

# Factors affecting office modernization at Son Ha Group, Vietnam

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## ABSTRACT

The objective of this study is to find out the factors and determine the degree of influence of these factors on the process of office modernization at Son Ha Group. The authors have studied the theoretical basis and previous related research topics as the basis for proposing a model with 6 elements (People; Equipment; Operations; Decoration; Environment; School; Information Technology). The study was conducted at the office of Son Ha Group with 133 survey samples (for employees at the Group), of which 120 were valid. The study uses Cronbach's Alpha test method and exploratory factor analysis (EFA) to test and build the scales. Besides, the multiple linear regression method is used to find out the factors and their influence on the modernization of the Group's office. The results show that there are only two factors that affect office modernization at Son Ha Group: Office equipment and office operations, these factors have an impact on 83.4% of office modernization of the Group, 16.6% is affected by other factors. In which, the office equipment factor has the strongest impact on the Group's office modernization with 74.33%.

**Keywords:** Office; Modernization; Office modernization; Son Ha Group.

## I. INTRODUCTION

In order to improve competitiveness, enterprises are constantly modernizing their offices (the information center of enterprises). This is consistent with the view of the VIII National Party Congress taking place in Hanoi on September 1, 2020 on the issue of industrialization and modernization, which clearly stated: "The goal of industrialization and modernization is to build our country into an industrial country with modern material and technical foundations, a reasonable economic structure, advanced production relations,

suitable for the development level of the productive forces and material life. and high morale, solid national defense and security, rich people, strong country, fair and civilized society: (Vietnam News Agency, 2020).

In fact, research topics on office modernization are mainly approached by qualitative methods. These methods do not allow to determine the exact level of impact of factors on office modernization. Besides, each business is unique, using a combination of approaches (qualitative, quantitative) will bring more profound and reliable results.

Group is known as a multi-industry enterprise developing among the top developed enterprises in Vietnam. The Group has achieved certain achievements, but besides that, there are still limitations in innovating and absorbing the modern office trend. In addition, the Group has not applied a number of management software such as: employee work evaluation software, admission management software. The group mainly manages using common applications (zalo, viber, paper documents, so the work is not yet highly efficient and the management is not tight.

This study was carried out by a combination of qualitative and quantitative methods in order to accurately determine the factors that have an impact and level of impact on the process of office modernization at Son Ha Group. hereinafter referred to as the Group). From the research results, the authors propose a number of management implications to improve the efficiency of the process of modernizing the Group's office, contributing to improving labor productivity.

## II. THEORETICAL BASIS AND RESEARCH MODEL

### 2.1. Some concepts

#### 2.1.1. Office concept

The word office appeared long ago in the feudal government system and since 1945 in administrative documents. There are different views about the office. However, in general, there are two most commonly accepted views:

The office is understood as an advisory apparatus to assist the leader directly, with the function of ensuring information, working conditions, and assisting the leader in administration (Nguyen Thanh Do, 2012); (Vu Thi Phung et al, 2020).

Office is understood as a part in the organizational structure of an agency or enterprise with the function of advising, synthesizing, ensuring logistics or other tasks at the request of the administrator (Van Tat Thu, 2020).

In order to provide a definition suitable for the scope of this study, the authors will base on the contents of the office as well as the above approach, the authors would like to give a full definition of offices and units as follows:

“The office is the apparatus of an agency or organization that is responsible for collecting, processing and synthesizing information to serve the leadership's operating activities, helping the leader to run the work, and at the same time ensuring the material and technical conditions for the general operation of the whole agency or organization”.

#### 2.1.2. Modernization concept

According to the journal Sociology No. 2, (2005) by author Tran Huu Quang said: “Modernization is understood as the application and equipping of advanced and modern scientific and technological achievements into the process. production, business, services and socio-economic management” (Tran Huu Quang, 2005). According to Krishan Kumar - Professor at the University of Virginia: “Modernization is a continuous and open-ended process”. Modernization is not a once-and-for-all achievement.

In order to provide a definition suitable for the research scope of this study, the authors will base on the concepts of modernization as well as the above approach, the authors would like to give a full definition. Modernization is understood as the application and equipping of advanced and modern scientific and technological achievements into the process of production, business, service and socio-economic management.

#### 2.1.3. Office modernization concept

Currently, there are many different concepts when it comes to office modernization. According to a research paper, author Hoang Thi Phuong (2018) with the title Modernizing the office at the Ministry of Finance to meet the requirements of administrative reform said that: “Office modernization is the process of improving the operation of the office. office on all the means that make up a modern office, including: assets, technology and people” (Hoang Thi Phuong, 2018).

Office modernization is the process of improving the operation of the office in all constitutive aspects of a modern office, including: Human thinking; Office equipment; Science and technology; Professional process. Office modernization is the application of advanced scientific and technological advances to office operations to improve efficiency and work efficiency (Nguyen Manh Cuong, 2022).

Based on the ways to learn about office modernization given by the authors, the authors have come up with a definition suitable for the research scope of this study as follows: “Office modernization is the process of Present comprehensively, synchronously scientific and technical achievements into the goals, resources and business processes of the office in order to improve the quality and efficiency of office work, meet the requirements of the office. increasing demand of the times”.

### 2.2. Theoretical and practical studies on office modernization

#### 2.2.1. Theoretical studies on office modernization

In Vietnam, there are many theoretical studies on office modernization. In which, the authors point out the elements of the content of office modernization such as the element of “Organizational structure; Personnel; Space; Working conditions” (Vu Thi Phung et al, 2020) or “Human thinking; Office equipment; Science and technology; business process) (Nguyen Manh Cuong et al, 2022). Besides, according to Nguyen Manh Cuong et al (2022), office modernization to meet the requirements of administrative modernization must be carried out in all three means: Modernizing the office; Modernize operating equipment and apply information technology in office management and administration activities. According to Nguyen Van In (2021), the content of office modernization consists of 3 big factors: Facilities; Technological aspect; Human aspect.

From the above points of view, the authors found that there are 3 contents of office modernization

that the authors agree to point out: People; Facilities and equipment; Information technology. There are also other inconsistent factors such as: Business Process, Organizational Structure.

2.2.2. Practical research topics on office modernization

Practical studies on office modernization are mainly approached by qualitative research

2.2.3. Summary of factors affecting office modernization

	Vu Thi Phung (2021)	Nghiem Ky Hong (2014)	Le Van In (2021)	Nguyen Manh Cuong (2022)	Nguyen Thi Thanh Huyen (2022)	Duong Chau Anh (2020)	Le Thi My Duyen (2020)
Human	+	+	+	+	+	+	+
Equipment	+		+	+	+	+	+
Business office	+	+		+	+	+	+
How to arrange	+			+	+	+	+
Office environment	+			+			
Information technology			+	+			

methods at a specific agency or enterprise. Elements of the content of office modernization include: People working in the office; facilities and office equipment; administrative operations; office layout (Nguyen Thi Thanh Huyen, 2022) (Duong Thi Chau Anh, 2020) (Le Thi My Duyen, 2020) (Nguyen Thi Hoa, 2017).

2.2.4. Proposing a research model

From inheriting the above theories and practical studies, the research team proposes a research model with the topic "Factors affecting office modernization at Son Ha Group as follows:

**Research hypothesis:**

X<sub>1</sub>: Human factor has a positive influence on office modernization.

X<sub>2</sub>:The element of office equipment has a positive impact on office modernization.

X<sub>3</sub>: Office administration has a positive impact on office modernization.

X<sub>4</sub>: Office layout has a positive impact on office modernization.

X<sub>5</sub>: The working environment has a positive impact on office modernization.

X<sub>6</sub>: Information technology has a positive impact on office modernization.

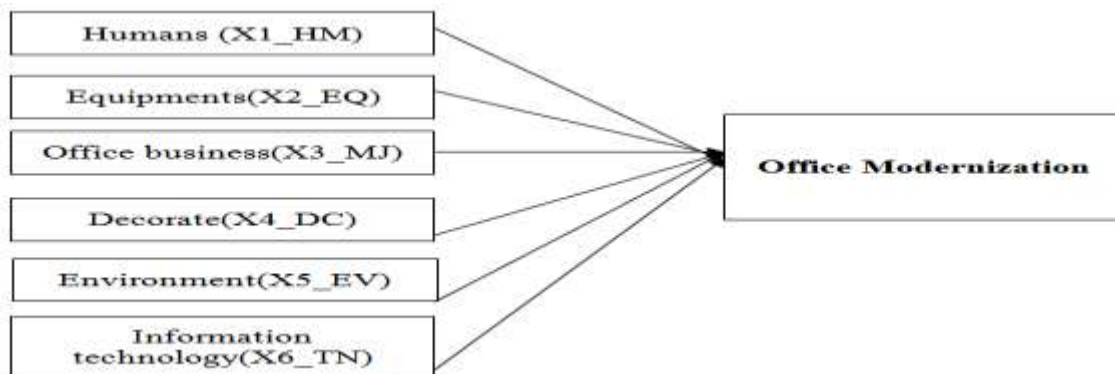


Figure 2.1. Proposed research model

### III. RESEARCH METHODS

#### 3.1. Description of the scale

The scales are built partly based on the above-mentioned theories and practical studies. In addition, because previous studies were mainly qualitative, the research team through the methods of document research, observation and expert consultation as a basis to propose additional observed variables in the scale. Observed variables are measured using a 5-point Likert scale, in which level 1 - Completely disagree to level 5 - Totally agree.

#### 3.2. Data collection methods

Convenient non-random sampling technique is used by the author to select easily accessible elements, get enough observations according to the required research sample size. In which, the samples are divided into 05 different departments working in the Group with different numbers .

Determining the research sample size, the author based on the exploratory factor analysis model to determine the sample size. Although in scientific research, the larger the sample size, the more accurate the results, but it can be limited to the ratio of 5:1 (Hair, 1998) sample size is determined based on: (i) the minimum level and (ii) the number of samples. variables included in the model analysis.

Minimum level (Min) = 50

The ratio of the number of observations to an analytic variable (k) is: 5/1

If the model has m scales; P<sub>j</sub>: Number of observed variables of the jth scale.

Sample size was determined:  $n = (6 * 4) * 5 = 120$  people

If  $n <$  the minimum, choose a minimum of 120 people.

Error Remaining 10% = 132 people

Collecting information and data based on survey results of related subjects at Son Ha Group.

The survey subjects took primary data: the author group collected through the survey process by questionnaires with the subjects being office staff working at Son Ha Group.

#### 3.3. Data processing and analysis methods

The topic uses descriptive statistical analysis methods, scale testing, exploratory factor analysis and regression analysis with the analysis tool of SPSS software to analyze the given factors.

##### 3.3.1. Descriptive statistical analysis method

On the basis of the collected secondary data, the research topic uses

analytical, statistical, descriptive and data methods to clearly see the characteristics of the sample.

##### 3.3.2. Check the reliability of the scale

The topic uses Cronbach's alpha on SPSS to check the reliability of the estimated parameters in the group of factors belonging to the proposed model. The higher the Cronbach's Alpha coefficient, the higher the reliability of the scale and the variables that do not guarantee the reliability will be removed. According to Hair et al. (2009), a good scale should ensure unidirectionality and have Cronbach's Alpha reliability of 0.7 or higher. However, in this study, the author assesses that the Cronbach's Alpha threshold is 0.6 acceptable.

##### 3.3.3. Exploratory factor analysis

After determining the variables to ensure reliability, the study will pass the exploratory factor analysis of EFA when meeting the conditions of Kaiser-Meyer-Olkin (KMO) test and Bartlett's test. From there, exploratory factor analysis will shorten the estimated parameters, identify factors and prepare data for the next analysis.

##### 3.3.4. Linear regression analysis

After the exploratory factor analysis step, the topic tests the linear correlation of the variables in the model by using multiple linear regression. After the model is calibrated with a significance level of 0.05, the model will be regressed to determine the impact level and direction of the factors on office modernization.

The linear regression function has the form:

$$Y = \beta_0 + \beta_1 * X_1 + \beta_2 * X_2 + \beta_3 * X_3 + \dots + \beta_n * X_n$$

In there:

Y is Modernization;

$\beta$  is the coefficient of the factors;

$X_1, X_2, X_3, X_4, X_5, X_6$  are the factors of the model.

In order to ensure the reliability of the regression ham, the study uses independent tests of residuals (Durbin-Watson statistical quantity), multicollinearity phenomenon (acceptance of Tolerance and magnification factor VIF). In addition, the method of selecting the Enter variable is carried out with the coefficient of determination  $R_2$  to determine the fit of the model.

After collecting survey data, the authors used the information processing method by using SPSS software version 25.0 to screen and analyze the necessary information.

#### IV. RESEARCH RESULTS

##### 4.1. Characteristics of the study sample

###### 4.1.1. Research institution

The total number of survey questionnaires collected was 133, of which 13 were invalid due to lack of information and incompatibility with previous answers. As a result, 120 valid votes were used as data for the study.

###### 4.1.2. Demographic characteristics of the research sample

The authors give demographic factors of 120 survey subjects as follows: Gender, age, education level, professional department.

###### 4.1.2.1. Gender and age of civil servants

Table 4.1. Gender & Age

			Age				Total
			18-30	31-40	41-50	over 50	
Sex	Male	Quantity	6	19	21	twelfth	58
		Percentage (%)	5.0%	15.8%	17.5%	10.0%	48.3%
	Female	Quantity	twelfth	20	23	7	62
		Percentage (%)	10.0%	16.7%	19.2%	5.8%	51.7%
Total	Quantity		18	39	44	19	120
	Percentage (%)		15.0%	32.5%	36.7%	15.8%	100%

Table 4.2. Education level and department of expertise

			Academic level				Total	
			Common	Intermediate college	University	After university		
Department of Expertise	Department of Finance Accounting	Quantity	0	1	14	4	19	
		Percentage (%)	0.0%	0.8%	11.7%	3.3%	15.8%	
	Human Resources Department Office	Quantity	1	7	22	3	33	
		Percentage (%)	0.8%	5.8%	18.3%	2.5%	27.5%	
	Communication-Marketing Department	Quantity	0	1	11	1	13	
		Percentage (%)	0.0%	0.8%	9.2%	0.8%	10.8%	
	Legislation room	Quantity	0	5	11	1	17	
		Percentage (%)	0.0%	4.2%	9.2%	0.8%	14.2%	
	Other	Quantity	0	14	18	6	38	
		Ratio	0.0%	11.7%	15.0%	5.0%	31.7%	
	Total	Total quantity		1	28	76	15	120
		Percentage (%)		0.8%	23.3%	63.3%	12.5%	100%

##### 4.2. Check the scale

###### 4.2.1. Crobach's Alpha test

Table 4.3. Crobach's Alpha analysis results

Influencing factors	Observable variable	Total variable correlation coefficient	Coefficient if variable type
Human factor test Crobach's Alpha=0.658	HM1	0.597	0.488
	HM2	0.639	0.463
	HM3	0.315	0.691



	HM4	0.280	0.693
Equipment factor tested by Crobach's Alpha=0.712	EQ1	0.573	0.570
	EQ2	0.551	0.596
	EQ4	0.470	0.697
Business factor tested by Crobach's Alpha=0.693	MJ1	0.494	0.617
	MJ2	0.424	0.662
	MJ3	0.568	0.568
	MJ4	0.440	0.660
Crobach's Alpha test environmental factor = 0.413	EV1	0.277	0.289
	EV2	0.410	0.147
	EV3	0.261	0.309
	EV4	0.029	0.532
Factor tested by Crobach's Alpha=0.605	DC1	0.436	0.506
	DC4	0.328	0.580
	DC2	0.564	0.410
	DC3	0.271	0.637
Information technology factor tested by Crobach's Alpha= 0.393	TN1	0.334	0.193
	TN2	0.047	0.516
	TN3	0.242	0.296
	TN4	0.323	0.194
Factor on office modernization tested by Crobach's Alpha= 0.658	HDH4	0.338	0.584
	HDH2	0.440	0.507
	HDH1	0.400	0.539
	HDH3	0.397	0.539

According to the test results, the Crobach's Alpha coefficient of the factors is different:

For the factors of People, Equipment, Office Operations, Office Layout, and dependent factors of Office Modernization, Crobach's Alpha results are all greater than 0.6. This means that the observed variables of the above factors are reliable enough to describe the content, showing different aspects of the factors that the observed variables are used to measure.

In addition, the remaining factors including: Environmental factors, Information technology, variables with Alpha coefficients lower than Crobach's Alpha coefficients of the scale are eliminated, those variables are: DC<sub>3</sub>, EV<sub>1</sub>, EV<sub>2</sub>, EV<sub>3</sub>, EV<sub>4</sub>, TN<sub>1</sub>, TN<sub>2</sub>, TN<sub>3</sub>, TN<sub>4</sub>.

Therefore, remove these 9 observed variables from the scale of factors. The remaining 15 independent observed variables and 4 dependent variables are continued to be used for EFA exploratory factor analysis.

#### 4.2.2. The results of exploratory factor analysis EFA

Results of the first EFA analysis:

The exploratory factor analysis results showed that the KMO value = 0.666. Bartlett's test has sig significance = .000 < 0.05, so the observed variables included in the research model are correlated with each other and are suitable for exploratory factor analysis.

Besides, HM<sub>4</sub> is in the category of disqualification. When analyzing EFA, the variable HM<sub>4</sub> has a negative coefficient, so it cannot guarantee the discriminant value between the factors. And variable DC<sub>3</sub> is excluded because it belongs to the same new factor group with HM<sub>4</sub> (in addition, DC<sub>3</sub> has Corrected Item < 0.3). Thus, the remaining 13 observed variables all have factor weights > 0.5, so they should be kept for the second EFA exploratory factor analysis.

Results of the 2nd EFA analysis

Table 4.4. The results of the second EFA discovery factor analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.693	
Bartlett's Test of Sphericity	Approx. Chi-Square	405.968
	DF	78
	Sig.	.000

Source: According to the calculation of the author group, SPSS 25.0 software table

Table 4.5. Factor matrix after 2 rotation

Observable variable	Factor			
	1	2	3	4
MJ3	0.744			
MJ2	0.708			
MJ1	0.691			
MJ4	0.590			
EQ1		0.753		
EQ4		0.750		
EQ2		0.608		
HM2			0.806	
HM1			0.782	
HM3			0.726	
DC1				0.815
DC2				0.741
DC4				0.698
KMO . test				0 .693
Bartlett's test				0 000
Eigenvalus coefficient	3.406	2.095	1,350	1.133
General of wrong quotes				61,414

Source: According to the calculation of the author group, SPSS 25.0 software table

The results show that after removing the HM4 variable, the exploratory factor analysis results are as follows:

The KMO test value is 0.693, in the range of 0.5-1, so factor analysis is appropriate.

The results of the Bartlett test are significant at the sig level = 0.000 < 0.05, so the observed variables included in the research model are correlated with each other and are suitable for EFA factor analysis.

Factor loading coefficients of all 14 observed variables are > 0.5, the lowest talent weight is

0.590 (MJ<sub>4</sub> of the office business scale), the highest weight is 0.815 (DC<sub>1</sub> of the layout scale).

The total variance extracted of the research model is 61,414, showing that the observed variables mentioned in the research model explain 61,414% of the variation of the research model. Moreover, the total value of variance extracted is greater than 50%, so it is suitable for the research model. Eigenvalues of the observed variables are all greater than 1, meeting the set requirements.

Thus, after factor analysis to explore EFA, the observed factors and variables are as follows.

### 4.3. Multiple Linear Regression Analysis

#### 4.3.1. Check the significance of the regression coefficients :

Table 4.6. Coefficients

Model	Unnormalized coefficients	Normalization coefficient	t	Sig.	Collinear Statistics
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		REMO VE	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.092	.188		.488	.626		
	CN	.052	.036	.059	1.449	.150	.850	1.176
	TT	.659	.039	.741	16.894	.000	.723	1.382
	NV	.231	.039	.256	5.957	.000	.756	1.323
	BT	.031	.034	.035	.912	.364	.923	1.083

Source: According to the author's calculation on SPSS software

Research results are shown in the table on the independent variables NV, TT with Sig ≤ 0.05. The independent variables (CN, BT) have Sig > 0.1. As excluded because those observed variables

do not affect BPT. So, NV and TT are statistically significantly correlated with BPT with confidence > 95%.

#### 4.3.2. Explanatory level of the model

Table 4.7. Model Summary

Model	Cheap	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson
					R Square Change	Sig. Change	
1	.916 <sup>a</sup>	.840	.834	.20159	.840	.000	2.039

In Table 4.7, adjusted R<sup>2</sup> (Adjusted R square) = 0.834 (variable test, Sig ≤ 0.05. It shows that the research model explains 83.4% of the variation of modernization at Son Ha Group, the

remaining 16.6). % is explained by variables outside the model and random error that the authors have not found.

#### 4.3.3. Model fit

Table 4.8. Analysis of variance table (Anova)

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	24.509	4	6.127	150.769	.000 <sup>b</sup>
	Residual	4.674	115	.041		
	Total	29.183	119			

Source: According to the calculation of the author group, SPSS 25 . software table

In the table (Regression Model) there is Sig = 0.000 ≤ 0.05. Thus, in general, the independent variables have a linear correlation with the dependent variable. Therefore, the linear regression model has a good fit to the actual data.

Thus, the model does not have collinearity.

#### 4.3.4. Check for collinearity

In Table 4.6, all independent variables have VIF < 10

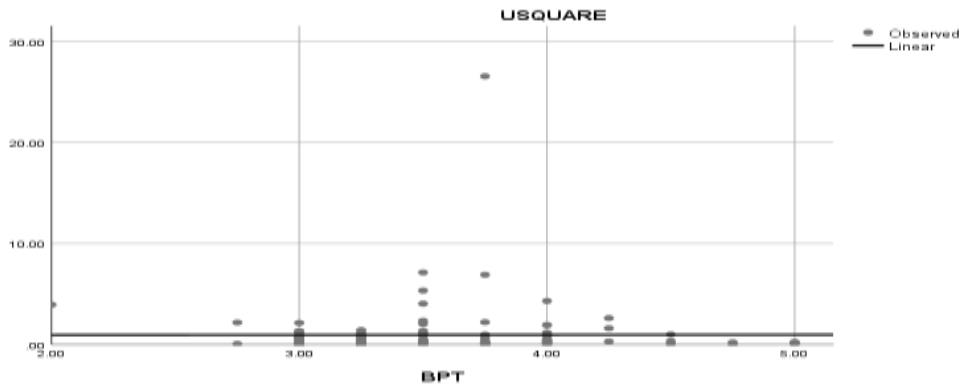
#### 4.3.5. Check for autocorrelation

According to the summary table of the statistical model Durbin – Watson d = 2,039. 1 < d = 2,039 < 3. Therefore, there is no residual correlation.

#### 4.3.6 . Testing for the phenomenon of residual variance changes



Table 4.9. Table of the phenomenon of residual variance variation



Source: According to the calculation of the author group, SPSS 25 . software table

In the above figure, the curve of USQUARE and BPT correlation is straight line (linear correlation), there is no residual variance phenomenon.

Conclusion: Through 6 tests of the regression model, the independent variables affect the modernization of the office at Son Ha group.

#### 4.4. Discuss regression results

Table 4.10. Coefficients

Model		Unnormalized coefficients		Normalization coefficient	t	Sig.	Collinear Statistics	
		Remove	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.092	.188		.488	.626		
	CN	.052	.036	.059	1.449	.150	.850	1.176
	TT	.659	.039	.741	16.894	.000	.723	1.382
	NV	.231	.039	.256	5.957	.000	.756	1.323
	BT	.031	.034	.035	.912	.364	.923	1.083

Source: According to the calculation of the author group, SPSS 25.0 software table

The model, after being calibrated with a significance level of 0.05, has determined the level of impact and direction of the factors on office modernization through a linear regression function of the form:

$$Y = \beta_0 + \beta_1 * NV + \beta_2 * TT + e$$

Y is office modernization

$\beta$  is the coefficient of the factors

NV, TT, CN, BT are the factors of the model

e is the remainder

Unnormalized regression coefficient:  $Y = 0.092 + 0.231 * NV + 0.659 * TT + e$

Normalized regression coefficient:  $Y = 0.256 * NV + 0.741 * TT$

According to Norsis (1993), Beta coefficient indicates the level of impact of the independent variable on BPT. In other words, determine the importance of the independent variables in %. Looking at the regression function, we can immediately determine which variable has a stronger impact on the dependent variable.

Table 2.11. The level of impact of the independent variable

	Absolute Value Beta	%	Location of influence
(NV) Office operations	0.256	25.67%	2
(TT) Office equipment	0.741	74.33%	first

Total	0.997	100%	
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Source: According to the calculation of the author group, SPSS 25.0 software table

The factor “equipment” has the strongest influence on office modernization at Son Ha Group. “Equipment” is an indispensable part to ensure the above-mentioned office operations. According to the calculation results of the authors, the factor “office equipment” has an impact of 73.44%, which has a positive relationship with office modernization.

The factor “Office operations” is the second factor affecting office modernization at Son Ha Group. According to the calculation results of the authors, office operations have an impact of 25.67%.

## V. POLICY IMPLICATIONS ONLY

### 5.1.1 . Policy implications of “office equipment”

The factor “equipment” is the most influential factor in office modernization at Son Ha Group. The office needs to be equipped with modern equipment to serve the work process. The factor “equipment” is measured through 03 observed variables, including: You are fully equipped with necessary equipment in the office; The company has provided modern equipment to meet job requirements; Equipment is regularly maintained and upgraded.

Research results show that “office equipment” has a positive impact on office modernization at Son Ha Group with an average value of 3.56 on a 5-point Likert scale. Specific solutions the office needs to implement:

Regularly update modern and advanced equipment. Especially the equipment for operation and work management.

The office should have detailed instructions on how to use and operate the equipment, the article should be equipped with a hotline to be able to connect calls when having problems. In addition, there should be a “Frequently Asked Questions” section on the website so that employees can quickly consult and answer common questions themselves;

Train employees in the application of equipment to solve problems. Avoid the use of outdated, outdated equipment, delay work, instead need to provide and update modern equipment to quickly solve the job.

### 5. 2. Policy implications of “office operations”

The factor “Office operations” is one of the factors that positively affect office modernization at Son Ha Group. That is, when the

Group's office operations are standardized, fully exploited by machines, and office staff must understand the business processes at work. In particular, those business processes must regularly be reviewed and evaluated for smooth work. The factor “Office operations” is measured through 4 observed variables including: Standardized office administrative operations of the company; You know the professional processes at work; Operations are regularly reviewed, evaluated and improved; Business processes are fully exploited by modern machinery. This is the basis for proposing a group of solutions for the “office operations” factor.

Research results show that “office operations” have a positive impact on office modernization at Son Ha Group with an average value of 3.55 on a 5-point Likert scale. Therefore, Son Ha Group needs to focus on the development of professional stages in the office and strengthen specific management software:

Regularly organize training courses to improve office skills for employees to improve communication, informatics, teamwork, management and problem solving skills; The Group needs to constantly improve technology, design consistent business processes; Digitizing work processes to help businesses operate and manage processes quickly and efficiently; Effective employee management through features: personnel information management, recruitment, timekeeping, KPI management, online internal training salary calculation (for example: BASE HRM+ human resource management software).

## VI. LIMITATIONS OF THE RESEARCH

In order to carry out this research , the author has tried to collect and process the most objective information, but the study still has certain limitations such as:

Firstly, in the process of survey collection, although the author has persuaded and supervised the filling process of the respondents, it is still inevitable that the information is dishonest, not really objective compared to the assessment. This caused some of the results of the study to be less than expected.

Second, the study was only conducted on office workers working at Son Ha Group, so this result can only be applied to employees working in the

office. For other subjects in Son Ha and office workers working in other businesses, the results will be different.

Third, due to limited research time and resources, the study only considers the influence of 6 factors on office modernization without taking into account the influence of other factors (culture, etc.). However, it can also be seen as a suggestion for further studies.

Fourth, this is not a new topic, but quantitatively it is a new topic. The authors had difficulty in finding documents such as could not find previous research models, documents that talk about the issue of office modernization.

## VII. CONCLUSION

Through studying the topic “Office modernization at Son Ha Group”, the authors have systematized a number of concepts such as: modernization concept, office concept, office modernization concept. Next, the authors went into deep understanding of the contents of office modernization and showed the importance of office modernization. These are important contents that serve as the theoretical basis for scientific research. Besides, the scientific research paper presents an overview of Son Ha Group. Learn and analyze the office modernization situation of the Group, thereby giving research results based on the factors affecting office modernization. Research results show that there are two factors that strongly affect office modernization at the Group, which are “office equipment” and “office operations”. The above contents serve as a practical basis for scientific research.

Given the current situation, there are still many issues that need to be improved, the scientific research presents the content of the proposed basis, which implies the policy of improving office modernization at Son Ha Group in the period of modern industrialization. From there, a number of policy implications are given that contribute to modernizing the office in a modern way, in line with the current trend.

Thus, the results of scientific research are the initial contribution, which is the basis for Son Ha Group to learn, apply and implement to improve the quality of office modernization of the Group.

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