







# THE SECOND INTERNATIONAL CONFERENCE ON SCIENTIFIC, ECONOMIC AND SOCIAL ISSUES

# DIGITAL TRANSFORMATION, COOPERATION AND GLOBAL INTEGRATION IN THE NEW NORMAL



### 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 MANAGEMENTHE NAM A COMMERCIAL JOINT STOCK BANK	
Truong Thanh Loc, Tran Ngoc Thanh	23
VIETNAM - AUSTRALIA ECONOMIC AND TRADE COOPERATION IN THE NORMAL: OPPORTUNITIES AND CHALLENGES FOR VIETNAMESE INVESTORS	
Nhu Nguyen Phuc Quynh*, Anh Nguyen Thi Nguyet, Duy Nguyen Anh	30
IMPACTS OF CREDIT GROWTH AND CREDIT RISK ON THE PROFIT OF VIETNA STOCK COMMERCIAL BANKS	
Dao Le Kieu Oanh*, Tran Thi Huong Ngan	43
FACTORS AFFECTING CUSTOMERS' DECISIONS TO USE E-BANKING AT JOIN' COMMERCIAL BANKS IN HO CHI MINH CITY	
Nguyen Duy Khanh <sup>1</sup> , Pham Quoc Tham <sup>2</sup>	57
HOW CHINA_USA POLITICAL TENSIONS AFFECT STOCK MARKET RETURN O AND THE USA? A QUANTILE VAR CONNECTEDNESS APPROACH	
Hao Wen Chang <sup>1</sup> , Tsangyao Chang <sup>2</sup> and Mei-Chih Wang <sup>3</sup>	70
BANKING HUMAN RESOURCES BEFORE THE DEVELOPMENT OF ARTINTELLIGENCE AI	
Nguyen Huynh Chi	92
IMPROVE THE QUALITY OF TRAINING THROUGH IMPROVEMENT OF ST TESTING AND ASSESSMENT – CASE IN ACCOUNTING BRANCH, UNIVERSE ECONOMICS AND FINANCE	SITY OF
Thuy Thi Ha	102
ACTIVITIES OF DIGITAL TRANSFORMATION IN VIETNAMESE COMMERCIAL AN OVERVIEW DURING THE COVID-19 RECOVERY PERIOD	
Nguyễn Thị Quỳnh Châu, Đào Lê Kiều Oanh	109
OPPORTUNITIES AND CHALLENGES FOR VIETNAM IN ATTRACTIVE FDI IN MINIMUM CORPORATE TAX IMPLEMENTATION	
Ngo Hoang Thong	117

IMPACTS OF STAT	E OWNERSHIP	AND	BUSINESS	CHARACTERIST	ICS ON	TAX
AVOIDANCE: EVIDENCE	N VIETNAM					128
Huyen Ngoc Nguyen, Than	h Dan Bui					128
RUSSIA'S IMPACTS	AND SCENES ON	BEING	G BANNED F	ROM SWIFT		143
Lam Dang Xuan Hoa 1, Ph	an Ngoc Anh <sup>2</sup>					143
THE ROLE OF ACC YOUNGERS IN THE SOUT						
Vu Truc Phuc*, Nguyen Da	ng Hat, Nguyen Ai	n Phu, I	) Dao Le Kieu (	Oanh		151

## DIGITAL ECONOMY IN VIETNAM, TRENDS AND POTENTIABILITY

DEVELOPING SMART HOME MODEL FOR APARTMENTS IN HO CHI MINH CITY BASI ON INTERNET OF THINGS (IoT) TECHNOLOGY1	
Dang Thanh Thuy <sup>1</sup> , Nguyen Thanh Dien <sup>2</sup> 1	
TRANSPARENCY OF ACCOUNTING INFORMATION OF CONSTRUCTION ENTERPRIS IN HO CHI MINH CITY – CASE STUDY OF APPLICATION OF ACCRUAL ACCOUNTING1  Truong Thanh Loc <sup>1*</sup> , Pham Thi Yen Nhi <sup>2</sup>	193
FACTORS AFFECTING THE QUALITY OF FINANCIAL STATEMENTS OF MANUFACTURING ENTERPRISES IN HO CHI MINH CITY	
Truong Thanh Loc*, Dang Nguyen Tuong Han, Nguyen Ngoc Mai Phuong, Nguyen Thi Quy	
Huong2	20 /
THE CRITICAL FACTORS OF COLLEGE STUDENTS' INTENTION TO USE METAVER TECHNOLOGY FOR SUBJECTS RELATED TO IMPORT-EXPORT LEARNING2	
Van Thuy Nguyen Ho, Chau The Huu, Luan Thanh Nguyen*2	221
CONSUMER PERCEPTION ABOUT THE SUSTAINABILITY COMMITMENT OF LUXUI BRANDS IN VIETNAM AND CHINA MARKETS2	
Tran Minh Tu <sup>1</sup> 2	233
INFLUENCE OF WOM AND EWOM IN MAKING DECISION BUYING GOODS2	247
Doan Anh Tu <sup>1</sup> , Kim Phi Rum <sup>2</sup> , Nguyen Pham Hai Ha <sup>3</sup> 2	
DIGITAL ECONOMY AND DEVELOPMENT POTENTIAL IN VIETNAM2  Hoang Thi Chinh, Nguyen Hoang Phan2	
noang Thi Chinii, Nguyen noang rhan	23 /
BLOCKCHAIN APPLICATION IN MODERN LOGISTICS: INTERNATIONAL EXPERIENCE AND SOME RECOMMENDATIONS FOR VIETNAM	
Nguyen Nu Tuong Vi2	266
FACTORS AFFECTING THE DEVELOPMENT OF THE DIGITAL ECONOMY IN VIETNAL	
Vo Tien Si2	272
LEGAL FRAME FOR THE OPERATION OF THE REAL ESTATE BUSINESS UTILIZING TO BLOCKCHAIN PLATFORM IN VIETNAM	
La Thi Khanh Linh	20/

# DIGITAL TRANSFORMATION – COOPERATION – GLOBAL INTEGRATION IN BUSINESS

FACTORS INFLUENCING BUSINESS ACCEPTANCE OF INDUSTRY 4.0 TECHN APPLICATIONS IN DONG NAI PROVINCE	
Thanh-Thu Vo*, Minh-Huong Tang	291
DIGITAL ORIENTATION, INNOVATION CAPABILITY AND FIRM PERFORMATION PROPOSAL RESEARCH MODEL	
Nguyen Van Hau	298
PREDICTION OF STUDENT'S BEHAVIORAL INTENTION TO USE SMART LE. ENVIRONMENT: A COMBINED MODEL OF SELF-DETERMINATION THEOR TECHNOLOGY ACCEPTANCE	Y AND
Nguyen Thi Hai Binh <sup>1</sup> , Dao Y Nhi <sup>2</sup> , Nguyen Thanh Luan <sup>3</sup> , Dang Quan Tri <sup>4</sup>	309
THE PEDAGOGICAL IMPACT OF GRAMMARLY ON EFL WRITING COMPETEN EMPIRICAL INVESTIGATION IN HIGHER EDUCATION CONTEXT.  Nguyen Thi Hong Lien <sup>1</sup> , Nguyen Truong Gia Minh <sup>2</sup> , Nguyen Ngoc Vu <sup>3*</sup>	323
FACTORS AFFECTING PURCHASING DECISION OF THE YOUTH ON TIKTOK	
Ngoc Pham <sup>1</sup> , Thanh Cong Tran*	
FACTORS AFFECTING OCCUPATIONAL SAFETY BEHAVIORS OF WORKERS PRODUCTION AT CU CHI POWER COMPANY	
Minh Luan Le, Thi Trang Tran	345
CORPORATE SOCIAL RESPONSIBILITY AND EMPLOYEES' ORGANIZA CITIZENSHOP BEHAVIOUR	
Nguyen Xuan Hung <sup>1</sup> , Ha Le Thu Hoai <sup>1</sup> , Nguyen Huu My Truc <sup>2&amp;3</sup> , Pham Tan Nhat <sup>2&amp;3</sup>	355
THE INNOVATION CAPACITY - THE ROLE OF LEADERS OF SMALL AND MENTERPRISES IN HO CHI MINH CITY, VIETNAM	
Huynh Nhut Nghia	365
PEOPLE'S THOUGHTS ON THE IMPACT OF ARTIFICIAL INTELLIGENCE ON BU	
Ton Nguyen Trong Hien, Bui Tuyet Anh	
FACTORS AFFECTING BRAND SWITCHING INTENTION IN THE CONTEXT OF EDUCATION IN VIETNAM	
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 ITHU DUC CITY HOSPITAL	
Nguyen Hoang Dung 1*, Nguyen Huynh Bao An 2, Van Phuong Trang 2	408
INDUSTRIAL AND HUMAN RESOURCES FORM THE FOUNDATION FOR IS SUSTAINABLE ECONOMIC DEVELOPMENT	
Hoang-An Nguyen	417
IMPACT OF ORGANIZATIONAL FAIRNESS ON THE EMPLOYEES' SHARING IN TRAVEL AND TOURISM ENTERPRISES IN HO CHI MINH CITY	
Le Thi Nhu Quynh <sup>1,2</sup> , Le Thi Giang <sup>2</sup> , Truong Quang Dung <sup>1</sup>	426
THE EFFECT OF PERSONAL MOTIVATION ON THE TACIT KNOWLEI BEHAVIOR OF 5-STAR HOTELS' EMPLOYEES IN HO CHI MINH CITY	
Le Thi Giang, Nguyen Bach Hoang Phung	440
DIGITAL COMPETITIVENESS AND OPERATIONAL EFFICIENCY OF ENTHE DIGITAL ERA: THE CASE OF VIETNAMESE ENTERPRISES	
Diep Nguyen Thi Ngoc <sup>1*</sup> , Canh Quang Tran <sup>2</sup> , Anh Bach Hoang Ngoc <sup>1</sup>	453
FACTORS INFLUENCING PARENTS' SELECTION OF PRIVATE PRESCH	
Thi-Trang Tran <sup>1</sup> , Thi-My-Dung Pham <sup>2</sup> , Thi-Bich-Diep Le <sup>1*</sup>	466

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

DEVELOPING A SPIRITUAL TOURISM DESTINATION IMAGE MEASUREMENT SCALI
OF AN GIANG474
Nguyen Vuong Hoai Thao <sup>1</sup> , Nguyen Quyet Thang <sup>2</sup>
PROSPECTS OF VIRTUAL REALITY TOURISM APPLICATION IN VIETNAM TOURISM PROMOTION
Nguyen Thi Hong Ha, Pham Thi Huong Giang
PERSONALIZATION TRAVEL TRENDING IN HO CHI MINH CITY IN THE CONTEXT OF POST COVID-19
Duong Bao Trung
IMPACTS OF MEDIA ON CUSTOMERS' DECISION TO CHOOSE FOOD AND BEVERAGI SERVICES POST THE COVID-19 PANDEMIC51
Nguyen Thi Bich Van51
DIGITAL TRANSFORMATION APPLICATION TO PROMOTE THE RECOVERY AND DEVELOPMENT OF INBOUND TOURISM IN HO CHI MINH CITY52
Tran Trong Thanh
VIETNAM TOURISM AFTER COVID-19 PANDEMIC52
Nguyen Hoang Phan <sup>1</sup> , Hoang Thi Chinh <sup>2</sup> 52
NAVIGATING THE EVOLVING LANDSCAPE OF SOCIAL MEDIA DATA MINING ANI PRIVACY53
Pham Thai Hien53
THE CORRELATION BETWEEN STUDENT SELF-REPORTED GENERAL WELL-BEING AND PERCEIVED SUPPORT FROM FRIENDS, TEACHERS, AND UNIVERSITY54:
Virginia Kelsey <sup>1</sup> , Đăng Thi Mai Ly <sup>2*</sup> , Nguyễn Anh Khoa <sup>2</sup> , Nguyễn Văn Tường <sup>2</sup>

### DIGITAL VERSUS NON- DIGITAL

١:
6
6
G 4
4
A
0
0
S
7
7

### CHALLENGES FACED BY TEACHERS IN NON-TRADITIONAL EDUCATION

COMPETENCE SCALE FOR UNIVERSITY LECTURERS	PROPOSE AN ONLINE TEACHING O
596	
en596	Duong Thi Kim Oanh*, Dang Thi Dieu Hier
G MANAGEMENT SYSTEMS (LMSS) BY FACULTY	EXAMINE USAGE OF LEARNING
OMICS (UEF) AND FINANCE WITH EXPANDED	STAFF AT UNIVERSITY OF ECONO
TAM)608	TECHNOLOGY ACCEPTANCE MODEL (T
ach Tran Huy608	Ha Truong Minh Hieu, Ngo Minh Hai*, Ma

# DIGITAL TRANSFORMATION AN INDISPENSABLE EVOLUTION FOR SUSTAINABLE CORPORATES

FACTORS AFFECTING THE APPLICATION OF STRATEGIC MANAGEMENT ACCOUNTING AT MANUFACTURING ENTERPRISES IN BINH DUONG PROVINCE
Truong Thanh Loc <sup>1</sup> *, Nguyen Thi Thanh Truc <sup>2</sup> 618
HRM DIGITAL TRANSFORMATION: TAKING A ROAD OF SUCCESSION PLANNING629
Trương Phan Hoàng Anh, Giang Ngọc Anh629
THE IMPLICATION OF CONTACLESS SERVICE AS A TOOL TO IMPROVE CUSTOMER
REVISIT INTENTION
Linh, Nguyen Duy Yen*640
TOURISM BRAND LOVE IN THE DIGITAL AGE: THE ROLE OF ONLINE TOURIST EXPERIENCES, TOURIST-BRAND RELATIONSHIP QUALITY AND SUSTAINABILITY651
Thanh Nguyen Ngoc Le651
CONDUCTING FOCUS GROUPS IN CROSS-CULTURAL SCHOLARSHIP OF TEACHING AND LEARNING (SoTL): A COMPARATIVE CASE STUDY662
Punithan Moganathas <sup>1</sup> , Jenny Hill <sup>2</sup> , Andy VM. Kok <sup>2</sup> , Matt Barr <sup>2</sup> , Ruffin Relja <sup>2*</sup> , Philippa Ward <sup>2</sup> , Duong Tran Quang Hoang <sup>3</sup> , Quynh Phuong Tran <sup>3</sup>
LEVERAGING DIGITAL TRANSFORMATION FOR SUSTAINABLE CORPORATE EVOLUTION IN VIETNAM
Nguyen, Tan Dat <sup>1</sup> , Le, Dinh Thang <sup>2</sup>

### 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 SATISFACTION	E-
Lam Hoang Phuong <sup>1*</sup> , Nguyen Thi Kim Lien <sup>2</sup> , Tien Hung Nguyen <sup>3</sup> , Vinh Long Nguyen <sup>4</sup>	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	r724
Hoàng Văn Hiếu, Trần Ngọc Thiên Ngân	724

### TRENDS AND ISSUES IN ENGLISH LANGUAGE EDUCATION AND RESEARCH

EFL LEARNERS' ATTITUDES AND LEARNING ENGAGEMENT IN COMMUNIC GAME-BASED GRAMMAR TEACHING	
Nguyen Thi Thanh Huyen <sup>1</sup> , Tran Quoc Thao <sup>2</sup>	
APPROACHES TO TEACHING L2 LISTENING:	749
CLOSING THE GAP BETWEEN REAL-LIFE AND CLASSROOM-BASED LISTENING .	
DEFINING ROLES OF STUDENT ENGAGEMENT IN THE 21ST CENTURY LANCED CLASSROOM	
Ho Xuan Tien, Duong My Tham	755
EFL STUDENTS' ATTITUDES AND LEARNING INVESTMENT IN PORTFOLIO - I ENGLISH WRITING LEARNING: A LITERATURE REVIEW	
Ly Gia Huy <sup>1</sup> , Tran Quoc Thao <sup>2</sup>	763
EXPLORING EFL LEARNER IDENTITIES IN PROJECT-BASED LANGUAGE LEARNI A HIGH SCHOOL IN AN GIANG PROVINCE	
Nguyen Hong Thien <sup>1</sup> , Tran Quoc Thao <sup>2</sup>	774
THE VALUES OF SYNTACTIC COMPLEXITY IN ACADEMIC WRITING: A LITERAREVIEW	
THE ISSUE OF AMBIGUITY IN THE ENGLISH LANGUAGE  Nguyen Dinh Tuan	
RESEARCH PERSPECTIVES ON JUNIOR HIGH SCHOOL EFL STUDENTS' MOTIVAT ENGLISH LANGUAGE LEARNING	
Huynh Thanh Nhon <sup>1</sup> , Tran Quoc Thao <sup>2</sup>	812
EXPLORING THE INFLUENCE OF WRITING ANXIETY ON VIETNAMESI UNDERGRADUATES' WRITING PERFORMANCE: A QUANTITATIVE STUDY	
Nguyen Ngoc Nguyen, Nguyen Hoang Phan	821
THE APPLICATION OF THE "FLIPPED CLASSROOM" MODEL IN TEACHING ENGLE THE VIETNAMESE UNIVIVERSITY EDUCATION ENVIRONMENT	
THE USE OF RESOURCE MANAGEMENT STRATEGIES IN EFLFLIPPED CLASSR	
Nguyen Quynh Thao Vy <sup>1,*</sup> , Duong My Tham <sup>2</sup>	
INSIGHTS INTO ENGLISH MAJOR STUDENTS' USE OF PHRASAL VERBS IN ACAI WRITING	
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 UKRAINE869
Bui Thi Hong Ninh*869
MODEL OF ASSET REGISTRATION WORLDWIDE AND LESSONS FOR VIETNAM IN IMPROVING ASSET REGISTRATION LAWS880
Vu Anh Sao <sup>1,2</sup> , Nguyen Thi Xuan Mai <sup>2</sup> 880
LEGAL ISSUES ARISING FROM THE DEVELOPMENT, IMPLEMENTATION, AND USE OF ARTIFICIAL INTELLIGENCE (AI) - INTERNATIONAL EXPERIENCES AND LESSONS FOR VIETNAM887
Le Hoang Minh Huy*, Nguyen Thi Thu Ha, Dao Trong Duc, Ky Dieu Linh, Bui Thi Thuy Linh, Nguyen Nam Trung
SOUTH KOREA'S EXPERIENCES ON PROPERTY REGISTRATION LAW - LESSONS FOR VIETNAM896
Vu Anh Sao, Pham Huynh Bao Oanh896
THE RISE OF REMOTE WORK: LEGAL CHALLENGES AND IMPLICATIONS FOR EMPLOYMENT LAW IN VIETNAM903
Nguyen Thi Xuan Mai <sup>1</sup> , Nguyen Thi Ngoc Loan <sup>2</sup>
CHALLENGES AND RECOMMENDATIONS FOR THE LEGAL FRAMEWORK IN THE EMERGING AGE OF ARTIFICIAL INTELLIGENCE910
Nguyen Thi Thu Trang910
THE IMPACTS OF GLOBAL MINIMUM TAX ON FOREIGN DIRECT INVESTMENT (FDI) CORPORATIONS IN VIETNAM921
Trần Ngọc Thanh <sup>1</sup> 921
CROSS-BORDER E-COMMERCE ACTIVITIES AND TAX MANAGEMENT ISSUES933
Le Huynh Phuong Chinh, Ngo Thi Khanh Linh, Pham Ngoc Lan Anh
EXPERIENCE IN KOREA AND CHINA ON TAX MANAGEMENT FOR CROSS-BORDER E-COMMERCE ACTIVITIES941
Duong Anh Son <sup>1</sup> , Tran Vang Phu <sup>2</sup> 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 APPLICATION946
Nguyen Duc Tri <sup>1</sup> , Hoang Minh Châu <sup>2</sup> 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.

Pham Huynh Bao Oanh	956
TAX POLICY FOR E-COMMERCE OF COUNTRIES IN THE WORLD RECOMMENDATIONS TO VIETNAM	967
Tigayon Thaim Minn Chaim, Ta Tin Yan Tinn, Thain Bain Tuni Ma	
LEGAL REGULATIONS FOR ENTERPRISE OBLIGATIONS TO PROVIDE INFORM	<b>MATION</b>
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 GEOPOI	ITICAL
TENSIONS	
Nguyen Nam Trung	988

# 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 linhltk@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. (Hiến 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 misusage 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



## 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