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Research on Talent Reserve and Incentive Mechanisms in the Housing Industry under the New Era Human Resource Management Framework

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Abstract This paper first constructs a human resource management framework and conducts an in-depth study of talent reserves and incentive mechanisms in the housing industry within this framework. Factor analysis and multiple linear regression models are used as the main research methods in this paper. In the empirical study, the system clustering method is used to cluster the incentive factors. After completing the factor analysis, regression analysis is further used to explore the relationship between the work enthusiasm of talents in the housing industry and the incentive factors. Finally, methods for maximizing the economic benefits of human resource management are proposed. In the factor analysis, the three common factors explain 59.886% of the total variance. Factor 1 explains fair recruitment, skill enhancement, and media promotion; Factor 2 explains project content, reasonable compensation, and online reviews; and Factor 3 explains company type. The work motivation of talent in the housing industry is significantly positively correlated with all seven original variables. Reasonable compensation has the greatest impact on the work motivation of talent in the housing industry.

Index Terms factor analysis, multiple linear regression model, cluster analysis, incentive mechanism, human resource management

I. Introduction

Talent is the foundation for the development and revitalization of a nation. Only by vigorously developing corporate talent teams can we achieve healthy development in modern society [1]. As society develops, enterprises have come to recognize the importance of human resource management. First, corporate talent is a key factor in realizing corporate value [2]. Through human resource management, we can analyze the value generated by the enterprise's past activities. As society continues to progress, today's enterprises are gradually moving toward a modern economic system [3]-[5]. Second, human resource management can comprehensively analyze how much value these factors can bring to the enterprise [6]. In actual work, human resource management can combine a scientific evaluation system to understand the value elements related to the enterprise, thereby effectively determining what value these factors can create for the enterprise [7]-[9]. Therefore, by adapting to the trends of the times and strengthening the talent management system, enterprises can effectively stimulate the work enthusiasm of their talent, cultivate employees' sense of responsibility and mission, and enhance the enterprise's core competitiveness [10]-[13].

If the purpose of human resource management is to unlock human potential, maximize individual initiative and creativity, and promote the achievement of both organizational and personal goals [14], [15], then incentive mechanisms form the foundation of human resource development. Talent reserves and incentive mechanisms are key tools in human resource management [16], [17]. In today's economic landscape, talent competition has intensified. Therefore, a key mission in promoting human resource development is to retain, attract, and develop talent through talent reserves and incentive mechanisms, thereby enhancing the initiative and creativity of human resources [18]-[21]. As the construction industry remains a labor-intensive sector, it faces a series of challenges, including outdated construction methods, rudimentary management practices, and low profitability despite large scale [22], [23]. Particularly, the housing industry, as a key component of China's construction sector, plays a significant role in domestic infrastructure projects within the national economic cycle [24]-[26]. Therefore, developing a high-quality, efficient human resource management framework tailored to the housing industry is a symbol of a housing company's operational capability and strength.

The key to corporate innovation lies in talent. The rapid and leapfrog development of the construction industry requires breaking away from traditional talent cultivation models. Zhang, X, and others innovated the talent cultivation model in the construction industry by establishing a talent cultivation system based on the needs of industry and regional economic development during the undergraduate education stage, thereby stimulating the development of building electrical and intelligent systems and establishing sufficient talent reserves for the construction industry [27]. Johari, S., and Jha, K. N. used non-structured interviews to identify the inhibiting factors hindering construction workers from receiving training. Based on this, they established a talent management framework for the construction industry, which is conducive to addressing the shortage of skilled workers in the construction industry [28]. Lu, L. highlighted the importance of developing information technology-based construction engineering production and management models, emphasizing the need to formulate talent cultivation strategies to achieve dual talent reserves integrating computer science and construction engineering disciplines, thereby promoting the digital transformation of the construction industry [29]. Setyawan, A. and Nelson, A. investigated the influencing factors of human resource management strategies in construction enterprises, finding that management commitment and knowledge management variables have a significant positive impact on talent management strategies, thereby enhancing the competitive advantage of construction enterprises [30].

Addressing issues such as insufficient talent incentives and rigid management systems in the construction industry, researchers have studied talent incentive mechanisms to expand the growth space for talent in the construction industry. Zhang, W., et al. explored the differences in the impact of talent recruitment on regional construction and sustainable growth, finding that talent recruitment models can effectively alter labor market dynamics while stimulating demand in the construction industry and promoting industry growth through economies of scale [31]. Wu, Q, and others analyzed the incentive mechanisms for cultivating scientific and technological talent in construction projects, concluding that both external and internal motivational factors are crucial means to enhance the technological innovation capabilities of construction enterprises [32]. Ghasemi, F, and others integrated surprise incentive mechanisms into human resource management in construction projects, finding that the incentive value created effectively improved employee safety performance, prevented accidents, and promoted safe working conditions on construction sites [33]. Ling, F. Y. Y., et al. proposed human resource management strategies targeting the job satisfaction of construction project managers, combining talent identification systems, career planning, and performance evaluation to incentivize talented project managers to continue developing in the construction industry [34].

This paper first constructs a human resource management framework, comprehensively plans human resources, establishes communication, incentive, and constraint mechanisms for human resources, and builds a human resource value system for the housing industry. Under the human resource management framework, factor analysis and multiple linear regression models are employed to study talent reserves and incentive mechanisms in the housing industry. In the empirical research, systematic clustering analysis is first conducted to cluster the incentive factors for talent in the housing industry, followed by factor analysis of influencing factors. A stepwise regression analysis is then performed to examine the relationship between the work enthusiasm of talent in the housing industry and various incentive factors. Finally, strategies for maximizing the economic benefits of human resources management are proposed, along with efficient planning for human resources development and talent reserves.

II. Building a human resource management framework

II. A. Overall Human Resource Planning and Development

In the context of high market growth rates across the industry, if a company has a lower market share than its competitors, its human resources strategy should be aligned with its policy of expanding market share. This strategy should emphasize recruiting and selecting personnel who have a certain level of work experience and ability and who identify with the company's future development, while accelerating the elimination of unsuitable personnel. The process for formulating its human resources strategy is shown in Figure 1.

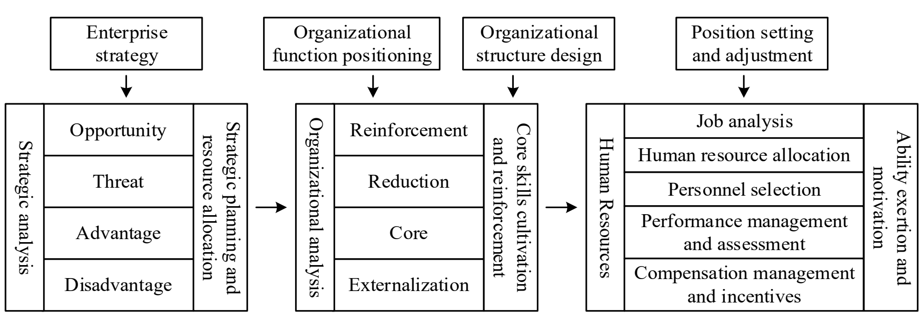

Figure 1: Process of enterprise human resource strategy

II. B.Building human resource communication, incentive, and constraint mechanisms

The formation of the corporate value chain is shown in Figure 2. The corporate value chain includes three links: value creation, value evaluation, and value distribution, which are closely connected, interlinked, and inseparable [35]. The basis for incentives is value evaluation, the means of incentives is value distribution, and the purpose of incentives is to create more benefits.

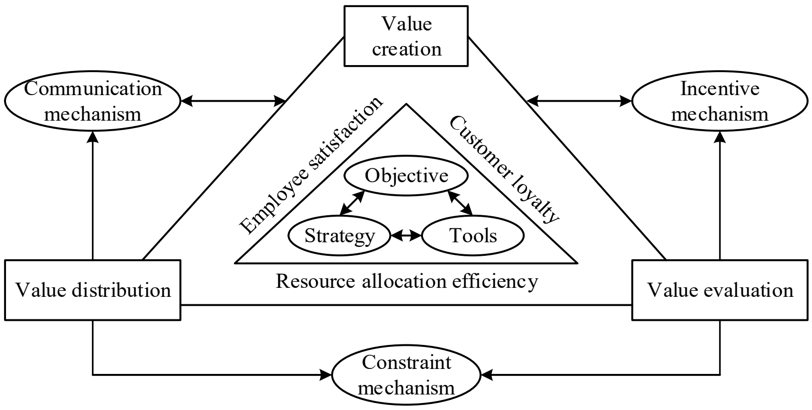

Figure 2: Enterprise value chain formation diagram

II. C.Building Human Resource Value in Enterprises

From another perspective, corporate value creation can be divided into two parts: customer value (external) and employee value (internal), with their relationship illustrated in Figure 3. Companies should aim to establish a learning organization and cultivate knowledge-based employees. In their human resource management strategies, they should focus on establishing fair and objective performance appraisal mechanisms, conducting job analysis and employee role positioning, respecting knowledge and talent, and emphasizing trust and communication to ensure that employees identify with the company's development goals. Only when employee needs are met can high-quality services be provided to customers.

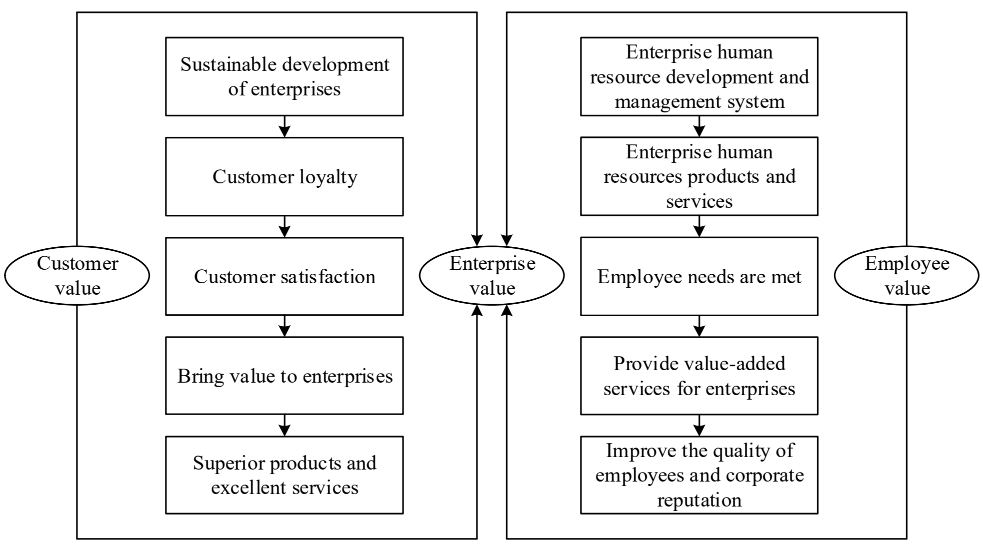

Figure 3: The relationship between customer value and employee value

III. Research on talent reserves and incentive mechanisms

III. A. Factor analysis

Factor analysis represents most of the information of the original variables using a small number of mutually independent factor variables [36]. It primarily utilizes the correlations between variables to convert multiple highly correlated variables into several weakly correlated common factors while ensuring that the original data is fully retained. Variables are grouped based on their correlations, with the aim of achieving strong correlations within groups and weak correlations between groups. These factors are then used to describe the complex relationships among multiple variables. The primary function of this method is to eliminate the influence of correlations between variables on experimental results, effectively avoiding the impact of redundant information on outcomes, thereby making empirical results more scientifically credible. The mathematical model is as follows:

$$\begin{aligned} x_1 &= a_{11}F_1 + a_{12}F_2 + \cdots + a_{1m}F_m \\ x_2 &= a_{21}F_1 + a_{22}F_2 + \cdots + a_{2m}F_m \\ &\vdots \\ x_p &= a_{p1}F_1 + a_{p2}F_2 + \cdots + a_{pm}F_m \end{aligned} \tag{1}$$

The matrix is expressed as:

$$X = AF + a\varepsilon \tag{2}$$

Among them, $x_1, x_2, \cdots, x_p$ is the original variable, $F_1, F_2, \cdots, F_m$ is the factor variable, $m < p$. F is the common factor, A is the factor loading matrix, and a_i is the factor loading.

The specific steps and flowchart of factor analysis are shown in Figure 4:

(1) Process the raw data using SPSS 23.0 to perform KMO and Bartlett tests to determine whether it is suitable for factor analysis.

(2) Use the principal component method to determine common factors.

(3) Use rotation methods to make the factor variables more fully extract the raw data.

(4) Calculate the factor scores.

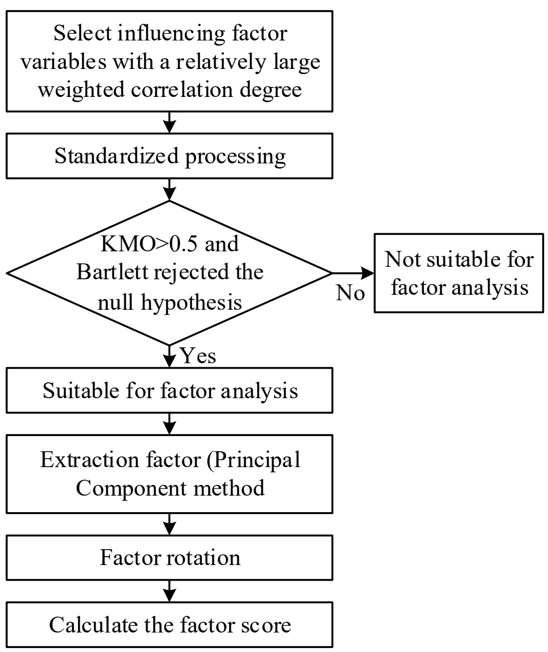

Figure 4: Factor analysis flowchart

III. B. Multiple linear regression model

A multiple linear regression model is defined as the linear relationship between variable Y and independent variable $X_1, X_2, ..., X_k$ [37]. Assuming that there is a linear relationship between dependent variable Y and independent variable $X_1, X_2, ..., X_k$, this function is called a multiple linear regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_k X_k + \mu \tag{3}$$

In this equation, Y represents the dependent variable, $X_i (i = 1, 2, \cdots, k)$ represents the independent variable, $\beta_i (i = 0, 1, 2, \cdots, k)$ represents the regression coefficient, and μ represents the random error.

It is usually assumed that $\mu \sim N(0, \sigma^2)$. The linear regression equation of the expected value of the dependent variable Y and the independent variable $X_1, X_2, \cdots, X_k$ is:

$$E(Y) = \beta_0 + \beta_1 \bar{X}_1 + \beta_2 \bar{X}_2 + \cdots + \beta_k \bar{X}_k \tag{4}$$

This is called a multiple linear regression equation.

For n sets of observations $Y_i, X_{1i}, X_{2i}, ..., X_{ki} (i = 1, 2, \cdots, n)$, the equation set is:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \cdots + \beta_k X_{ki} + \mu_i, (i = 1, 2, \cdots, n) \tag{5}$$

That is:

$$\begin{cases} Y_1 = \beta_0 + \beta_1 X_{11} + \beta_2 X_{21} + \cdots + \beta_k X_{k1} + \mu_1 \\ Y_2 = \beta_0 + \beta_1 X_{12} + \beta_2 X_{22} + \cdots + \beta_k X_{k2} + \mu_2 \\ \cdots\cdots \\ Y_n = \beta_0 + \beta_1 X_{1n} + \beta_2 X_{2n} + \cdots + \beta_k X_{kn} + \mu_n \end{cases} \tag{6}$$

Its matrix form is:

$$\begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_n \end{bmatrix} = \begin{bmatrix} 1 & X_{11} & X_{21} & \cdots & X_{k1} \\ 1 & X_{12} & X_{22} & \cdots & X_{k2} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ 1 & X_{1n} & X_{2n} & \cdots & X_{kn} \end{bmatrix} \begin{bmatrix} \beta_0 \\ \beta_1 \\ \beta_2 \\ \vdots \\ \beta_k \end{bmatrix} + \begin{bmatrix} \mu_1 \\ \mu_2 \\ \vdots \\ \mu_n \end{bmatrix} \tag{7}$$

The equation is:

$$Y = X\beta + \mu \tag{8}$$

In equation (8), Y represents the observation vector, X represents the known matrix, μ represents the random error option, and β_0 represents the unknown number.

IV. Analysis of empirical research results

IV. A. Cluster Analysis

First, cluster analysis is used to perform a simple classification of the correlations between the independent variables. The variables studied in this section are media publicity (F1), enterprise type (F2), project content (F3), online reviews (F4), skill enhancement (F5), fair recruitment (F6), and reasonable compensation (F7).

This study employs the systematic clustering method for cluster analysis [38] to cluster the independent variables, grouping factors with similar behavioral patterns together and separating those with significant differences in performance.

The approximate matrix table calculated using the squared Euclidean distance is shown in Table 1. In Table 1, except for the diagonal values, which are 0, most of the remaining data in the matrix are greater than 10, indicating that there are differences in the performance of the influencing factors. Below, we will further use clustering methods to analyze the relationships between the various factors.

Table 1: Proximity matrix

Case	Matrix file input						
	F1	F2	F3	F4	F5	F6	F7
F1	0.000	14.123	16.823	12.724	9.987	13.962	14.314
F2	14.123	0.000	22.745	18.048	17.934	12.241	17.235
F3	16.823	22.745	0.000	16.723	14.935	26.935	19.423
F4	12.724	18.048	16.723	0.000	12.302	18.756	15.934
F5	9.987	17.934	14.935	12.302	0.000	14.635	14.833
F6	13.962	12.241	26.935	18.756	14.635	0.000	17.763
F7	14.314	17.235	19.423	15.934	14.833	17.763	0.000

The clustering table is shown in Table 2. This table reflects the results of clustering at each stage. The coefficient represents the “clustering coefficient,” and the second and third columns represent the clustering classes.

The values in Table 2 can explain the specific clustering process among the variables. In the first step, variable 1 and variable 5 are clustered with a sample spacing of 9.213, named after variable 1, and then reappear in the third step. Step 2: Aggregate variables 2 and 6 with a sample spacing of 12.321, named after variable 2, and then use it in Step 5. Step 3: Aggregate the new variables 1 and 4 with a sample spacing of 12.842, named after variable 1, and then use it in Step 4. Step 4: Aggregate variable 1 and variable 7 with a sample spacing of 15.068, named after variable 1, and then use it in Step 5. Step 5: Aggregate the new variable 1 and the new variable 2 with a sample spacing of 16.894, named after variable 1, and then use it in Step 6. Step 6: New variable 1 and variable 3 are clustered, with a sample spacing of 20.386, named after variable 1. This concludes the clustering process.

Table 2: Agglomeration schedule

Stage	Cluster combined		Coefficients	Stage cluster first appears		Next stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	1	5	9.213	0	0	3
2	2	6	12.321	0	0	5
3	1	4	12.842	1	0	4
4	1	7	15.068	3	0	5
5	1	2	16.894	4	2	6
6	1	3	20.386	5	0	0

IV. B. Factor analysis of influencing factors

IV. B. 1) KMO and Bartlett's sphericity test

The KMO and Bartlett's sphericity test indicators provide statistical evidence of whether these seven variables have an intrinsic structure, i.e., a latent factor structure. The test results are shown in Table 3. KMO > 0.5, and Bartlett's Sig < 0.05. According to statistical standards, a KMO value greater than 0.5 is suitable for factor analysis. The sphericity test yields a confidence level of 0.000, so the null hypothesis of no correlation is rejected, indicating that the data is suitable for factor analysis.

Table 3: KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.726
Approx. chi-square		76.155
Bartlett's test of sphericity	df	23
	Sig.	0.000

IV. B. 2) Extracting factors

The principal component method was chosen as the factor extraction method because the questionnaire used a scoring method for the options, so the measurement scales for the seven variables were all the same. By default, factors with eigenvalues greater than 1 were extracted. The total variance explained is shown in Table 4.

In the factor variance explanation table, the total variance explanation is 59.886%, and there are a total of 3 common factors, indicating that if 7 variables are not used, but these 3 factors are used instead, 59.886% of the variance of the original 7 variables can be explained. Factor rotation is equivalent to redistributing the same cumulative contribution rate among the 3 common factors.

Table 4: Total variance interpretation

	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	1.968	28.114	28.114	1.968	28.114	28.114	1.725	23.204	24.398
2	1.116	15.943	44.057	1.116	15.943	44.057	1.422	20.065	44.463
3	1.108	15.829	59.886	1.108	15.829	59.886	1.096	15.423	59.886
4	0.792	11.314	71.200						
5	0.783	11.186	82.386						
6	0.645	9.214	91.600						
7	0.588	8.400	100.000						

IV. B. 3) Principal component analysis

After determining the number of principal components to be extracted, it is necessary to further analyze the relationship between each variable and the principal components to obtain the principal component factor loading matrix, as shown in Table 5.

Table 5: Component matrix

	Component		
	1	2	3
Ability improvement	0.725	-0.322	-0.214
Media propaganda	0.673		
Internet review	0.605	0.186	
Fair recruit	0.534	-0.603	0.204
Project content	0.316	0.599	0.452
Rational payment	0.467	0.536	-0.123
Business's type		-0.168	0.853

The factor loading matrix in Table 5 does not clearly reflect the relationship between the principal components and the original variables. The correlation coefficients overlap between factors, and the values make it difficult to distinguish the degree of correlation between the original variables and the principal components. Therefore, it is necessary to perform factor rotation on the data in the factor loading matrix to obtain a new rotated component matrix, as shown in Table 6.

Three principal component factors were extracted and integrated from the seven original variables: Factor 1 primarily explains the three original variables of fair recruitment, skill enhancement, and media promotion in internship programs. Factor 2 primarily explains the three original variables of program content, reasonable compensation, and online reviews in internship programs. Factor 3 primarily explains the single original variable of the type of company in the program.

Table 6: Rotated component matrix

	Component		
	1	2	3
Ability improvement	0.806	0.112	-0.159
Fair recruit	0.762	-0.165	0.322
Media propaganda	0.568	0.356	
Project content		0.758	0.391
Rational payment	0.161	0.659	-0.176
Internet review	0.423	0.487	-0.108
Business's type			0.912

IV. C. Regression Analysis

IV. C. 1) Correlation Analysis

Before conducting regression analysis, a study of the correlation relationship is necessary, as regression analysis cannot be performed without a correlation relationship. In other words, the existence of a correlation relationship is a prerequisite for regression analysis, and without it, regression analysis is not possible. Therefore, before conducting regression analysis, it is necessary to study and analyze the correlation relationship to ensure the accuracy and reliability of the data. Therefore, the first step is to analyze the correlation between work motivation (Y) and each of the following factors: media promotion (Factor 1), company type (Factor 2), project content (Factor 3), online reviews (Factor 4), skill development (Factor 5), fair hiring practices (Factor 6), and reasonable compensation (Factor 7). The strength of the relationship between variables is measured using the correlation coefficient as a reference indicator. The correlation coefficient ranges from -1 to 1, with values less than 0 indicating a negative correlation and values greater than 0 indicating a positive correlation. The closer the absolute value of the correlation coefficient between two variables is to 1, the stronger the linear relationship between them. This study utilized SPSS 25.0 software and employed Pearson's correlation coefficient method to test the correlations among work motivation (Y), media promotion (Factor 1), company type (Factor 2), project content (Factor 3), online evaluation (Factor 4), skill enhancement (Factor 5), fair hiring (Factor 6), and reasonable compensation (Factor 7), as detailed in Table 7. Using SPSS 25.0, the correlation coefficients between media promotion, enterprise type, project content, online evaluation, skill enhancement, fair recruitment, reasonable compensation, and work motivation are shown in Table 7. Work motivation is significantly positively correlated with media promotion, enterprise type, project content, online evaluation, skill enhancement, fair recruitment, and reasonable compensation. Reasonable compensation is significantly positively correlated with media promotion, enterprise type, online evaluation, and fair recruitment. Fair hiring is significantly positively correlated with media promotion, company type, and online reviews. Skill enhancement is significantly positively correlated with project content. Online reviews are significantly positively correlated with media promotion.

Table 7: The correlation analysis of motivation factors and working initiative

	F1	F2	F3	F4	F5	F6	F7	Y
F1	1							
F2	0.206	1						
F3	0.102	0.132	1					
F4	0.586**	0.236	0.241	1				
F5	0.362	0.284	0.547**	0.267	1			
F6	0.521**	0.426**	0.186	0.503**	0.214	1		
F7	0.432**	0.526**	0.203	0.468**	0.234	0.527**	1	
Y	0.496**	0.459**	0.421**	0.529**	0.618**	0.575**	0.692**	1

IV. C. 2) Stepwise regression analysis

Regression analysis (linear regression analysis) studies the relationship between variables. Essentially, regression analysis examines the influence of independent variables on dependent variables. However, a correlation does not necessarily imply a regression relationship. This study primarily analyzes the impact of seven dimensions of factors influencing work motivation in the housing industry on work enthusiasm. This scenario involves one dependent variable and multiple independent variables, so stepwise regression analysis is employed.

Correlation analysis typically describes the degree of closeness between variables, while regression analysis is required to specifically describe the causal relationships between variables, including the direction and extent of influence, i.e., the quantitative interdependence between variables. The following regression analysis will examine the impact of media promotion, company type, project content, online reviews, skill development, fair hiring practices, and reasonable compensation on work motivation. Work motivation will be treated as the dependent variable, while media promotion, company type, project content, online reviews, skill development, fair hiring practices, and reasonable compensation will serve as independent variables in a stepwise regression analysis. The idea behind stepwise regression is to introduce variables one by one. Each time a variable is introduced, it must be tested individually. If a previously existing variable becomes insignificant due to the introduction of subsequent variables, it should be removed, leaving only significant variables. This process is repeated until no significant variables are introduced into the equation and no insignificant variables are removed from the regression equation.

This study employed SPSS 25.0 software for stepwise regression analysis, with the overall regression results presented in Table 8. Based on the regression coefficients and significance test results, it was found that the reasonable compensation factor was the first to enter the model, indicating that reasonable compensation has a greater impact on the work motivation of talent in the housing industry than other incentive factors. Finally, we obtained the standard regression equation: Work Motivation = 0.356 × Reasonable Compensation + 0.312 × Fair Recruitment + 0.245 × Skill Development + 0.224 × Project Content + 0.238 × Company Type + 0.206 × Online Reviews + 0.213 × Media Promotion.

Table 8: The regression analysis of motivation factors and working initiative

Model		Unnormalized coefficient		Normalized coefficient	t	sig	Common linear statistics	
		B	SE	Beta			Tolerance	VIF
1	Constant	1.898	0.129		18.625	0.000		
	F7	0.453	0.045	0.685	15.452	0.000	1.000	1.000
2	Constant	1.153	0.146		11.652	0.000		
	F7	0.364	0.041	0.586	14.035	0.000	0.935	1.092
	F6	0.375	0.042	0.527	13.363	0.000	0.935	1.092
3	Constant	0.793	0.153			0.000		
	F7	0.342	0.038	0.529	13.422	0.000	0.932	1.105
	F6	0.306	0.037	0.487	12.519	0.000	0.895	1.163
	F5	0.211	0.035	0.395	10.563	0.000	0.946	1.106
4	Constant	0.326	0.148			0.000		
	F7	0.257	0.034	0.472	12.369	0.000	0.826	1.385
	F6	0.296	0.034	0.433	12.034	0.000	0.882	1.203

	F5	0.215	0.032	0.338	9.055	0.000	0.945	1.112
	F3	0.258	0.041	0.302	8.893	0.000	0.826	1.326
5	Constant	0.311	0.137			0.000		
	F7	0.203	0.029	0.426	11.639	0.000	0.709	1.423
	F6	0.241	0.028	0.385	11.265	0.000	0.792	1.362
	F5	0.193	0.025	0.302	8.345	0.000	0.826	1.269
	F3	0.181	0.026	0.264	8.526	0.000	0.792	1.458
	F2	0.234	0.023	0.285	7.536	0.000	0.758	1.512
6	Constant	0.274	0.131			0.018		
	F7	0.186	0.025	0.392	11.243	0.000	0.694	1.526
	F6	0.176	0.024	0.362	10.596	0.000	0.754	1.485
	F5	0.232	0.022	0.286	7.068	0.000	0.748	1.306
	F3	0.204	0.021	0.251	7.384	0.000	0.735	1.486
	F2	0.193	0.025	0.262	7.032	0.000	0.704	1.596
	F4	0.203	0.022	0.243	6.485	0.000	0.689	1.618
7	Constant	-0.182	0.125		-1.623	0.152		
	F7	0.203	0.022	0.356	10.634	0.000	0.682	1.653
	F6	0.211	0.024	0.312	9.355	0.000	0.712	1.526
	F5	0.198	0.020	0.245	6.718	0.000	0.748	1.462
	F3	0.274	0.028	0.224	7.065	0.000	0.708	1.594
	F2	0.212	0.023	0.238	6.593	0.000	0.692	1.625
	F4	0.193	0.022	0.206	6.053	0.000	0.662	1.684
	F1	0.216	0.024	0.213	6.517	0.000	0.627	1.692

V. Maximizing the economic benefits of human resource management

In the process of human resource management, the achievement of enterprise and institutional goals requires a group of high-quality employees as a foundation to provide support, thereby enabling enterprises and institutions to gain unique advantages in their development. Human resource management departments must clearly define the development goals of enterprises and institutions in order to maximize the economic benefits of human resource management.

V. A. Develop effective human resource development plans

The formulation of objectives refers to clearly defining the future direction of enterprise development and establishing a professional talent pool to support future growth. Specifically, this involves conducting planned training and development programs for employees based on current organizational needs, with tailored training programs designed to address the specific characteristics of each position.

At different stages of their careers, employees should be provided with targeted development programs. Additionally, organizational managers must dynamically adjust human resources in a scientific and reasonable manner based on the specific circumstances of the organization's operational status, talent needs, and development targets, thereby achieving the optimal utilization of talent resources.

V. B. Focus on talent reserves

Managers of enterprises and public institutions must proactively build up a talent pool in advance. Only by doing so can they effectively prevent the occurrence of job vacancies following employee turnover. Managers must continuously update their personnel management philosophy to achieve the optimal state where talent is both utilized and retained by the organization.

Efforts should be made to explore personnel mechanisms in depth and establish a unique talent information database for enterprises and institutions. This will enable them to contact personnel in various positions in a timely manner and utilize part-time employees to better address the issue of short-term personnel shortages encountered by enterprises and institutions at different stages of development.

VI. Conclusion

This paper constructs a human resource management framework to explore talent reserves and incentive mechanisms in the housing industry. Factor analysis and multiple linear regression models are used to study talent reserves and incentive mechanisms in the housing industry, and empirical research is conducted to identify ways to improve talent reserves and incentive mechanisms in the housing industry.

Variables 1, 5, 4, 7, 2, and 3 cluster together, with sample intervals of 9.213, 12.842, 15.068, 16.894, and 20.386, respectively. All are named after Variable 1. Variables 2 and 6 cluster together, with a sample interval of 12.321, and are named after Variable 2. The total variance explained is 59.886%, with three common factors identified. Factor 1 primarily explains the variables of fair recruitment, skill enhancement, and media promotion. Factor 2 primarily explains the variables of project content, reasonable compensation, and online reviews. Factor 3 primarily explains the variable of company type. There is a significant positive correlation between work enthusiasm in the housing industry and media promotion, company type, project content, online reviews, skill enhancement, fair hiring, and reasonable compensation. The regression equation between work motivation and incentive factors is: Work Motivation = 0.356 × Fair Compensation + 0.312 × Fair Recruitment + 0.245 × Skill Development + 0.224 × Project Content + 0.238 × Company Type + 0.206 × Online Reviews + 0.213 × Media Promotion.

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