Mia 2021). In addition, there has not been investigations exploring the perception of the capital market stakeholders as the users and implementers of the technology. Given the readiness and the Bangladesh government's ambitious policy expectations targeting the National Blockchain Strategy implementation by 2030 and the priority of capital markets in the process, more research is thus required to assist the government in crafting evidence-based policy.

## 2. Literature Review

Efficient capital markets have long been identified as critical in steering the growth of firms (Didier *et al.* 2021, Schumpeter 1934) and consequentially the economy (King and Levine 1993, Levine and Zervos 1996). Recent studies provide additional evidence showing that capital markets enable firm-level production expansion, transitioning to a more favourable capital structure, and subsequently, accelerated growth of firm value (Fan 2019, Didier *et al.* 2021, Calomiris *et al.* 2021). The metrics used to evaluate capital market performance are fairness and efficiency (Lu 2013, Kemme *et al.* 2022). According to Miskin and Eakins (2018), the ability of market prices to reflect all available information about a financial instrument is the core concept of market efficiency. In order to properly allocate resources to the most advantageous and productive uses possible, price is crucial (Fama 1970). The efficient market theory, which was developed and states that an efficient market is one in which it is impossible for an investor to obtain returns that are higher than the market rate of return, is where the definition originated (Degutis and Novickytė 2014). Hence, the majority of earlier studies have depended on the fundamental ideas presented, which includes figuring out efficiency metrics like liquidity (Cumming *et al.* 2020) or indicators linked to price and interest spreads (Lu 2013, Tsai *et al.* 2021, Yang *et al.* 2020). The graphic summarizes the capital market performance contexts that are common in the literature. Other capital market performance context prevalent in literature.

The Bangladesh capital markets began operating in 1954 (Amit 2016) as the East Pakistan Stock Exchange Association Ltd. Then the country was still known as East Pakistan. Following Bangladesh's independence in 1971, the bourse resumed operation five years into the new nation after a temporary suspension. The primary stock exchange was then rebranded to Dhaka Stock Exchange in 1986. However, in the early years little impact was

noticeable on the economy until the 1990s (Amit 2016). It was only after increased activity that considerations to institute a regulator to supervise the capital market activities were made. In 1993, the Bangladesh Securities and Exchange Commission (BSEC) was established through an Act of Parliament. Two years later, Bangladesh's second capital market, the Chittagong Stock Exchange was created. The regulator's governance policies were initially weak and systemically misaligned without any specified procedures to evaluate and institute controls to counter any early signs of market stress and probable abnormal volatilities (Qamruzzaman and Wei 2018). The financial ecosystem in Bangladesh has a number of difficulties, which have an impact on the performance of the capital market. First off, the capital market is an unsuitable yardstick for the success of the economy as a whole because of its limited and misaligned activity (Amit 2016, Jahan, and Abdullah 2021). For more than ten years, Bangladesh's economy grew at one of the quickest rates in the world thanks to its strong economic performance, which reached above average growth (Amit 2016, Naoaj et al. 2021, Rezina et al. 2017). This expansion is not keeping up with the performance of the capital market. It's interesting to note that the primary exporting industries are absent from the capital markets. The textile sector accounts for around of the nation's exports; the majority of these businesses are privately held and do not offer investment options on the national stock exchange. According to Bangladesh Bank (2021), the superior DSE's capitalization ratio was really less than 16 percent of GDP, which is below the 50 percent mark that denotes a deeper market (Jahan and Abdullah 2021). It follows that these companies' operations depend on bank financing for the use of the capital markets.

### **2.1. Stakeholder Theory**

The term stakeholder was coined from the novel work out of Stanford Research Institute (now known as SRI International) sometime in the 1960s. The work was largely shaped by ideas and frameworks established by projects with Lockheed the military aircraft manufacturer (Parmar *et al.* 2010). These concepts were refined and advanced further by Ansoff and Stewart (1967). Right from the beginning, the stakeholder approach emanated from management theory (Parmar *et al.* 2010) but was influenced by other preceding concepts such as systems thinking (Freeman and McVea 2001). The SRI's emphasis was on the managers' need to comprehend the various interests of business owners, staff, suppliers, financiers and society in general and develop objectives which these groups would most likely be in favour of (Freeman and McVea 2001, Parmar *et al.* 2010). Such support has long term relevance. Thus, management continuously pursues to understand these relationships and aligns strategy with the stakeholder objectives.

### **2.2 Unified Acceptance and Use Of Technology (UTAUT Theory).**

The UTAUT theory is an extension of the TRA. The TRA was developed in 1975 through the work of Fishbein and Ajzen (1975) in the field of sociological research. The initial focus was the development of a cognitive framework to assist in developing behavioural change strategies in individuals. The previous discussion looked at establishing the theoretical underpinnings for eliciting interests of different groups to be impacted by a technology change endeavour. The second aspect identifies a framework to identify the main influences affecting the adoption of technology with less friction by these groups. The unified acceptance and use of technology theory by Venkatesh *et al.* (2003) is one such framework. The several outlines have been utilised in the past to understand the adoption or resistance of technologies. There is a such technologies have been for payment systems, and more recent technologies such as smart homes (Hubert *et al.* 2019) and digital twins (Sepasgozar *et al.* 2021). The understanding of the relationships has also been investigated across different domains, such as tourism and the airlines and specific business functions within the conceptual framework (Brandon-Jones and Kauppi 2018).

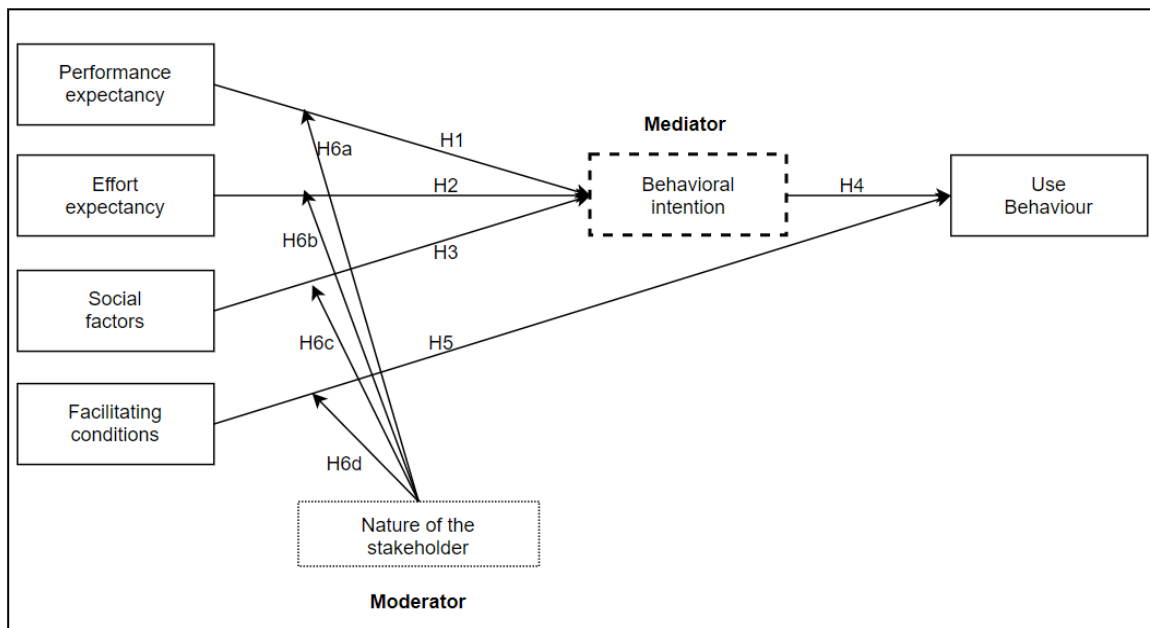


Figure 1 Conceptual Framework

### 3. Methodology

The research methodology employed to achieve the objectives set to commence with a description of the research design and underlying assumptions, followed by the determination of the unit of analysis and sampling. The ontological and epistemological beliefs in quantitative research take a positivist world view which assume absolute and objective reality (Cresswell and Cresswell 2018). A variety of stakeholders, including individuals and companies, are involved in the capital market in Bangladesh. But individuals including those who represent corporate or institutional players are the true technology users.

**Table 1 Demographics**

Stakeholder	Representative	Population
<b>Regulators</b>	CDBL – 75 employees (CDBL 2021) CSE – 80 employees (CSE 2021) DSE – 338 employees (DSE 2021) BSEC – listed as a company with 201-500 employees	Around 1,000 employees
<b>Brokers/Dealers</b>	DSE Brokers Association – 261 institutions CSE – 157 institutions	550 institutions: Total individual dealers/ brokers

	(majority are listed under DSE)	unknown)
	Merchant Banks – 66	
	Asset Management and Fund Management Companies - 66	
<b>Issuer/Listed companies</b>	DSE – 391 excluding debt listings	391 employees (total unknown)
	CSE – 362 companies (majority listed under DSE)	
<b>Total</b>		725 companies and 4 regulators
<b>Investors</b>	Brokers/Dealers	

A self-administered questionnaire will be utilised to measure the constructs and latent variables developed in chapter 2 of this study. This is because, the instrument is convenient and can be dispersed across geographical boundaries at a lesser cost. The sections thus measure the four independent latent variables, the mediating construct, and the dependent variable; all measured on a 5-point Likert scale with “1” denoting “Strongly disagree” and “5” as “Strongly agree”. The four independent latent variable is facilitating conditions. The mediating construct is behavioural intention, and the dependent latent variable is using behaviour. Stratified sampling is a procedure in which the population is divided into subgroups and a random sample is selected from the subgroups for analysis (Edlund and Nichols 2019). In this study, the subgroups are the stakeholder groups of all the capital market players impacted by the blockchain technology use. The evaluation procedure utilizes with the response rate and informant competency assessment, common bias method, participant analysis and lastly the partial least square (PLS) measurements. The research considered to be appropriate for attaining the set research objectives in investigating the adoption of blockchain technology in Bangladesh capital markets. The use of the unit of analysis, the population thereof and the sampling design are to ensure that the capital market stakeholders are sufficiently represented as informants. The detail of the instrument design of the quantitative study, as the methods for data collection and the respective analysis is undertaken within a period of two years.

#### 4. Results and Discussion

The results about the use of blockchain technology for the consideration of research with the use of analysis report format. The data was validated before the descriptive analysis was performed to make sure there were no outliers, missing values, problems with data normality, or problems with standard procedures. It is towards the evaluating of the validity and reliability of the measurement model; the idea was operationalized using to validate the structural model. It includes the measurement model's quality and the assessment of the inclusion for the mediating results of the block chain technology on the progress of using financial services for the capital market success and effective use of data analysis. There are 384 number of total respondents, the result of the descriptive analysis shows that 82 percent (411 respondents) of the respondents were male and only 18 percent (91 respondents) were female. As for the level of education, certificate is 49 percent, diploma is 33 percent, bachelor is 13 percent, masters are at, and doctorate is at only 5 percent. Majority of the participants are working

as a broker in the capital market (270 respondents), while the least consist of regulator (23 respondents). Indicator reliability is a measure of how consistent the latent constructs are in measuring what they intend to measure. To meet the requirement of indicator reliability, each construct must explain at least 50% of the variance in each indicator (Urbach & Ahlemann, 2010). Hair et al. (2017) suggests that an outer loading of 0.708 or higher is needed to obtain a value equal to 0.50 through squared loading. Therefore, indicators with outer loadings less than 0.708 were removed from the constructs. However, weak indicators should only be removed if doing so would increase composite reliability or AVE (Hair et al., 2017). In addition, reflective indicators should be eliminated from measurement models if their loadings within the PLS model are less than 0.4 (Hulland, 2002).

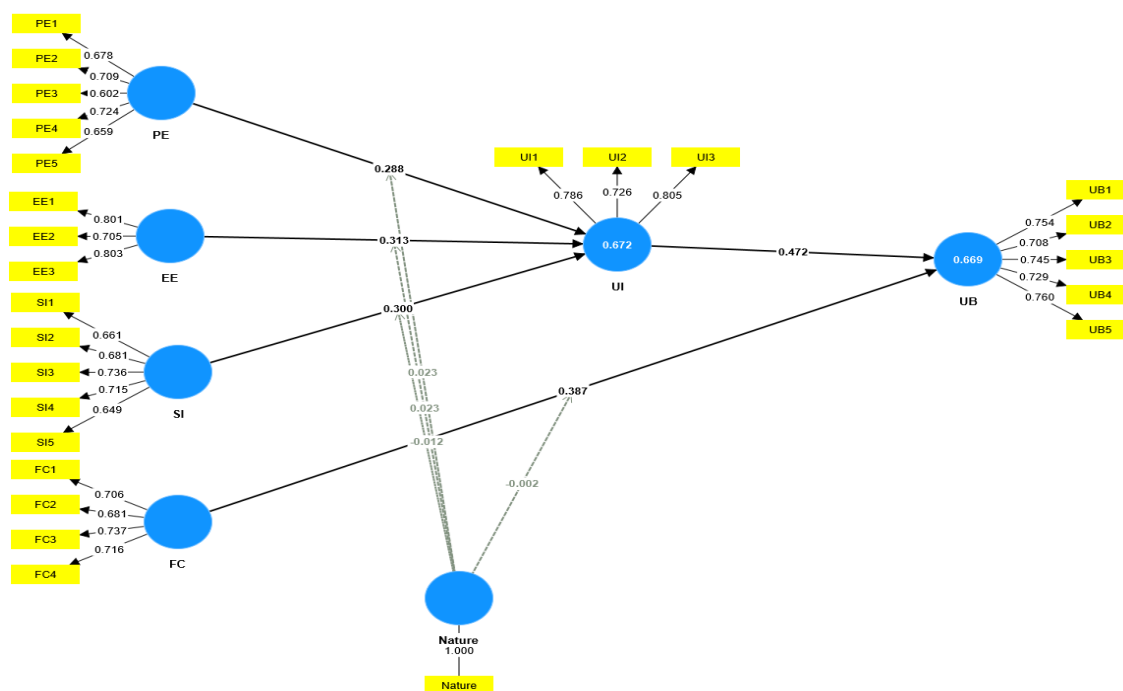


Figure 2 Graphical output for reliability indicator after deletion

The concept of convergent validity pertains to how accurately the indicators reflect the construct that they aim to measure (Vinzi et al., 2010). The underlying idea is that if multiple measures are taken of the same thing, they should have a high degree of covariance to be considered valid indicators of the concept (Bagozzi et al., 1991, p. 425). The AVE (Average Variance Extracted) is used to measure convergent validity (Hair et al., 2017), with a suggested threshold value of 0.50 or above to ensure that the indicators are converging onto the same construct (Fornell & Larcker, 1981). AVE values greater than 0.50 suggest that the constructs explain over half of the variance of their respective indicators (Hair et al., 2017). The results in the analysis indicate that an average variance extracted (AVE) greater than 0.5; with a range of 0.546 to 0.732 after deleting seven items (PE1 PE3 PE5 SI1 SI2 SI5 FC2) therefore demonstrating the criterion as suggested by (Fornell & Larcker, 1981). The results are presented in Table 4.7 confirming that the items contained in each construct are based on the constructs that have been set (Hair et al., 2017).

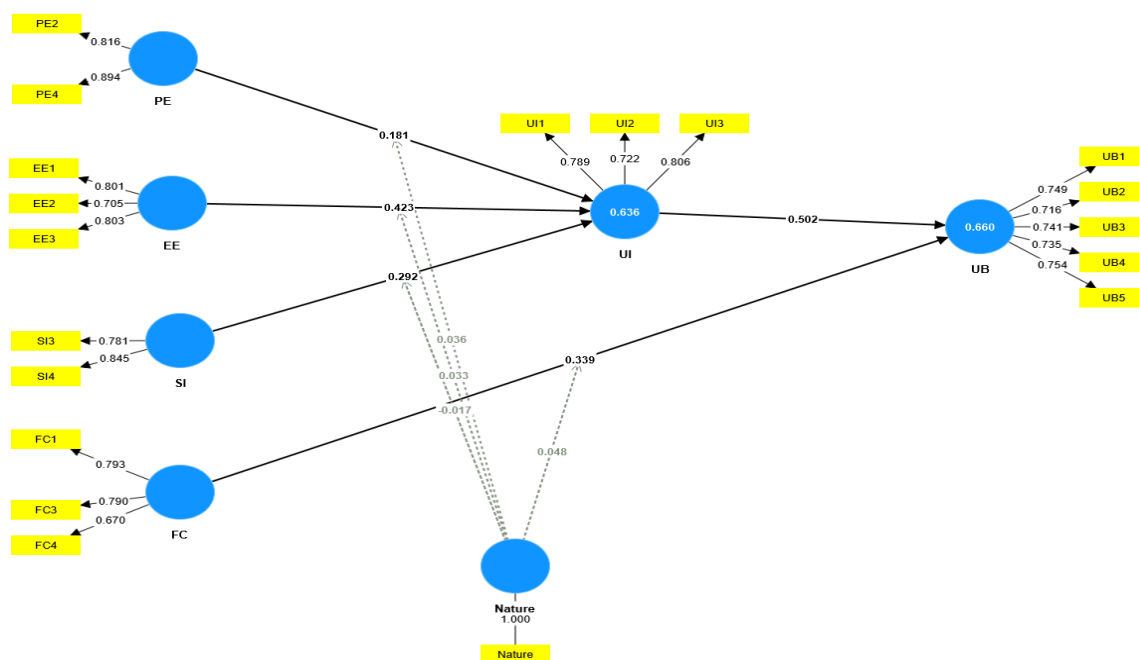


Figure 3 Graphical output for reliability indicator before deletion

The results provide the discussion on the structural model's assessment with the procedures that involved with the collinearity issues. It shows the path coefficients of hypothesized relationships as well as the predictive accuracy and predictive relevance of the structural model. In summary, five direct relationship hypotheses namely, H1, H2, H3, H4 and H5 in the structural model are supported with positive  $\beta$  or path coefficients,  $t > 1.645$  and are significant at  $p < 0.05$ . The value obtained for coefficient of determination ( $R^2$ ) was 66.0% which indicates that the percentage of variance in the endogenous construct (use behaviour) was explained by all the exogenous constructs namely performance expectancy, social influence, effort expectancy, and facilitating conditions. The adoption of block chains in Bangladesh's various financial services marketplaces is one of the research's ramifications. It meets client demand in a thoughtful way and has an impact on the collateral market for free lending. The many advantages of adopting the technology come with the deceit that prevents the widespread use of blockchain technology. the effective application of preference for the planned adoption and utilization of pertinent capital market financing operations. In order to easily alter services and improve the well-being of financiers, financial service providers must use technology, including blockchain, into their operations with open innovation and dynamics.

An increasing number of businesses are utilizing the block chain's global applicability through supported financial operations, which is a creative and effective alternative to the traditional method of financing delivery and associated activities. The implementation of a blockchain-based supply chain enhances financial efficiency and effectiveness by presenting less hazardous options to stakeholders. The research is the realization of block chains in Bangladesh's different financial services sectors. It thoughtfully satisfies customer demand and influences the free lending collateral market. Deception stands in the way of blockchain technology's mainstream application, despite its obvious benefits. the sensible use of preference for the organized implementation and use of relevant capital market financing activities. Financial service providers must use technology, including blockchain, into their operations with open innovation and dynamics in order to quickly

modify services and enhance the welfare of financiers. Through supported financial operations, more companies are taking advantage of the worldwide applicability of the block chain. This is a novel and efficient substitute for the conventional approach to finance delivery and related activities. By offering stakeholders less risky options, the adoption of a blockchain-based supply chain improves financial efficiency and effectiveness.

## 5. Conclusion

The relationship between performance expectancy and an individual's behavioural intention to use blockchain technology in capital markets. The effort expectancy, facilitating condition, performance expectancy, social influence, behavioural intention and use behaviour (EE, FC, PE, SI, BI and UB). This is reflected for the nature of the stakeholder and moderate effects of performance expectancy, effort expectancy, social influence's effect on behavioural intention. The research considered the role of blockchain technology with respect to the adoption of the facilities for the effective consideration of research in a reflective manner. The security and privacy framing of the information authentication is effective with the use of cryptocurrencies those are enlarging the architectural data and internet facilities. It is unable to utilize the full potential of the technology for the multiple markets in Bangladesh. The reflective measures for the effort expectancy, facilitating condition, performance expectancy, social influence, behavioural intention and use behaviour are to facilitate the technology in a useful manner. The development of the blockchain technology underlines the importance of marketplace with respect to the monitoring of the personal data privacy intelligent use of the energy. The dramatic decrease in the effects of the cryptocurrency provides Bangladesh with the little progress in block chain technology with the facilitation of direction and key structures.

### 5.1. Research Implications & Contribution

The research in practice is to attain the proximity of the financial purchaser for applying the blockchain technology in capital market of Bangladesh. The banking CEOs, managers, staff, and the financial experts in the capital market industry of Bangladesh are the direct and affected stakeholders. These are involved with the electronic documentation and placement of the record for the applicability of block chain in a useful manner. The practice of the research for the financial stability of the capital markets is surrounded by the psychological drivers those are influencing the adoption of technology within the block chain use for the finances. The modelling of the combined use of digital transformation is reflective of the intrinsic and extrinsic stimulus that is to use the technology with the subjective norms. The complex mechanisms of business and the complexities of improved performance are linked to the comprehensive financial system that creatively employs technology. Behaviour choices for blockchain adoption are associated with the application of state-of-the-art technology in the financial industry.

## References

- Aihara, K., Edahiro, T., Onuma, T., Saito, H., Kawanami, S., Hirata, Y., Matsuo, H. and Yoshida, M. (2019), "Study on Applicability of DLT in Trade Matching Processes, Phase 2", *JPX Working Paper*, Vol. Supplement.
- Ajzen, I. (1985), "From Intentions to Actions: A Theory of Planned Behavior . . .", in Kuhl, J. and Beckmann, J. (Eds.), *Action Control. SSSP Springer Series in Social Psychology*, Springer, Berlin, Heidelberg.
- Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 52 No. 2, pp. 179-211.
- Amit, S. (2016), "Market Bubbles, Structural Developments and Present Trends: An Overview of Bangladesh Capital Markets", in *Sector Report Series*, Center for Enterprise and Society, University of Liberal Arts



Bangladesh.

- Ansoff, H.I. and Stewart, J. (1967), "Strategies for a Technology-Based Business", *Harvard Business Review*, Vol. 45, pp. 71-83.
- Bangladesh Bank. (2021), "Monthly report on capital market development in Bangladesh (December 2021)", in.
- Brandon-Jones, A. and Kauppi, K. (2018), "Examining the antecedents of the technology acceptance model within e-procurement", *International Journal of Operations & Production Management*, Vol. 38 No. 1, pp. 22-42.
- Calomiris, C.W., Larrain, M. and Schmukler, S.L. (2021), "Capital inflows, equity issuance activity, and corporate investment", *Journal of Financial Intermediation*, Vol. 46, pp. 100845.
- CDBL. (2021), "Annual Report 2021: Central Depository Bangladesh Limited", in, Central Depository Bangladesh Limited.
- Cresswell, J.W. and Cresswell, J.D. (2018), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed., Sage Publications, Thousand Oaks, California.
- CSE. (2021), "Annual Report 2021: Chittagong Stock Exchange Limited", in, Chittagong Stock Exchange Limited.
- Cumming, D., Ji, S., Peter, R. and Tarsalewska, M. (2020), "Market manipulation and innovation", *Journal of Banking & Finance*, Vol. 120, pp. 105957.
- Degutis, A. and Novickytė, L. (2014), "The efficient market hypothesis: A critical review of literature and methodology", *Ekonomika*, Vol. 93 No. 2.
- Didier, T., Levine, R., Llovet Montanes, R. and Schmukler, S.L. (2021), "Capital market financing and firm growth", *Journal of International Money and Finance*, Vol. 118, pp. 102459.
- DSE. (2021), "Annual report 2020-2021: Dhaka Stock Exchange Limited", in, Dhaka Stock Exchange Limited.
- Edlund, J.E. and Nichols, A.L. (2019), *Advanced Research Methods for the Social and Behavioural Sciences*, Cambridge University Press, Cambridge, UK.
- Eduardo Demarco, A. (2020). Analysing blockchain/distributed ledger technology in capital markets and know your customer process. *Journal of Securities Operations & Custody*, 12(1), 58-71.
- Fama, E.F. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work", *The Journal of Finance*, Vol. 25 No. 2, pp. 383-417.
- Fan, P. (2019), "Debt retirement at IPO and firm growth", *Journal of Economics and Business*, Vol. 101, pp. 1-16.
- Firth, C. (2020), "Protecting investors from themselves: Evidence from a regulatory intervention", *Journal of Behavioral and Experimental Finance*, Vol. 27, pp. 100329.
- Fishbein, M. and Ajzen, I. (1975), *Belief, attitude, intention and behaviour: An introduction to theory and research*, Addison-Wesley, Massachusetts.
- Foglia, M., Ortolano, A., Di Febo, E. and Angelini, E. (2020), "Bad or good neighbours: a spatial financial contagion study", *Studies in Economics and Finance*, Vol. 37 No. 4, pp. 753-776.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of marketing research*, Vol. 18 No. 1, pp. 39-50.
- Freeman, R. and McVea, J. (2001), "A Stakeholder Approach to Strategic Management", *SSRN Electronic Journal*.
- Gorkhali, A., & Chowdhury, R. (2022). Blockchain and the evolving financial market: A literature review. *Journal of Industrial Integration and Management*, 7(01), 47-81.
- Hair Jr, J.F., Sarstedt, M., Ringle, C.M. and Gudergan, S.P. (2017), *Advanced issues in partial least squares structural equation modeling*, Sage publications.
- Hubert, M., Blut, M., Brock, C., Zhang, R.W., Koch, V. and Riedl, R. (2019), "The influence of acceptance and adoption drivers on smart home usage", *European Journal of Marketing*, Vol. 53 No. 6, pp. 1073-1098.

- Jahan, N. and Abdullah, M.N. (2021), "Unparalleled volatility in sector-wise return in the Chittagong Stock Exchange: A Covid-19 perspective", *Asia-Pacific Management Accounting Journal*, Vol. 16 No. 3, pp. 55-83.
- Kemme, D.M., McInish, T.H. and Zhang, J. (2022), "Market fairness and efficiency: Evidence from the Tokyo Stock Exchange", *Journal of Banking & Finance*, Vol. 134, pp. 106309.
- Levine, R. and Zervos, S. (1996), "Stock market development and long-run growth", *The World Bank Economic Review*, Vol. 10 No. 5, pp. 987-1007.
- Naoaj, M.S., Khan, A. and Ahsan, N. (2021), "The Emerging Asia Pacific Capital Markets: Bangladesh", in Cao, L. and Garcia-Feijóo, L. (Eds.), *CFA Institute Research Foundation Briefs*, CFA Institute.
- Parmar, B., Freeman, R., Harrison, J., Purnell, A. and De Colle, S. (2010), "Stakeholder Theory: The State of the Art", *The Academy of Management Annals*, Vol. 3, pp. 403-445.
- Qamruzzaman, M. and Wei, J. (2018), "Financial Innovation, Stock Market Development, and Economic Growth: An Application of ARDL Model", *International Journal of Financial Studies*, Vol. 6 No. 3, pp. 69.
- Rezina, S., Jahan, N. and Mustafi, M. (2017), "Contribution of StockMarket Towards Economic Growth: An Empirical Study on Bangladesh Economy", *European Scientific Journal*, Vol. 13.
- Schär, F. (2021), "Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets", *Federal Reserve Bank of St. Louis Review*, Vol. Second Quarter.
- Stolowy, H., Paugam, L. and Gendron, Y. (2022), "Competing for narrative authority in capital markets: Activist short sellers vs. financial analysts", *Accounting, Organizations and Society*, pp. 101334.
- Tsai, H.-J.S., Wu, Y. and Xu, B. (2021), "Does capital market drive corporate investment efficiency? Evidence from equity lending supply", *Journal of Corporate Finance*, Vol. 69, pp. 102042.
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003), "User Acceptance of Information Technology: Toward a Unified View", *MIS Quarterly*, Vol. 27 No. 3, pp. 425-478.
- Yang, Z., Ho, K.-C., Shen, X. and Shi, L. (2020), "Disclosure Quality Rankings and Stock Misvaluation – Evidence from Chinese Stock Market", *Emerging Markets Finance and Trade*, Vol. 56 No. 14, pp. 3468-3489.