



THE SECOND INTERNATIONAL CONFERENCE ON SCIENTIFIC, ECONOMIC AND SOCIAL ISSUES

DIGITAL TRANSFORMATION, COOPERATION AND GLOBAL INTEGRATION IN THE NEW NORMAL

SPONSORS

Sacombank
Đồng hành cùng phát triển



FINANCIAL PUBLISHING HOUSE

TABLE OF CONTENT

APPLICATION OF TECHNOLOGY AND BIG DATA IN THE FIELDS OF FINANCE, ACCOUNTING AND AUDITING IN THE CONTEXT OF GLOBALIZATION

BANK RUN AND SILICON VALLEY BANK	1
Lam Dang Xuan Hoa, Ho Minh Khoa, Huynh Vo Nhat Linh	1
BIG DATA AND INTELLECTUAL PROPERTY RIGHTS.....	14
Le Thi Minh, Vo Trung Hau	14
THE EFFICIENCY OF THE INTERNAL CONTROL SYSTEM IN RISK MANAGEMENT AT THE NAM A COMMERCIAL JOINT STOCK BANK	23
Truong Thanh Loc, Tran Ngoc Thanh.....	23
VIETNAM - AUSTRALIA ECONOMIC AND TRADE COOPERATION IN THE NEW NORMAL: OPPORTUNITIES AND CHALLENGES FOR VIETNAMESE INVESTORS.....	30
Nhu Nguyen Phuc Quynh*, Anh Nguyen Thi Nguyet, Duy Nguyen Anh	30
IMPACTS OF CREDIT GROWTH AND CREDIT RISK ON THE PROFIT OF VIETNAM JOINT STOCK COMMERCIAL BANKS	43
Dao Le Kieu Oanh*, Tran Thi Huong Ngan	43
FACTORS AFFECTING CUSTOMERS' DECISIONS TO USE E-BANKING AT JOINT STOCK COMMERCIAL BANKS IN HO CHI MINH CITY	57
Nguyen Duy Khanh ¹ , Pham Quoc Tham ²	57
HOW CHINA_USA POLITICAL TENSIONS AFFECT STOCK MARKET RETURN OF CHINA AND THE USA? A QUANTILE VAR CONNECTEDNESS APPROACH	70
Hao Wen Chang ¹ , Tsangyao Chang ² and Mei-Chih Wang ³	70
BANKING HUMAN RESOURCES BEFORE THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE AI	92
Nguyen Huynh Chi.....	92
IMPROVE THE QUALITY OF TRAINING THROUGH IMPROVEMENT OF STUDENT TESTING AND ASSESSMENT – CASE IN ACCOUNTING BRANCH, UNIVERSITY OF ECONOMICS AND FINANCE	102
Thuy Thi Ha	102
ACTIVITIES OF DIGITAL TRANSFORMATION IN VIETNAMESE COMMERCIAL BANKS: AN OVERVIEW DURING THE COVID-19 RECOVERY PERIOD.....	109
Nguyễn Thị Quỳnh Châu, Đào Lê Kiều Oanh	109
OPPORTUNITIES AND CHALLENGES FOR VIETNAM IN ATTRACTIVE FDI IN GLOBAL MINIMUM CORPORATE TAX IMPLEMENTATION	117
Ngo Hoang Thong	117

DIGITAL ECONOMY IN VIETNAM, TRENDS AND POTENTIABILITY

DEVELOPING SMART HOME MODEL FOR APARTMENTS IN HO CHI MINH CITY BASED ON INTERNET OF THINGS (IoT) TECHNOLOGY	182
Dang Thanh Thuy ¹ , Nguyen Thanh Dien ²	182
TRANSPARENCY OF ACCOUNTING INFORMATION OF CONSTRUCTION ENTERPRISES IN HO CHI MINH CITY – CASE STUDY OF APPLICATION OF ACCRUAL ACCOUNTING	193
Truong Thanh Loc ^{1*} , Pham Thi Yen Nhi ²	193
FACTORS AFFECTING THE QUALITY OF FINANCIAL STATEMENTS OF MANUFACTURING ENTERPRISES IN HO CHI MINH CITY	207
Truong Thanh Loc [*] , Dang Nguyen Tuong Han, Nguyen Ngoc Mai Phuong, Nguyen Thi Quynh Huong	207
THE CRITICAL FACTORS OF COLLEGE STUDENTS' INTENTION TO USE METAVERSE TECHNOLOGY FOR SUBJECTS RELATED TO IMPORT-EXPORT LEARNING	221
Van Thuy Nguyen Ho, Chau The Huu, Luan Thanh Nguyen [*]	221
CONSUMER PERCEPTION ABOUT THE SUSTAINABILITY COMMITMENT OF LUXURY BRANDS IN VIETNAM AND CHINA MARKETS.....	233
Tran Minh Tu ¹	233
INFLUENCE OF WOM AND EWOM IN MAKING DECISION BUYING GOODS	247
Doan Anh Tu ¹ , Kim Phi Rum ² , Nguyen Pham Hai Ha ³	247
DIGITAL ECONOMY AND DEVELOPMENT POTENTIAL IN VIETNAM.....	257
Hoang Thi Chinh, Nguyen Hoang Phan	257
BLOCKCHAIN APPLICATION IN MODERN LOGISTICS: INTERNATIONAL EXPERIENCE AND SOME RECOMMENDATIONS FOR VIETNAM	266
Nguyen Nu Tuong Vi.....	266
FACTORS AFFECTING THE DEVELOPMENT OF THE DIGITAL ECONOMY IN VIETNAM	272
Vo Tien Si	272
LEGAL FRAME FOR THE OPERATION OF THE REAL ESTATE BUSINESS UTILIZING THE BLOCKCHAIN PLATFORM IN VIETNAM.....	284
Le Thi Khanh Linh.....	284

DIGITAL TRANSFORMATION – COOPERATION – GLOBAL INTEGRATION IN BUSINESS

FACTORS INFLUENCING BUSINESS ACCEPTANCE OF INDUSTRY 4.0 TECHNOLOGY APPLICATIONS IN DONG NAI PROVINCE.....	291
Thanh-Thu Vo*, Minh-Huong Tang.....	291
DIGITAL ORIENTATION, INNOVATION CAPABILITY AND FIRM PERFORMANCE: A PROPOSAL RESEARCH MODEL	298
Nguyen Van Hau	298
PREDICTION OF STUDENT'S BEHAVIORAL INTENTION TO USE SMART LEARNING ENVIRONMENT: A COMBINED MODEL OF SELF-DETERMINATION THEORY AND TECHNOLOGY ACCEPTANCE	309
Nguyen Thi Hai Binh ¹ , Dao Y Nhi ² , Nguyen Thanh Luan ³ , Dang Quan Tri ⁴	309
THE PEDAGOGICAL IMPACT OF GRAMMARLY ON EFL WRITING COMPETENCY: AN EMPIRICAL INVESTIGATION IN HIGHER EDUCATION CONTEXT.	323
Nguyen Thi Hong Lien ¹ , Nguyen Truong Gia Minh ² , Nguyen Ngoc Vu ^{3*}	323
FACTORS AFFECTING PURCHASING DECISION OF THE YOUTH ON TIKTOK	336
Ngoc Pham ¹ , Thanh Cong Tran*.....	336
FACTORS AFFECTING OCCUPATIONAL SAFETY BEHAVIORS OF WORKERS DIRECT PRODUCTION AT CU CHI POWER COMPANY.....	345
Minh Luan Le, Thi Trang Tran.....	345
CORPORATE SOCIAL RESPONSIBILITY AND EMPLOYEES' ORGANIZATIONAL CITIZENSHIP BEHAVIOUR.....	355
Nguyen Xuan Hung ¹ , Ha Le Thu Hoai ¹ , Nguyen Huu My Truc ^{2&3} , Pham Tan Nhat ^{2&3}	355
THE INNOVATION CAPACITY - THE ROLE OF LEADERS OF SMALL AND MEDIUM ENTERPRISES IN HO CHI MINH CITY, VIETNAM.....	365
Huynh Nhut Nghia	365
PEOPLE'S THOUGHTS ON THE IMPACT OF ARTIFICIAL INTELLIGENCE ON BUSINESS	376
Ton Nguyen Trong Hien, Bui Tuyet Anh	376
FACTORS AFFECTING BRAND SWITCHING INTENTION IN THE CONTEXT OF HIGHER EDUCATION IN VIETNAM	382
Ly Dan Thanh, Nguyen Phu Quoi, Tran Hoang Nam, Vo Hong Son, Nguyen Ngoc Thuy Tien	382
ENHANCE THE DIGITAL COMPETITIVENESS	398
Tran Quang Canh, Hoang Thi Chinh.....	398

ASSESSING PATIENT SATISFACTION (BRAND) AFTER THE COVID-19 PANDEMIC AT THU DUC CITY HOSPITAL.....	408
Nguyen Hoang Dung ^{1*} , Nguyen Huynh Bao An ² , Van Phuong Trang ²	408
INDUSTRIAL AND HUMAN RESOURCES FORM THE FOUNDATION FOR BINH DUONG'S SUSTAINABLE ECONOMIC DEVELOPMENT	408
Hoang-An Nguyen	417
IMPACT OF ORGANIZATIONAL FAIRNESS ON THE EMPLOYEES' KNOWLEDGE SHARING IN TRAVEL AND TOURISM ENTERPRISES IN HO CHI MINH CITY	426
Le Thi Nhu Quynh ^{1,2} , Le Thi Giang ² , Truong Quang Dung ¹	426
THE EFFECT OF PERSONAL MOTIVATION ON THE TACIT KNOWLEDGE SHARING BEHAVIOR OF 5-STAR HOTELS' EMPLOYEES IN HO CHI MINH CITY	440
Le Thi Giang, Nguyen Bach Hoang Phung.....	440
DIGITAL COMPETITIVENESS AND OPERATIONAL EFFICIENCY OF ENTERPRISES IN THE DIGITAL ERA: THE CASE OF VIETNAMESE ENTERPRISES	453
Diep Nguyen Thi Ngoc ^{1*} , Canh Quang Tran ² , Anh Bach Hoang Ngoc ¹	453
FACTORS INFLUENCING PARENTS' SELECTION OF PRIVATE PRESCHOOLS IN THU DUC CITY	466
Thi-Trang Tran ¹ , Thi-My-Dung Pham ² , Thi-Bich-Diep Le ^{1*}	466

**RECOVERY COMMUNICATIONS IN THE TOURISM AND HOSPITALITY INDUSTRY
AFTER THE COVID-19 PANDEMIC**

DEVELOPING A SPIRITUAL TOURISM DESTINATION IMAGE MEASUREMENT SCALE OF AN GIANG	474
Nguyen Vuong Hoai Thao ¹ , Nguyen Quyet Thang ²	474
PROSPECTS OF VIRTUAL REALITY TOURISM APPLICATION IN VIETNAM TOURISM PROMOTION	487
Nguyen Thi Hong Ha, Pham Thi Huong Giang.....	487
PERSONALIZATION TRAVEL TRENDING IN HO CHI MINH CITY IN THE CONTEXT OF POST COVID-19	497
Duong Bao Trung.....	497
IMPACTS OF MEDIA ON CUSTOMERS' DECISION TO CHOOSE FOOD AND BEVERAGE SERVICES POST THE COVID-19 PANDEMIC	511
Nguyen Thi Bich Van	511
DIGITAL TRANSFORMATION APPLICATION TO PROMOTE THE RECOVERY AND DEVELOPMENT OF INBOUND TOURISM IN HO CHI MINH CITY	521
Tran Trong Thanh	521
VIETNAM TOURISM AFTER COVID-19 PANDEMIC	527
Nguyen Hoang Phan ¹ , Hoang Thi Chinh ²	527
NAVIGATING THE EVOLVING LANDSCAPE OF SOCIAL MEDIA DATA MINING AND PRIVACY	537
Pham Thai Hien	537
THE CORRELATION BETWEEN STUDENT SELF-REPORTED GENERAL WELL-BEING AND PERCEIVED SUPPORT FROM FRIENDS, TEACHERS, AND UNIVERSITY	545
Virginia Kelsey ¹ , Đặng Thị Mai Ly ^{2*} , Nguyễn Anh Khoa ² , Nguyễn Văn Tường ²	545

DIGITAL VERSUS NON- DIGITAL

PROVIDING CONVENIENCE TO CUSTOMERS IN THE DIGITAL MARKETING ERA: OBSERVATIONS FROM COMMERCIAL BANKS IN HO CHI MINH CITY	556
Nguyen Quang Trung	556
VIRTUAL REALITY: AN INNOVATIVE TOOL IN TOURISM EXPERIENTIAL MARKETING	564
Thanh Nguyen Ngoc Le ¹ , Khuong Thanh Nguyen ²	564
THEORETICAL CONCEPTS OF STRATEGIC POSITIONING FOR PLACE BRANDING: A CASE STUDY OF DONG THAP PROVINCE	580
Phan Bao Giang.....	580
LITERATURE REVIEW ON THE IMPACT OF DIGITAL MARKETING ON VIETNAM'S SMALL AND THE MEDIUM BUSINESS ENTERPRISES (SMEs)	587
Lê Kim Nguyên *	587

CHALLENGES FACED BY TEACHERS IN NON-TRADITIONAL EDUCATION

PROPOSE AN ONLINE TEACHING COMPETENCE SCALE FOR UNIVERSITY LECTURERS

.....596

Duong Thi Kim Oanh*, Dang Thi Dieu Hien596

EXAMINE USAGE OF LEARNING MANAGEMENT SYSTEMS (LMSS) BY FACULTY
STAFF AT UNIVERSITY OF ECONOMICS (UEF) AND FINANCE WITH EXPANDED
TECHNOLOGY ACCEPTANCE MODEL (TAM).....608

Ha Truong Minh Hieu, Ngo Minh Hai*, Mach Tran Huy.....608

**DIGITAL TRANSFORMATION
AN INDISPENSABLE EVOLUTION FOR SUSTAINABLE CORPORATES**

FACTORS AFFECTING THE APPLICATION OF STRATEGIC MANAGEMENT ACCOUNTING AT MANUFACTURING ENTERPRISES IN BINH DUONG PROVINCE	618
Truong Thanh Loc ^{1*} , Nguyen Thi Thanh Truc ²	618
HRM DIGITAL TRANSFORMATION: TAKING A ROAD OF SUCCESSION PLANNING ..	629
Trương Phan Hoàng Anh, Giang Ngọc Anh.....	629
THE IMPLICATION OF CONTACTLESS SERVICE AS A TOOL TO IMPROVE CUSTOMER REVISIT INTENTION	640
Linh, Nguyen Duy Yen*	640
TOURISM BRAND LOVE IN THE DIGITAL AGE: THE ROLE OF ONLINE TOURIST EXPERIENCES, TOURIST-BRAND RELATIONSHIP QUALITY AND SUSTAINABILITY	651
Thanh Nguyen Ngoc Le	651
CONDUCTING FOCUS GROUPS IN CROSS-CULTURAL SCHOLARSHIP OF TEACHING AND LEARNING (SoTL): A COMPARATIVE CASE STUDY	662
Punithan Moganathas ¹ , Jenny Hill ² , Andy V.-M. Kok ² , Matt Barr ² , Ruffin Relja ^{2*} , Philippa Ward ² , Duong Tran Quang Hoang ³ , Quynh Phuong Tran ³	662
LEVERAGING DIGITAL TRANSFORMATION FOR SUSTAINABLE CORPORATE EVOLUTION IN VIETNAM	677
Nguyen, Tan Dat ¹ , Le, Dinh Thang ²	677

INFORMATION TECHNOLOGY AND APPLICATIONS

FB-PROPHET MODEL FOR TIME SERIES FORECASTING IN SALES	691
Thanh Cong Tran	691
USING AI CODE IN C# PROGRAMMING	698
Nguyen Ha Giang.....	698
DETERMINANTS OF CONTINUANCE USAGE INTENTION OF MOBILE FOOD ORDERING APPLICATIONS (MFOAS) AMONG VIETNAMESE USERS: THE MEDIATING ROLE OF E- SATISFACTION	705
Lam Hoang Phuong ^{1*} , Nguyen Thi Kim Lien ² , Tien Hung Nguyen ³ , Vinh Long Nguyen ⁴	705
DECODING MARKETING INSIGHT: INSIGHT FROM OUTSIDE.....	718
Hoàng Thị Hằng, Trần Thành Công*	718
DIGITAL DISRUPTION AND DATA SECURITY: HOW FINTECH IS RESHAPING BANKING ...	724
Hoàng Văn Hiếu, Trần Ngọc Thiên Ngân.....	724

TRENDS AND ISSUES IN ENGLISH LANGUAGE EDUCATION AND RESEARCH

EFL LEARNERS' ATTITUDES AND LEARNING ENGAGEMENT IN COMMUNICATIVE GAME-BASED GRAMMAR TEACHING	736
Nguyen Thi Thanh Huyen ¹ , Tran Quoc Thao ²	736
APPROACHES TO TEACHING L2 LISTENING:.....	749
CLOSING THE GAP BETWEEN REAL-LIFE AND CLASSROOM-BASED LISTENING	749
Luu Thi Mai Vy	749
DEFINING ROLES OF STUDENT ENGAGEMENT IN THE 21ST CENTURY LANGUAGE CLASSROOM	755
Ho Xuan Tien, Duong My Tham.....	755
EFL STUDENTS' ATTITUDES AND LEARNING INVESTMENT IN PORTFOLIO - BASED ENGLISH WRITING LEARNING: A LITERATURE REVIEW	763
Ly Gia Huy ¹ , Tran Quoc Thao ²	763
EXPLORING EFL LEARNER IDENTITIES IN PROJECT-BASED LANGUAGE LEARNING AT A HIGH SCHOOL IN AN GIANG PROVINCE	774
Nguyen Hong Thien ¹ , Tran Quoc Thao ²	774
THE VALUES OF SYNTACTIC COMPLEXITY IN ACADEMIC WRITING: A LITERATURE REVIEW	791
THE ISSUE OF AMBIGUITY IN THE ENGLISH LANGUAGE.....	801
Nguyen Dinh Tuan	801
RESEARCH PERSPECTIVES ON JUNIOR HIGH SCHOOL EFL STUDENTS' MOTIVATION IN ENGLISH LANGUAGE LEARNING	812
Huynh Thanh Nhon ¹ , Tran Quoc Thao ²	812
EXPLORING THE INFLUENCE OF WRITING ANXIETY ON VIETNAMESE ESL UNDERGRADUATES' WRITING PERFORMANCE: A QUANTITATIVE STUDY.....	821
Nguyen Ngoc Nguyen, Nguyen Hoang Phan.....	821
THE APPLICATION OF THE "FLIPPED CLASSROOM" MODEL IN TEACHING ENGLISH IN THE VIETNAMESE UNIVERSITY EDUCATION ENVIRONMENT	838
THE USE OF RESOURCE MANAGEMENT STRATEGIES IN EFLFLIPPED CLASSROOMS	847
Nguyen Quynh Thao Vy ^{1,*} , Duong My Tham ²	847
INSIGHTS INTO ENGLISH MAJOR STUDENTS' USE OF PHRASAL VERBS IN ACADEMIC WRITING.....	860
Do Thi Thanh Thuy, Tran Quoc Thao	860

LAW IN THE CONTEXT OF INTERNATIONAL INTEGRATION

LEGALISING INTELLECTUAL PROPERTY INFRINGEMENTS IN RUSSIA – A WAR TACTIC IN THE CONTEXT OF RUSSIA’S INVASION OF UKRAINE.....	869
Bui Thi Hong Ninh*	869
MODEL OF ASSET REGISTRATION WORLDWIDE AND LESSONS FOR VIETNAM IN IMPROVING ASSET REGISTRATION LAWS.....	880
Vu Anh Sao ^{1,2} , Nguyen Thi Xuan Mai ²	880
LEGAL ISSUES ARISING FROM THE DEVELOPMENT, IMPLEMENTATION, AND USE OF ARTIFICIAL INTELLIGENCE (AI) - INTERNATIONAL EXPERIENCES AND LESSONS FOR VIETNAM	887
Le Hoang Minh Huy*, Nguyen Thi Thu Ha, Dao Trong Duc, Ky Dieu Linh, Bui Thi Thuy Linh, Nguyen Nam Trung.....	887
SOUTH KOREA’S EXPERIENCES ON PROPERTY REGISTRATION LAW - LESSONS FOR VIETNAM	896
Vu Anh Sao, Pham Huynh Bao Oanh.....	896
THE RISE OF REMOTE WORK: LEGAL CHALLENGES AND IMPLICATIONS FOR EMPLOYMENT LAW IN VIETNAM	903
Nguyen Thi Xuan Mai ¹ , Nguyen Thi Ngoc Loan ²	903
CHALLENGES AND RECOMMENDATIONS FOR THE LEGAL FRAMEWORK IN THE EMERGING AGE OF ARTIFICIAL INTELLIGENCE.....	910
Nguyen Thi Thu Trang	910
THE IMPACTS OF GLOBAL MINIMUM TAX ON FOREIGN DIRECT INVESTMENT (FDI) CORPORATIONS IN VIETNAM.....	921
Trần Ngọc Thanh ¹	921
CROSS-BORDER E-COMMERCE ACTIVITIES AND TAX MANAGEMENT ISSUES	933
Le Huynh Phuong Chinh, Ngo Thi Khanh Linh, Pham Ngoc Lan Anh.....	933
EXPERIENCE IN KOREA AND CHINA ON TAX MANAGEMENT FOR CROSS-BORDER E-COMMERCE ACTIVITIES	941
Duong Anh Son ¹ , Tran Vang Phu ²	941
LEGAL PERSPECTIVE ON REGULATIONS RALATED TO PERSONAL INCOME TAX WHEN EARNING INCOME THROUGH E-COMMERCE PLATFORMS IN VIETNAM, TAKING THE CASE OF INDIVIDUALS DOING BUSINESS THROUGH TIKTOK APPLICATION.....	946
Nguyen Duc Tri ¹ , Hoang Minh Châu ²	946
THE COMPATIBILITY ON THE SCOPE OF MUTUAL LEGAL ASSISTANCE (MLA) IN CRIMINAL MATTERS AND THE CONDITIONS OF REFUSAL MLA IN CRIMINAL MATTERS BETWEEN VIETNAMESE LAW AND INTERNATIONAL TREATIES WHICH VIETNAM HAS SIGNED.	956

Pham Huynh Bao Oanh.....	956
TAX POLICY FOR E-COMMERCE OF COUNTRIES IN THE WORLD AND RECOMMENDATIONS TO VIETNAM.....	967
Nguyen Thanh Minh Chanh, Ha Thi Van Anh, Pham Lam Tam Nhu	967
LEGAL REGULATIONS FOR ENTERPRISE OBLIGATIONS TO PROVIDE INFORMATION ON E-COMMERCE PLATFORM	974
Truong Kim Phung*, Nguyen Hoang Chuong	974
“ROBOT TAX” – RECOMMENDATIONS FOR VIETNAM.....	981
Gian Thi Le Na, Pham Phuong Doanh.....	981
WTO APPELLATE BODY REFORM IN THE CONTEXT OF ESCALATING GEOPOLITICAL TENSIONS.....	988
Nguyen Nam Trung.....	988

IMPACTS OF STATE OWNERSHIP AND BUSINESS CHARACTERISTICS ON TAX AVOIDANCE: EVIDENCE IN VIETNAM.....	128
Huyen Ngoc Nguyen, Thanh Dan Bui	128
RUSSIA'S IMPACTS AND SCENES ON BEING BANNED FROM SWIFT	143
Lam Dang Xuan Hoa ¹ , Phan Ngoc Anh ²	143
THE ROLE OF ACCESS TO FINANCE AND THE ENTREPRENEURIAL INTENTION OF YOUNGERS IN THE SOUTHWESTERN PROVINCE, VIETNAM.....	151
Vu Truc Phuc*, Nguyen Dang Hat, Nguyen An Phu, Dao Le Kieu Oanh	151

LEGAL FRAME FOR THE OPERATION OF THE REAL ESTATE BUSINESS UTILIZING THE BLOCKCHAIN PLATFORM IN VIETNAM

Le Thi Khanh Linh

Ho Chi Minh City University of Economics and Finance

linhlk@uef.edu.vn

Abstract

Blockchain is currently a trend that adjusts the way traditional transactions operate and attracts investors to learn and participate. The real estate business in Vietnam is also catching up with this movement. Besides the benefits of blockchain in real estate, investors also need to take into consideration the new challenges that this way presents. Currently, one of the risks of this operation is the lack of a legal frame for using the blockchain in Vietnam. The article is an analysis to clarify how the real estate blockchain works, highlighting the basic legal issues that need attention in this sector and recommending solutions to overcome legal “gaps” to ensure the legitimate rights and interests of investors/buyers. Therefore, this research is approached by the author mainly from the perspective of jurisprudence analysis instead of the economic analysis method like previous studies.

Keywords: blockchain, real estate, legal frame, smart contracts, token

1. Introduction

With the wave of applying the achievements of the Industrial Revolution 4.0, all areas of social life are operated based on a combination of advanced technologies that help blur the boundaries between countries and territories by the application of digitization, artificial intelligence, ensuring transparency, timeliness, and transparency. “Blockchain” is a term that has been mentioned and discussed a lot in recent times and has received the attention of society.

So, what is “blockchain” and how is it applied in the real estate business? How is the legality of this activity regulated in Vietnam? These are the basic questions that any real estate investor cares about before deciding to enter a transaction.

Therefore, within the scope of this article, the author focuses on research to: *firstly*, address the questions raised above; *secondly*, clarify the current legal framework being used to regulate this activity; Third, identify arising legal issues based on current legal regulations to offer remedial solutions in real estate business activities on a blockchain platform in Vietnam to match the trend of the real estate market. future growth in this field.

2. Overview of real estate business activities on a blockchain platform

2.1. “Real estate blockchain” – an opportunity for investors in the trend of globalization

Blockchain, “created to enable peer-to-peer (bitcoin) digital payment systems”, benefits various sectors, including real estate (Rosa M. Garcia-Teruel, 2020). Originally, the purpose of creating blockchain was to bypass traditional intermediaries in issuing currency (De Filippi P. & Wright A., 2018) and now blockchain is applied in the real estate sector with the feature is a distributed database, which records and combines transactions into one system, ensuring security. Blockchain creates a chronological “chain” of data that no party has control over. The value lies in the system’s ability to authenticate and track

transactions in real-time without using a third party, such as a bank, which saves time and costs (Jones Lang LaSalle IP, Inc., 2018).

In the real estate business on the blockchain platform, it is necessary to have the participation of a reputable technology company for the authorized project owner or the technology company itself to be the project owner to split the projects to share the right to utilize/own real estate into equal parts, encrypted into tokens for sale on applications.

Assuming a land plot has a market value of 10 billion Vietnamese dong, the project owner can split it into 10,000 units with a value of 1,000 Vietnamese dong for each token. Therefore, investors/buyers can buy this asset together based on their financial capacity (holding 1,000,000 Vietnamese dong can also own 1 token) without having to spend too much on this investment. When investors/buyers need to resell or buy more tokens, they are connected through the project owner's buying and selling information page with the market price at the time of resale/buying more tokens. Information about transactions is recorded, conducted, and accessed into the system by smart contracts ("smart contracts") without which any party can modify the content of that contract, ensuring the transparency of the transaction and information integrity.

In case the buyer/investor wants to transfer the jointly purchased real estate, it is necessary to ensure that the percentage of consensus members in the joint purchase group reaches the initially specified level; or can sell its tokens to any other investors on the real estate co-buying application; or can be resold to the original project owner depending on the policy of each project owner.

In terms of the purpose of setting up and how to operate the real estate blockchain, it can be seen that the outstanding advantages that make blockchain a great opportunity for real estate investors are as follows:

First, ensure the safety and speed of transactions with the existence of a database that exists on all devices connected to the network. Data is protected by code and operated in a chain of transactions (Rosa M. Garcia-Teruel, 2020, p. 134).

Second, it ensures convenience because transactions made through the blockchain are decentralized and without intermediaries, conducted by other computers connected to the compatible network to accept transactions. In addition, smart contracts play an important role in real estate blockchain adoption.

Smart contracts are computer programs, with codes that allow the automation of specific processes. For example, for a simple cryptocurrency purchase, the smart contract will detect whether the balance of the buyer's wallet is sufficient to make this transaction. If sufficient, the transaction will be executed and vice versa (Rosa M. Garcia-Teruel, 2020, p. 134). Smart contracts contain terms that are loaded into hardware and software and which we can negotiate, such as breach of contract terms (Szabo N., 1997).

Third, ensuring transparency with the above analysis on how the real estate blockchain works, it is easy to visualize real estate transactions on this online platform, ensuring there is no interference of the real estate agent from a third party outside the party needs to sell/buy and may have additional technical support from the application operator. There is a view that real estate blockchain works well in countries where corruption is alarming because blockchain is publicly verifiable, limiting interference with corrupt purposes (Wüst K. & Gervais A., 2017).

Fourth, ensure the economy for the parties involved in the real estate business on the blockchain platform because when operating the smart contract, the notarization will be reduced. The notary system is considered to be an expensive operating method for the parties involved in the transaction (Schmid C. et al., 2007). According to Goldman Sachs, in regards to land registration, blockchain could lead to cost savings in the implementation of property record keeping of up to four billion U.S. dollars by reducing the

number of employees and the estimated risk in the area alone. United States (Schneider J. et al., 2016). In addition, with little financial resources, buyers can own tokens instead of having to own a large capital like traditional real estate transactions.

Fifth, borderless because the blockchain system works only requires the parties to satisfy the requirements set by the application to own tokens, and convenient transactions on the application, but only a network and a computer is sufficient. Connecting buyers in any geographic location. Therefore, the borderless nature of real estate business on the blockchain platform is one of the good opportunities for foreign investors in need.

2.2. Blockchain-based real estate business in Vietnam

It can be seen that in Vietnam, the real estate business on the blockchain platform is a fairly new “playground”, receiving the attention of not only investors, researchers, and regulatory agencies. (Hiền Nguyễn/vnbusiness.vn, 2021). The Ho Chi Minh City Real Estate Association (HoREA) has also suggested that Vietnam can learn the model of asset encryption using blockchain technology, gradually changing the traditional method.

With the opportunities for buyers/sellers in the real estate market when applying this form of blockchain as analyzed in Section 2.1 above, considering joining this investment channel with not too large idle capital will also make a profit that attracts the attention of many investors.

However, besides the advantages of this form of real estate business on the blockchain platform, there are urgent issues that need to be resolved from the legal perspective to avoid repeating the risks for the buyer such as tourism real estate transactions (condotels, resort villas, and other multi-functional products) because of the absence of a regulatory framework.

Therefore, participation in transactions conducted by blockchain in Vietnam is currently quite limited because of the high legal risk for buyers.

3. Legal issues arising in the real estate business on the blockchain platform in Vietnam

To clarify the legal issues arising in real estate business activities on a blockchain platform in Vietnam, it is necessary to compare the current regulations and the principles in the transactions governed by the law to get an overview to solve this “legal problem”.

First, control the legality and validity of the contract

(i) Regarding legality control:

With the way real estate blockchain operates today, owning tokens is a form of joint purchase of real estate – this is the legal essence of real estate blockchain transactions. The joint purchase of real estate is not currently prohibited and is legally recognized as having joint ownership with the common ownership regime under the part provided for in Article 209 of the Civil Code 2015, whereby the owners “have rights and obligations to assets under common ownership in proportion to their ownership rights unless otherwise agreed.”

The Civil Code 2015 uses the method of listing assets classified as real estate, which includes “*land; houses and construction works attached to land; other properties attached to land, houses and construction works; other property as prescribed by law.*” (Clause 1, Article 107). Currently, the legal regime for land is more specific than that of other types of property, specifically, the State is the unified management and people are entitled to record land use rights and to prove their rights to land. Their rights to the land when there is a dispute, or a transfer transaction is required, a certificate of land use right is required (Clause 16, Article 3; Article 168 of the Land Law 2013).

In fact, on blockchain applications, when making real estate transactions on these applications, investors/buyers do not hold or are named on the Certificate of Land Use Right, Property Ownership attached to Land (“**Certificate**”) This is also easy to explain because a real estate, when divided into equal parts, can have hundreds or thousands of buyers to own tokens. The law still recognizes that the property has many owners and the Certificate may include many legal entities to prove the right to the property and to be able to perform future transactions safely with the advantages of administrative procedures.

However, with the current way of operating blockchain, the risk is quite large for those who own tokens but do not have ownership/use rights recorded legally.

(ii) Regarding the validity of the contract:

For contracts that are required to be notarized and authenticated (Clause 3, Article 167 of the Land Law 2013; Article 64 of Decree 43/2014/ND-CP; Clause 2, Article 17 of the Law on Real Estate Business 2014), the time when the contract comes into effect from the time of notarization or authentication. Therefore, for real estate transactions made on the blockchain platform, notarization and certification currently do not guarantee compliance with the provisions of the law on land and real estate business.

In addition, the protection of the rights of the disadvantaged party in a blockchain contract cannot be evaluated because this smart contract is offered by the asset holder and will usually be a model contract with detrimental terms to the token purchaser. Therefore, at present, the registration of these contracts at competent state agencies has not been adjusted.

Smart contracts in real estate business activities on the blockchain platform have not been regulated by law. Therefore, when a dispute arises, this contract only acts as additional evidence and cannot guarantee the rights of the token buyer.

Second, the verification of the identities of the parties involved in the real estate transaction on the blockchain

When the transaction is “borderless” like the real estate blockchain, the identification of the parties involved is also an issue that needs attention because the authentic information of the parties will help the contract performance and more favorable dispute resolution.

Therefore, to avoid disguised money laundering, verification of the identities (**IDs**) of the parties needs to be carried out, either by public authorities or by the blockchain management company itself, provided that this ID is recognized in specific countries.

For example, the company Accenture has now signed a formal agreement with Canada and the Netherlands to implement a blockchain-based ID that allows travelers to pre-share their biometrics with customs and border control, enabling coordination of traveler data (World Economic Forum, 2018).

Estonia is also a good example of using chains of functions, allowing public and private agencies to securely exchange data. Virtually by submitting a passport or identity card, the Government of Estonia provides individuals from anywhere in the world with an ID, allowing them to open a bank account in Estonia, sign documents electronically, establish a company, etc. Control of the person’s real ID is carried out using online: after the application is submitted, the Estonian Police conduct a background check. The applicant can then go to the Estonian Embassy, where they will provide fingerprints and obtain an ID card and card reader (Rosa M. Garcia-Teruel, 2020, p. 137).

The fact shows that creating an e-ID system through blockchain is essential to being able to apply it in the real estate sector, ensuring safety and transparency on the blockchain platform.

Third, the ability to modify the rights of token co-owners on the blockchain by public authorities

The current blockchain works based on an agreement between the parties, the data is distributed and guaranteed not to be modified by one of the parties without reaching an agreed-upon consensus. Therefore, it is necessary to anticipate in case one of the parties violates an obligation or needs to suspend a party's right to a token or property, what is the handling mechanism?

This is a question that needs to be answered and needs to be adjusted by legal regulations so that public authorities can intervene and temporarily (or permanently) deprive one of the parties when there is a breach of contract or a judgment from a court of law.

Fourth, about the jurisdiction to settle when disputes arise

It can be seen that currently Vietnamese law has not yet regulated real estate business activities on the blockchain platform. Therefore, it is not possible to determine exactly when the parties have a dispute, it is necessary to recognize the rights of investors/token buyers as joint owners in part of real estate assets to determine the jurisdiction of the court is the place where the real estate is located according to point c, clause 1, Article 39 of the Civil Procedure Code 2015; or applying the property rights dispute to determine the jurisdiction of the territorial court is the court where the defendant resides, works, and is headquartered (point a, clause 1, Article 39 of the Civil Procedure Code 2015)?

To be transparent about the rights and obligations of the parties, especially when a dispute arises, it has to determine the specific jurisdiction of the court to avoid the situation of “abandonment” of the responsibility of the public authority.

4. Proposing solutions to fill the legal “gaps” in real estate business activities on a blockchain platform in Vietnam

From the perspective of investors/buyers, perhaps applying the principle of “doing things that are not prohibited by law” is extremely risky in the real estate business on the blockchain platform when owning tokens does not imply full share ownership rights over real property purchased jointly. Therefore, the legal status of the investor/buyer is not the owner/user of real estate because the current law has not yet regulated this relatively new type of transaction.

In terms of public agencies performing legislative functions, studying the changes in business activities on the blockchain platform for flexible adaptation and timely promulgation of appropriate legal frame because it is likely that the superstructure plays a complementary role to help strengthen the infrastructure. Meanwhile, it is the real estate business on the blockchain platform that is currently extremely attractive to investors with not too large idle capital, an invisible barrier that makes them afraid to participate in this activity which is the legal “gaps” of the current Vietnamese legal system.

Therefore, from the above analysis of opportunities and legal problems arising in real estate business activities on the blockchain platform, the author raises the following recommendations to supplement the current “gaps” of the legal regulations:

Firstly, the promulgation of regulations governing the real estate blockchain, with specific regulations recognizing the rights of investors/buyers of tokens with the same rights as owners/users of common real estate by the law or research to issue a separate rights system for token holders that are real estate.

At the same time, regulate and adjust smart contracts in real estate blockchain transactions. Smart contracts also need to comply with general regulations such as non-discrimination, not imposing undue obligations on one party, not contrary to the general principles of civil law, etc.

Specify regulations on the need for notary participation in giving effect to transactions through blockchain as for traditional real estate transactions where current law requires legal conditions.

Considering to ensure transparency and economics of these new transactions, without complicating the process to smooth transactions on this platform.

Secondly, obtain the experiences of other countries to consider in applying the e-ID system through blockchain to verify the real identities of stakeholders in real estate blockchain activities. This is a method to help limit the disguised money laundering in the country, across borders with real estate business.

Thirdly, the current way of blockchain operation prevents third parties from interfering, changing transactions on this platform to help secure information and also make legislators consider limiting misuse from one party to protect the lawful and legitimate rights and interests of the other party. Therefore, it is necessary to stipulate in the direction of empowering the functional agency responsible for monitoring this activity and having the right to temporarily deprive a party of the rights when there is a basis to believe that continuing to empower this subject will cause substantial damage to the other party, which does not guarantee the economics of the transaction. However, with such a regulation, it is required that the authorities have a team of qualified, highly qualified, and fair-minded personnel when implementing to avoid the abuse of power causing difficulties for the entities. With the current situation, regulation in this direction may contain risks and fear of abuse of power by law enforcement by real estate blockchain participants. Therefore, it is also necessary to stipulate the liability for the law enforcers who cause damage in this blockchain activity. The second option to consider is the creation of a modified blockchain; it means that this method will allow some administrators of the application to modify it with the permission of the public authority if it is deemed necessary in the cases required by law.

Fourthly, the procedural law should regulate the jurisdiction of the court in resolving cases when there is a dispute arising in the field of real estate blockchain because at present there may be different views on the type of dispute. This figure is analyzed in Section 3 above. This provision helps the judicial authorities to receive the complaints to settle according to their competence, avoiding the situation of pushing it to other courts and leading to the person being violated but do not know how and where to contact which authority body for legal intervention and protection of their legitimate rights and interests.

The recognition of real estate business on the blockchain platform will certainly affect different branches of law (tax law, real estate business law, land law, etc.) synchronously, respectively, and in phases.

5. Conclusion

Law - superstructure should be a catalyst to boost the economy - infrastructure development instead of holding back. Opportunities always come with challenges, real estate business through blockchain platform is no exception to this rule. Overcoming the challenges will make blockchain a mechanism to promote more transparent real estate business transactions, ensuring speed, smoothness, and safety. Even when filling the legal “gaps” is arisen, in a potential way, real estate blockchain will become an investment trend for investors with not too large capital because the value of each token is not high. In addition, looking at the opportunity, the real estate blockchain, when regulated by a reasonable legal corridor, will be able to connect transactions automatically with tax authorities, and business registration agencies. businesses, courts, and other administrative agencies (Rosa M. Garcia-Teruel, 2020, p. 143), ensuring the good performance of the management functions of state agencies.

References

1. De Filippi P. & Wright A. (2018). Blockchain and the law. In *The Rule of Code*. Harvard University Press, Massachusetts.
2. Hiến Nguyễn/vnbusiness.vn. (2021). *Bất động sản “không biên giới” với Blockchain*. <https://tapchitaichinh.vn/thi-truong-tai-chinh/bat-dong-san-khong-bien-gioi-voi-blockchain-340050.html>

3. Jones Lang LaSalle IP, Inc. (2018). *How Blockchain is reshaping the real estate industry*. <https://www.jll.cl/en/trends-and-insights/investor/how-blockchain-is-reshaping-the-real-estate-industry>
4. Rosa M. Garcia-Teruel. (2020). Legal challenges and opportunities of blockchain technology in the real estate sector. *Journal of Property, Planning and Environmental Law*, 12(2), 129–145. <https://www.emerald.com/insight/2514-9407.htm>
5. Schmid C., Sebastian S.P., Lee G., Fink M., & Paterson I. (2007). *Study of the conveyancing services market*. University of Bremen.
6. Schneider J., Blostein A., Lee B., Kent S., Groer I., & Beardsley E. (2016). Blockchain Putting Theory into Practice. In *Goldman Sachs equity research profiles in innovation*. Goldman Sachs.
7. Szabo N. (1997). Formalizing and securing relationships on public networks. *First Monday*, 2(9).
8. Wüst K. & Gervais A. (2017). *Do you need a blockchain?* <https://eprint.iacr.org/2017/375.pdf>

NOT FOR SALE



978-604 79-3782-0

ISBN: 978-604-79-3782-0

HO CHI MINH CITY UNIVERSITY OF ECONOMICS AND FINANCE

141 - 145 Dien Bien Phu, Ward 15, Binh Thanh District, HCM City

Website: uef.edu.vn - Hotline: (028) 5422 6666 * (028) 5422 5555