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Human Resource Accounting in Vietnam: A Contextual Examination of Influencing Factors

Nguyen Thu Hoai, Lai Thi Thu Thuy*

Institute of Accounting and Auditing, Thuongmai University, Hanoi, Vietnam

**Corresponding author:* laithuy@tmu.edu.vn

ABSTRACT. This study examines the factors influencing the applicability of Human Resource Accounting (HRA) in Vietnam. A quantitative research design was employed, utilizing data from 408 valid survey responses collected in December 2024 and analyzed using Exploratory Factor Analysis (EFA). The findings indicate that perception of HRA benefits, accountants' qualifications, the existing information system, the legal and business environment, and the demands from stakeholders are positively associated with the implementation of HRA in Vietnam. The results offer practical implications for business managers and policymakers aiming to promote HRA adoption. This research contributes to the limited literature on HRA in developing countries and underscores the importance of raising awareness, building professional capacity, and enhancing regulatory support to foster broader implementation.

1. INTRODUCTION

In the increasingly knowledge-based economy, Human Resources (HR) are recognized as critical assets. While managers offer plans to save costs for purchasing materials and equipment, expenses for finding, recruiting, fostering, rewarding and retaining the quality human resource tend to increase. However, traditional accounting practices typically treat recruitment, salaries, training, and human resource development costs as period expenses, failing to capitalize them as assets despite their potential to generate benefits over multiple future periods—much like investments in physical assets [1]. People are often spoken of as assets, but are generally treated as expense because there is no credible system of valuing them. This approach compromises the completeness, integrity, and relevance of a company's financial information. Traditional accounting's treatment of HR as mere expenses leads to a lack of transparency regarding the value of these resources, potentially incentivizing business managers to cut essential HR-related

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expense to inflate profits, particularly when businesses face challenges like natural disasters and epidemics.

A proper understanding of HRA enables management to make informed decisions about investing in HR. It also offers comparative insights into the expenses and benefits linked to such investments. For external users of accounting information, especially investors, HRA is particularly valuable as it highlights the significant impact that the quality of human assets has on a firm's earning potential [2].

Dispite that HRA s a relatively new field, its development has already undergone several distinct stages. The initial phase, spanning from 1960 to 1966, was characterized by growing interest in HRA and the formulation of its foundational concepts, which were drawn from various theoretical disciplines. The early momentum for HRA emerged from multiple sources, including the economic theory of human capital, organizational psychology's focus on leadership effectiveness, and the recognition of human assets as integral to corporate goodwill. HR represent the most critical component of any organization, ensuring effective integration between financial and other physical resources in pursuit of organizational goals [3]. While financial assets are routinely recorded in the books of accounts according to established accounting principles, human assets are typically not reflected in the same way.

In Vietnam—a country actively integrating into the regional and global economy—research on HRA within enterprises remains relatively limited. As Vietnam aligns its accounting practices with international standards, there is a growing need for both theoretical and empirical studies to demonstrate the relevance and practicality of HRA in the local business context. Such research should reflect the dynamic changes in the economy, advancements in science and technology, and the need for alignment with global accounting models. Beyond technical accounting considerations, it is also essential to examine the various factors that may influence the adoption and implementation of HRA in Vietnamese enterprises in the near future.

2. LITERATURE REVIEW

2.1. The Concept of Human Resource Accounting

Research by Edmonds and Rogow [4] gave the earliest definition for HRA as follows: "the activity aimed at systematically identifying, measuring, and reporting the human resources of an organization to facilitate effective management". This definition underscores the role of HRA in supporting managerial decision-making by providing structured and quantifiable information about an organization's human capital. It highlights three main functions of HRA: (1) Identification of HR; (2) Measurement of HR's value or cost; and (3) Reporting for internal and external use. Through this lens, HRA is not just a financial tool but a managerial one, aiding in better planning, development, and utilization of HR.

According to Flamholtz [2] and the American Accounting Association's Social Accounting Committee on HRA [5], because accounting also provides information to users outside the organization, the definition of HRA is changed as follow: "HRA is the process of identifying, measuring and communicating this information to interested parties". Based on the assumption that the primary purpose for which accounting information is generated is to facilitate decision making; external users, particularly investors, could benefit immensely from HRA. Potential investors need to know the changes and value in human assets in order to evaluate properly assets and income. This concept views workers as key resource managers use to achieve competitive advantage for their companies.

The definition of HRA by Kodwani and Tiwari [6] states that "HRA is the measurement and reporting of the cost and value of people as organizational resources". This definition emphasizes two key aspects of HRA: (1) Cost measurement – accounting for the expenses related to acquiring, developing, and maintaining HR; (2) Value reporting – assessing the economic value that HR contribute to the organization. Kodwani and Tiwari's [6] perspective reflects a balanced view of HRA as both a financial and strategic tool for understanding the role of human capital in organizational success.

Although the definitions mentioned above have many points of disagreement and have not been clarified, they basically agree in the view that HR approach is an important part of the entity's assets. It is necessary to determine the value to reflect the true potential of an entity, and HR information needs to taken into account in user decisions.

2.2. Factors Affecting the Application Of HRA

Research on the factors influencing HRA adoption in various countries points to a combination of organizational, environmental, and individual factors.

2.2.1. Organizational Factors.

(1) Perception Of the HRA's Benefits.

Becker and Gerhart [7] outlined five compelling reasons for organizations to adopt HRA: (1) enhancing competitiveness through improved HR activities; (2) expanding and diversifying HR functions; (3) transitioning the HR focus from transactional tasks to strategic management; (4) integrating employees into the HR information system; and (5) redefining the role of the HR department.

According to Davis [8], perceived benefit refers to the extent to which an individual believes that using a system will improve their job performance. Research by Haines and Petit [9], Teo et al. [10], and AlKhowaiter et al. [11] has demonstrated that the perception of benefits is one of the most influential factors in the adoption of HRA systems. However, other studies, such as those by Al-Mobaideen et al. [12] and Noutsa et al. [13] suggest that awareness of HRA's benefits has only a minimal impact on its implementation within enterprises.

(2) The Existing Information Technology.

In the current context of Industry 4.0, information technology is increasingly developing, besides the cloud computing application platform, other integrated applications such as ERP software combined with cloud computing, Blockchain technology, etc. …. It is also an effective tool to help collect and record information effectively. Information related to the recognition of HR assets when incurred in all departments will be transmitted to the accounting department in a certain order that the enterprise has installed. Implementing cloud-based accounting helps to improve accounting efficiency in recording, analyzing data, controlling information and assisting in decision making [14]. The quality of information on accounting reports will be enhanced by the timeliness and accuracy, along with the support of processing and reporting over time [15]. On the basis of technological applications of Industry 4.0 such as: cloud computing, Blockchain, etc., the information about HR assets recorded timely and accurately will be automatically transferred to the relevant indicators in the financial statements.

The empirical research of Al-mobaideen et al. [12], Fink and Neumann [16], Sabrina [17] also show that information technology has a significant influence on the application of HRA.

2.2.2. Environmental Factors.

(1) Legal And Business Environment.

As organizations move towards a knowledge-based economy, pressure continues to mount on HR department to reduce costs and respond to the organization's grand strategies [18]. As competitive pressure increases, there is a need for better management, with one of the most important assets of businesses is HR. Businesses cannot compete if they do not manage their HR well. Therefore, using HRA will help businesses make more informed decisions, make the most of assets, streamline HR processes, and better allocate resources. Therefore, competitive dynamics in all aspects of business will lead to the adoption of HRA [10].

On the other hand, there are two ways in which government can influence the adoption of innovations: either by taking specific actions such as raising or lowering taxes or other measures to encourage enterprises to research and develop; Second is to create a favorable environment for policies to be received [19]. Governments can also play an important role in encouraging adoption of innovations by raising awareness, training and funding relevant HR training activities [20].

Research by Teo et al. [10] showed that the business environment has an influence but not significant on the application of HRA. Meanwhile, the study of Troshani et al. [21], AlDmour et al. [22] indicated that this factor has a significant influence on the application of HRA.

(2) The Demands From Stakeholders.

Flamholtz et al. [23] examined the impact of stakeholder interests—particularly those of management and investors—on the need to measure human capital. Their findings suggest that

organizations adopt HRA systems in response to increasing demands for transparency in the valuation of human assets.

Although not exclusively focused on HRA, Sveiby [24] emphasized that stakeholders—especially knowledge-based investors—seek greater insight into intangible assets, including human capital. The study highlights that external demands for information on employee competence, innovation capacity, and knowledge sharing are key drivers pushing organizations to adopt human capital measurement practices.

Tayles et al. [25] investigated the relationship between stakeholder awareness of intellectual capital and accounting practices. Their research revealed that rising stakeholder expectations for improved reporting on intangible assets, such as HR, are linked to the increased use of HRA-related practices.

Similarly, Abeysekera and Guthrie [26] explored how stakeholder expectations influence the voluntary disclosure of human capital information in corporate reports. Their findings indicate that organizations are more likely to report on HR in response to pressures from key stakeholders, including shareholders and regulatory bodies.

2.2.3. Individual Factor.

The Accountants' Qualifications.

This category includes the knowledge, skills, and attitudes of accountants regarding HRA. Professional level is one of the important factors in the application of new technologies [15]. Organizations with corporate cultures that accept change and encourage employees to learn are more likely to adopt innovation [27].

Elliot and Tevavichulada [28], Chenhall and Smith [29] stated that accountants need to be multidisciplinary and have knowledge of information systems and HR functions. The slow application of HRA is due to the lack of knowledge and skills among accounting staff [30]. The lack of understanding of the functions and features of HRA by accounting staff is a major obstacle in the application of HRA in enterprises [10].

Research by Attewell [31], Al-mobaideen et al. [12], Barzekar and Karami [32], Diez and McIntosh [33] have shown that accountants' experience and participation in professional training courses impact on the application of HRA in enterprises.

3. THEORETICAL BACKGROUND

The application of HRA within organizations is influenced by a variety of theoretical frameworks that help explain the motivations, constraints, and strategic choices involved in its adoption. Among these, Agency Theory, Institutional Theory, and the Technology-Organization-Environment (TOE) Framework are particularly relevant. Each offers a distinct lens for analyzing the factors affecting the implementation of HRA, such as management perceptions, information

systems, legal frameworks, stakeholder demands, and the competencies of accounting professionals.

3.1. Agency Theory

Agency theory originates from the field of economics and was first conceptualized by Alchian and Demsetz [34], with further elaboration by Jensen and Meckling [35]. The core premise of this theory is the principal-agent relationship, wherein a principal (such as shareholders or top management) delegates authority to an agent (such as managers or employees) to perform tasks on their behalf. However, due to differing objectives and asymmetric information, agency problems may arise, requiring mechanisms to align interests and monitor performance.

In the context of HRA, agency theory provides a foundation for understanding how and why decision-makers seek greater transparency and accountability in HR investments. The perception of HRA's benefits—particularly in enhancing performance evaluations, improving resource allocation, and reducing information asymmetry—can significantly influence whether management (agents) decides to adopt HRA practices. Furthermore, the qualifications and expertise of accountants also play a crucial role, as they are the agents responsible for implementing HRA systems and communicating results to the principals. A lack of competence or trust in these agents can lead to underutilization or resistance to HRA adoption.

Thus, agency theory helps explain how perception and professional competence—both rooted in concerns about accountability and performance—affect the adoption and application of HRA within organizations.

3.2. Institutional Theory

Institutional theory offers a sociological perspective on organizational behavior, emphasizing the importance of legitimacy, conformity, and societal expectations. According to Deegan and Unerman [36], organizations are embedded within broader institutional environments comprising norms, rules, regulations, and cultural expectations. To gain and maintain legitimacy, organizations often conform to these external pressures, even if doing so does not necessarily align with internal efficiency.

In the realm of HRA, institutional theory provides a useful framework for understanding how the legal and business environment affects the extent to which organizations implement human resource accounting. Regulatory standards, national accounting frameworks, labor laws, and societal expectations about corporate transparency all serve as institutional pressures that shape organizational behavior. In countries or sectors where human capital reporting is encouraged—or mandated—firms are more likely to adopt HRA practices to demonstrate compliance and legitimacy.

Moreover, pressures from industry bodies, professional associations, and peer organizations can create normative isomorphism, where firms adopt similar practices—including HRA—not necessarily because of internal demand but to align with industry norms. This perspective is particularly relevant in emerging economies like Vietnam, where convergence with international accounting standards and expectations from multinational stakeholders may drive increased interest in HRA.

3.3. The Technology-Organization-Environment Framework

The Technology-Organization-Environment (TOE) framework was introduced by Tornatzky and Fleischer [37] in their seminal work, The Processes of Technological Innovation. It is an organizational-level theory that explains how three contextual dimensions—technological, organizational, and environmental-jointly influence the adoption and implementation of innovations within firms.

- The technological context refers to both the internal and external technologies relevant to the firm, including the maturity, complexity, and compatibility of systems such as Human Resource Information Systems (HRIS) or Enterprise Resource Planning (ERP) platforms.

- The organizational context includes internal characteristics such as size, structure, managerial support, and the technical expertise of employees and accountants responsible for implementing new systems.

- The environmental context encompasses the external pressures from competitors, regulators, stakeholders, and market conditions that influence innovation decisions.

In this research, the TOE framework is applied to explain how information technology infrastructure, the legal and business environment, and internal organizational capabilities affect the adoption of HRA. A well-developed IT system enhances data collection, analysis, and reporting capabilities necessary for HRA. Organizational readiness, including the availability of skilled accountants and the support of top management, further enables successful adoption. Simultaneously, environmental pressures from regulatory bodies, industry standards, and stakeholder demands create a compelling case for the integration of HRA into organizational practices.

By capturing these multidimensional influences, the TOE framework provides a holistic understanding of how both internal capabilities and external pressures shape the decision to implement HRA in organizations.

4. RESEARCH DESIGN

4.1. Research Model and Hypotheses

To investigate the factors influencing the application of HRA in Vietnamese enterprises, this study proposes a conceptual research model grounded in Agency Theory, Institutional Theory, and the Technology-Organization-Environment framework. The model integrates both

internal and external organizational factors believed to affect the adoption and implementation of HRA practices.

The conceptual model identifies five independent variables: (1) Perception of the HRA's Benefits; (2) Existing information technology; (3) Legal and business environment; (4) The demands from stakeholders; (5) Accountants' qualifications.

These factors are hypothesized to have a positive effect on the dependent variable, which is the application of HRA in Vietnamese enterprises.

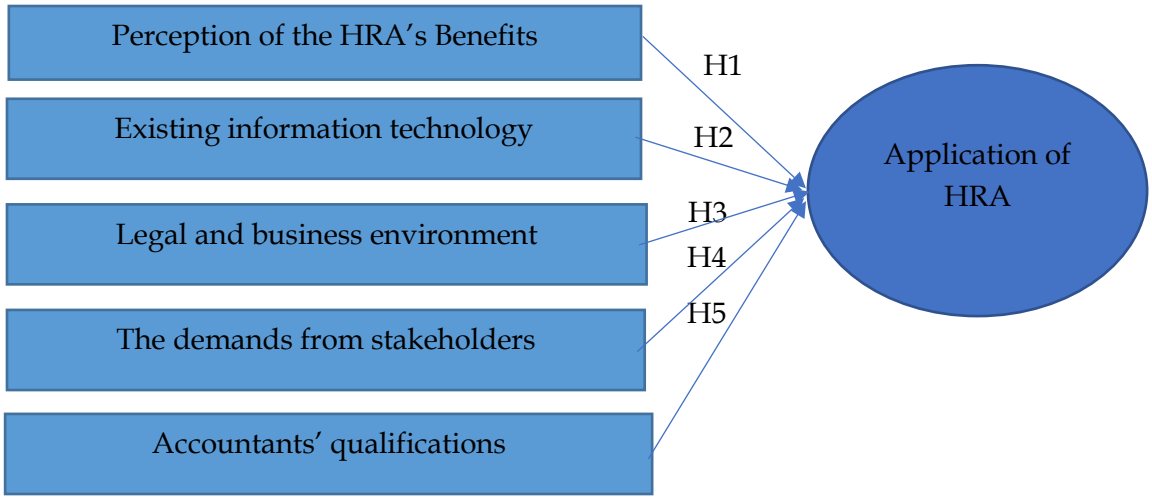

Figure 1. Research Model

Source: Developed by the authors

Based on the theoretical background and prior empirical studies, the following hypotheses are formulated:

H1: Perception of the HRA's Benefits has a positive effect on the application of HRA in Vietnam.

H2: Existing information technology has a positive effect on the application of HRA in Vietnam.

H3: Legal and business environment has a positive effect on the application of HRA in Vietnam.

H4: The demands from stakeholders have a positive effect on the application of HRA in Vietnam.

H5: Accountants' qualifications have a positive effect on the application of HRA in Vietnam.

The research model can be described as follow:

$AHRA = \beta 1PB + \beta 2IT + \beta 3LB + \beta 4DS + \beta 5AQ + \varepsilon i$

Where:

AHRA: Dependent variable

PB, IT, LB, DS, AQ: Independent variables

βi: Coefficient

εi: Random error

4.2. Data Collection

Initially, a Google form survey was designed. Hence, the survey was distributed online from October 2024 to December 2024 using different platforms such as Facebook, Zalo's group chat.

The Google form link allowed one person to access only once to complete the survey to enhance the truthfulness of the result. All the information about the project and those who designed the form were stated from the beginning to help the participants better understand the purpose of the project and contact the authors if necessary.

In contrast, they would continue filling the form with demographic questions, and the central section relates to factors affecting the application of HRA. Those who participated in the survey must meet the following criteria: (1) Accounting staff or managers in enterprises; (2) Having the ability to understand all the content in the survey. Therefore, 412 observations were collected after spreading the survey. However, 4 invalid responses were excluded, and 408 were used for analysis.

4.3. Measurement

This study combined both qualitative and quantitative research methods. Qualitative research method was carried out to find out the factors affecting the application of HRA from the results of previous studies in order to form the research model, hypotheses, and design a survey questionnaire. The author also check the suitability of the research model, consider adding new scales through conducting semi-structured expert interviewers and trial surveys.

Based on the qualitative research method, the study completed the questionnaire with 4 scales of the dependent variable and 18 scales of independent variables. SPSS26.0 software was executed using 408 valid responses during data analysis process. The Kaiser–Meyer–Olkin measure (KMO test) together with Bartlett's test were executed during the exploratory factor analysis (EFA) process. Factors with Eigenvalues greater than or equal to 1 were kept respecting the data results. Besides, to ensure the practical significance of EFA, factor loading >0.4 is considered necessary [38]. The scale with Cronbach's Alpha greater than 0.6 was applied to ensure the scale's reliability. In the next step, multiple regression analysis was applied to test the hypothesis.

5. RESULTS OF THE RESEARCH

5.1. Descriptive Statistics of The Survey Sample

The authors have distributed 500 questionnaires; the results obtained 408 valid responses used for analysis in the next steps. According to the results of descriptive statistics, out of 408 votes collected, 74.02% were from accountants, and 25.98% were business managers. 85.78% of people surveyed have a degree in accounting. On the other hand, the percentage of respondents with professional experience of 5 years or more is 66.67%. Thus, most of the surveyed subjects have professional knowledge and experience to ensure the reliability of the survey results.

Table 1. Sample and response rates

Group	No. of survey sent	Responses received		Accounting qualification		Experience		
		N	%	N	%	< 5 years	5-10 years	>10 years
Accountants	350	302	74.02	302	100	92	136	74
Managers	150	106	25.98	48	15.89	44	37	25
Total	500	408	100	350	85.78	136	173	99

Source: Author sunthesized

5.2. The Reliability of the Scales

Study used Cronbach's Alpha coefficient to test the reliability of the dependent and independent variable scales. According to Table 2, the Cronbach's Alpha coefficients of all variables are in the range of 0.7-0.9. Therefore, the reliability of all scales is ensured for carrying out the empirical study.

Table 2. The reliability of the scales

Variables	Cronbach's Alpha	N
Perception of the HRA's Benefits (PB)	0.786	3
Existing information technology (IT)	0.876	4
Legal and business environment (LB)	0.894	4
The demands from stakeholders (DS)	0.832	4
Accountants' qualifications (AQ)	0.840	3
Application of HRA (AHRA)	0.903	4

Source: Author sunthesized

5.3. Exploratory Factor Analysis Results

After analyzing the reliability of the scale, the study uses exploratory factor analysis (EFA) to determine whether the observed variables are suitable for performing regression analysis in the next step.

The results of factor analysis exploring independent variables are shown in Tables 3 and 4 below. KMO coefficient is 0.844, satisfying the condition: $0.5 < KMO < 1$, Barlett test has sig <

0.05 (according to Table 3). With the angle rotation method (Varimax), all variables have loading coefficients greater than 0.5, there is no cross-loading phenomenon (according to Table 4)

Table 3. KMO and Bartlett's Test (Independent variables)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.844
Bartlett's Test of Sphericity	Approx. Chi-Square	4564.712
	df	153
	Sig.	.000

Source: Results from SPSS 26.0

Table 4. Rotating factors (Independent variables)

	Component				
	1	**2**	**3**	**4**	**5**
LB3	.909				
LB2	.883				
LB4	.804				
LB1	.764				
IT4		.823			
IT3		.822			
IT2		.800			
IT1		.711			
DS3			.846		
DS1			.811		
DS2			.808		
DS4			.746		
AQ3				.779	
AQ2				.778	
AQ1				.749	
PB1					.850
PB2					.774
PB3					.763

Source: Results from SPSS 26.0

5.4. Multiple Regression Analysis Results

According to regression analysis in Table 8, VIF coefficients between 1.3 and 1.8 are all < 2, so there is no multicollinearity between the independent variables. Durbin - Watson test (according to Table 6) gives a value of 1.674 between 1 and 3, so there is no correlation between residuals. The ANOVA test according to Table 7 gives significance level < 0.05, so the regression model fits the data and can be used.

The coefficient R2 is 0.630 (according to Table 6), which means that 63% of the variation of the variable applying HRA was explained by factors that are independent variables included in the model. Regression results according to Table 8 show that all 5 independent variables have a significant and positive influence on the application HRA. The normalized regression equation for the application of human resource accounting in enterprises is as follows.

Table 6. Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.794[a]	.630	.626	.53901	1.674

Source: Results from SPSS 26.0

Table 7. ANOVA a test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	199.237	5	39.847	137.156	.000[b]
	Residual	116.792	402	.291		
	Total	316.029	407			

Source: Results from SPSS 26.0

Table 8. Regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.974	.179		-5.437	.000		
	PB	.241	.046	.185	5.231	.000	.736	1.359
	IT	.304	.042	.291	7.265	.000	.572	1.749
	LB	.266	.031	.299	8.607	.000	.761	1.314
	DS	.221	.029	.245	7.594	.000	.883	1.132
	AQ	.139	.047	.122	2.966	.003	.542	1.844

Source: Results from SPSS 26.0

Results from multiple regression analysis, the formalized regression Equation for the factors affecting the application of HRA is as follows:

AHRA = 0.185PB + 0.291IT + 0.299LB + 0.245DS + 0.122AQ

The level of influence from strong to weak of the factors as follows:

LB (0.299) > IT (0.291) > DS (0.245) > (0.185 PB) > AQ (0.122)

6. DISCUSSION AND INTERPRETATION OF RESULTS OBTAINED

The results of reliability of the scale, exploratory factor and multiple regression analysis show that all research hypotheses are accepted.

Table 9. Summary of hypotheses testing results

Hypotheses	Testing results	Beta coefficient	Correlation
H1: Perception of the HRA's Benefits has a positive effect on the application of HRA in Vietnam	Accepted	0.185	Positive
H2: Existing information technology has a positive effect on the application of HRA in Vietnam	Accepted	0.291	Positive
H3: Legal and business environment has a positive effect on the application of HRA in Vietnam	Accepted	0.299	Positive
H4: The demands from stakeholders have a positive effect on the application of HRA in Vietnam	Accepted	0.245	Positive
H5: Accountants' qualifications have a positive effect on the application of HRA in Vietnam	Accepted	0.122	Positive

Source: Author compilated

The results of empirical research show that the perception of the HRA's benefits, existing information technology, legal and business environment, the demands from stakeholders, the accountants' qualifications have a significant and positive influence on the application of HRA in Vietnam. This result is consistent with some previous studies such as the study of Teo et al. [10], Fink and Neumann [39], Troshani et al. [21], AlDmour et al [22], Al -mobaideen et al [12], AlKhowaiter et al [11], Sabrina [17].

7. IMPLICATIONS OF THE STUDY

Based on the experimental research results, the authors propose the following recommendations:

Vietnamese businesses need to raise awareness of the benefits of HRA and have policies in place to capitalize investments in HR when these have a positive effect on labor productivity and create long-term benefits for the business.

Education and training institutions also need to strengthen the content of research, training and academic exchange related to HRA in the entity in order to cultivate the professional knowledge of the accounting team in the future. on this issue.

The entities also need to strongly apply information technology in processing accounting information, especially promoting the quantification of input factors that traditional accounting has not mentioned.

State agencies also need to create a favorable legal business environment for the application of HRA. Specifically, promulgating, drafting standards, guiding documents for implementation and encouraging the application of testing with a roadmap, summarizing practices, drawing lessons and then supplementing and perfecting.

Moreover, it is essential to recognize and respond to the growing demand from key stakeholders-particularly investors, regulators, and internal management for greater transparency and accountability regarding human capital. Stakeholders increasingly expect organizations to disclose the value, development, and utilization of HR as strategic assets. Simultaneously, companies should proactively engage with stakeholders to understand their information needs, and incorporate HRA metrics into their internal decision-making and external disclosures. Doing so not only improves trust and credibility but also demonstrates a commitment to long-term value creation through effective human capital management.

Besides the obtained results, the study still has certain limitations such as just stopping at the EFA exploratory factor analysis technique, the results of the regression analysis for R2 = 0.630 mean that: the independent variables in the research model just explain 63% of the variation of the dependent variable. In subsequent studies, with conditions that allow the research to develop more confirmatory factor analysis CFA as well as add new factors, increase the sample size in the survey.

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