

# Effects of Human Resource Management Practice on Business Model Innovation

Ya Ran

School of Economics and Management, Chongqing University of Posts and Telecommunications, Chongqing 400065, China

## Abstract

**This study explores the impact of human resource management practice on business model innovation based on two factor theory. Based on 286 sample data, this study explore the relationship between human resource management practice, each dimension of human resource management practice and business model innovation. The results show that: hygiene human resource management practice and its dimensions significantly promote business model innovation; motivation human resource management practice and its dimensions significantly promote business model innovation.**

## Keywords

**Hygiene human resource management practice, motivation human resource management practice, business model innovation.**

## 1. Introduction

Business model innovation is considered to be a key source of continuous value creation for enterprises [1]. Compared with product or process innovation, business model innovation has higher and more sustainable returns [2]. Many studies have shown that business model innovation has a significant driving effect on corporate performance [3-6]. However, the efficiency of business model innovation by enterprises is not high at present, and researchers' research on the factors affecting business model innovation is also quite scarce. Nowadays, the importance of business model innovation is becoming more and more important. Exploring the factors that influence business model innovation has strong theoretical and practical significance.

Human resource management practice is an important management policy and management activity that promotes innovation at all levels of the enterprise [7-9] and improves corporate performance [10]. However, no research has explored the impact of human resource management practices on business model innovation. Therefore, this study focuses on the impact of human resource management practice on business model innovation based on two factor theory, and how to implement human resource management practice to promote business model innovation.

## 2. Theory and Hypotheses

Earlier research found that human resource management practices play an important role in cultivating individual creative thinking and supporting corporate innovation activities [11]. In order to better understand the human resource management practice under the Chinese scenario, Zhang Yan et al. [12] based on the two factor theory and combined with the Chinese scenario, divided the human resource management practice into two types: hygiene human resource practice and motivation human resource practice. Hygiene human resource practice provide employees with basic guarantees in terms of work and life, mainly including

employee benefits, employee compensation, employee care plan, and so on. Motivation human resource practice focus on the personal growth and development of employees, including employee training and career development plan.

### **2.1. Hygiene Human Resource Management Practice and Business Model Innovation**

Companies that implement hygiene human resource practice provide their employees with competitive compensation and benefits and care for their employees. Providing competitive compensation and benefits can firstly provide the necessary conditions to meet the basic physiological needs of employees, and then enhance employees' work initiative and voluntary innovation; secondly, it can effectively attract and motivate employees and make them full of passion and vitality in work, so it is easier to capture opportunities and entry points for business model innovation. Employee care plans promote the formation of a good relationship between all levels of the organization, which is conducive to the knowledge exchange and experience sharing among employees, thus conducive to the organization to keep an open mind and promote the generation of innovative business model ideas.

In organizations which are full of concern and provide competitive compensation and benefits, employees have a strong sense of belonging, responsibility, and security, which will encourage employees to devote themselves to work. Employees' dedication to work is conducive to improving the workflow and work content, which can help enterprises identify opportunities to improve and innovate the existing business model, and promote business model innovation.

In summary, this study proposes the following assumption.

Hypothesis 1 (H1). Hygiene human resource management practice will positively predict business model innovation.

Hypothesis 1a (H1a). Employee compensation will positively predict business model innovation.

Hypothesis 1b (H1b). Employee benefits will positively predict business model innovation.

Hypothesis 1c (H1c). Employee care plan will positively predict business model innovation.

### **2.2. Motivation Human Resource Management Practice and Business Model Innovation**

Companies that implement motivation human resource practice focus on employee training and career planning for their employees. Employee training has always been regarded as a direct and effective way for enterprises to improve the knowledge and skills of existing employees, and improve work efficiency of all employees and enterprises, and cultivate and develop talents needed by enterprises. Training can significantly improve the motivation of employees [13], and the importance that enterprises attach to training has a positive predictive effect on organizational innovation. Wang Zhaohui's research shows that extensive training promotes exploratory innovation by companies [14], thereby increasing the probability of business model innovation.

Simultaneously, Career development plan determines challenging and achievable goals for employees, which can internally motivate employees, and allow employees to think and be creative at work, and thus help companies improve existing business models. Thomas et al. pointed out that career development plan for technical talents can effectively promote technological innovation activities of enterprise [15].

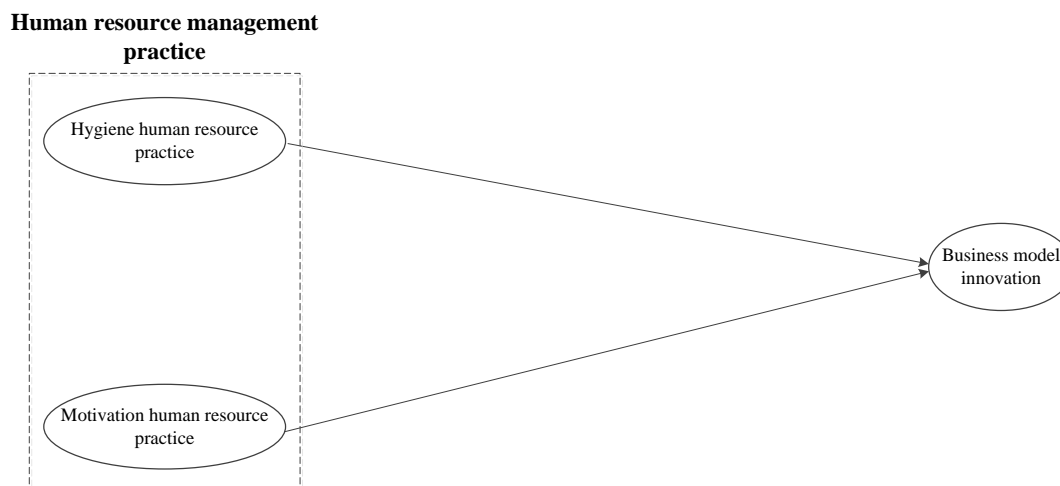
In summary, this study proposes the following assumption.

Hypothesis 2 (H2). Motivation human resource management practice will positively predict business model innovation.

Hypothesis 2a (H2a). Employee training will positively predict business model innovation.

Hypothesis 2b (H2b). Career development plan will positively predict business model innovation.

In summary, the conceptual model of this study is shown in Figure 1.



**Figure 1.** Conceptual model

### 3. Methods

#### 3.1. Sample

This study mainly collects data through two ways of market questionnaire service channels and the author's independent collection. A total of 420 questionnaires were collected. In order to ensure the stability of human resource management practices of the enterprise, the questionnaires with an enterprise size of 50 or less and the establishment period of the enterprise under 1 year were excluded, and invalid questionnaires were excluded from the remaining questionnaires. A total of 286 valid questionnaires were obtained. The effective questionnaire recovery rate was 68.10%.

#### 3.2. Measures

This study used the mature scales that have been publicly used in the domestic literature to ensure the reliability of the measurement tools, and the mature scales were appropriately modified according to the characteristics of this study. The measurement scales covered in this study are all the five-point Likert scale, with 1 representing a very disagreement and 5 representing a strong agreement.

(1) Human resource management practice. Human resource management practice was tapped with the scale developed by zhang yan et al. [12], and it was modified according to the interview and survey results. Finally, the human resource management practice scale of this study was obtained, with a total of 15 items. Among them, hygiene human resource management practice includes three dimensions of employee compensation, employee training and employee care plan, with a total of 8 items; motivation human resource management practice includes two dimensions of employee training and career development plan, with a total of 7 items.

(2) Business model innovation. Business model innovation was tapped with the novelty-centered scale developed by Zott and Amit[16]. The scale was modified according to the characteristics of this study and the final scale contains six items.

## 4. Results

### 4.1. Reliability and Validity Analysis

#### 4.1.1. Reliability Analysis

In this study, SPSS21.0 is used for reliability test. The Cronbach's Alpha coefficient (shown in Table 2) of each variable is greater than 0.8, indicating that the factors of scales have good consistency and the scale reliability is good.

#### 4.1.2. Validity Analysis

This study used Amos21.0 to perform confirmatory factor analysis (CFA). It can be seen from table 1 that  $\chi^2/df$  of each variable is less than 5, RMSEA is less than 0.12, GFI, AGFI, CFI and IFI are more than 0.89, and PNFI is more than 0.5. Therefore, the fitting degree of each dimension model is acceptable (shown in Table 2). In addition, the load coefficients of each factor are significant (shown in Table 2), indicating that each variable has good aggregation validity.

#### 4.1.3. Common Method Deviation Test

In this study, harman single factor test is used to test common method deviation. Exploratory factor analysis results of all unrotated variables showed that 4 factors (eigenvalues greater than 1) could be extracted, accounting for 59.625% of the total variance. The variance interpretation of the first factor was 40.066%, not exceeding 50% of the recommended value, indicating that there was no serious common method deviation in the measurement in this study.

**Table 1.** validity analysis of each variable

	$\chi^2/df$	GFI	AGFI	CFI	IFI	PNFI	RMSEA
hygiene human resource practice	1.714	0.975	0.947	0.987	0.987	0.588	0.050
motivation human resource practice	1.582	0.979	0.956	0.989	0.989	0.601	0.045
business model innovation	4.904	0.953	0.890	0.932	0.933	0.550	0.117

### 4.2. Descriptive Statistics and Correlation Analysis of Variables

In order to reveal the strength of the statistical relationship between variables, this study used SPSS21.0 to statistically analyze the mean, standard deviation and correlation coefficient of each variable (shown in Table 3). The results show that there is a significant correlation between the variables.

**Table 2.** reliability and validity analysis (N=286)

Variable	Item	UNstd	t-value	P	Std	Cronbach's Alpha coefficient
hygiene human resource practice	HHRP1	1.000			0.579	0.866
	HHRP2	1.105	9.182	***	0.699	
	HHRP3	1.092	9.182	***	0.726	
	HHRP4	0.850	8.015	***	0.613	
	HHRP5	1.133	8.772	***	0.714	
	HHRP6	1.054	8.663	***	0.701	
	HHRP7	0.997	8.807	***	0.701	
	HHRP8	0.880	8.252	***	0.637	
motivation human resource practice	MHRP1	1.000			0.733	0.842
	MHRP2	1.082	12.407	***	0.775	
	MHRP3	1.146	12.115	***	0.773	
	MHRP4	0.967	10.799	***	0.695	
	MHRP5	0.690	7.546	***	0.492	
	MHRP6	0.756	8.456	***	0.556	
	MHRP7	0.807	8.326	***	0.545	
business model innovation	B1	1.000			0.575	0.815
	B2	1.422	9.064	***	0.767	
	B3	1.1733	8.291	***	0.663	
	B4	1.237	8.405	***	0.708	
	B5	1.143	8.180	***	0.656	
	B6	1.0048	6.930	***	0.554	

**Table 3.** Descriptive statistics and correlation coefficients of variables

	Mean	SD	1	2	3
1 hygiene human resource practice practicepractice	2.972	0.780	1		
2 motivation human resource practice	3.191	0.740	0.657**	1	
3 business model innovation	3.278	0.727	0.646**	0.650**	1

Note: The value in the lower triangle of the matrix is the correlation coefficient; \*\*P< 0.01, \* P< 0.05.

### 4.3. Hypothesis Testing

This study used regression analysis to test the relationship between human resource management practice and business model innovation in SPSS21.0 statistical analysis software (shown in table 4).

(1) Test of hypothesis 1. This study established model 1 to test the relationship between independent variable (hygiene human resource management practice) and dependent variable (business model innovation). The regression results showed that the regression coefficient of hygiene human resource management practice was 0.602 ( $P < 0.001$ ), reaching a significant level. Hypothesis 1 was supported. Hygiene human resource management practice can significantly promote business model innovation.

(2) Test of hypothesis 1a. This study established model 1a to test the relationship between independent variable (employee compensation) and dependent variable (business model innovation). The regression results showed that the regression coefficient of employee compensation was 0.520 ( $P < 0.001$ ), reaching a significant level. Hypothesis 1a was supported. Employee compensation can significantly promote business model innovation.

(3) Test of hypothesis 1b. This study established model 1b to test the relationship between independent variable (employee benefits) and dependent variable (business model innovation). The regression results showed that the regression coefficient of employee benefits was 0.367 ( $P < 0.001$ ), reaching a significant level. Hypothesis 1b was supported. Employee benefits can significantly promote business model innovation.

(4) Test of hypothesis 1c. This study established model 1c to test the relationship between independent variable (employee care plan) and dependent variable (business model innovation). The regression results showed that the regression coefficient of employee care plan was 0.419 ( $P < 0.001$ ), reaching a significant level. Hypothesis 1c was supported. Employee care plan can significantly promote business model innovation.

(5) Test of hypothesis 2. This study established model 2 to test the relationship between independent variable (motivation human resource management practice) and dependent variable (business model innovation). The regression results showed that the regression coefficient of motivation human resource management practice was 0.639 ( $P < 0.001$ ), reaching a significant level. Hypothesis 2 was supported. Motivation human resource management practice can significantly promote business model innovation.

(6) Test of hypothesis 2a. This study established model 2a to test the relationship between independent variable (employee training) and dependent variable (business model innovation). The regression results showed that the regression coefficient of employee training was 0.497 ( $P < 0.001$ ), reaching a significant level. Hypothesis 2a was supported. Employee training can significantly promote business model innovation.

(7) Test of hypothesis 2b. This study established model 2b to test the relationship between independent variable (career development plan) and dependent variable (business model innovation). The regression results showed that the regression coefficient of career development plan was 0.506 ( $P < 0.001$ ), reaching a significant level. Hypothesis 2b was supported. Career development plan can significantly promote business model innovation.

**Table 4.** Results of regression analyses(N=286)

	Model 1	Model 1a	Model 1b	Model 1c	Model 2	Model 2a	Model 2b
Dependent variable							
business model innovation							
hygiene human resource practice	0.602***						
employee compensation		0.520***					
employee benefits			0.367***				
employee care plan				0.419***			
motivation human resource practice					0.639***		
employee training						0.497***	
career development plan							506***
F	203.484***	190.011***	87.163***	107.793***	208.086***	143.280***	137.905***
R <sup>2</sup>	0.417	0.401	0.235	0.275	0.423	0.335	0.327
ΔR <sup>2</sup>	0.415***	0.399***	0.232***	0.273***	0.421***	0.333***	0.324***

Note: the values in the table are non-standardized coefficient of association;\*p <0 .05, \*\*p<0 .01, \*\*\*p<0 .001.

## 5. Discussion

This study explores the relationship between hygiene human resource management practice and business model innovation, and the relationship between motivation human resource management practice and business model innovation. Empirical research shows that :hygiene human resource management practice and its dimensions significantly promote business model innovation; motivation human resource management practice and its dimensions significantly promote business model innovation.

The theoretical contributions of this study are as follows :(1) it fills the gap in the research on the relationship between human resource management practice and business model innovation, and deeply discusses the influence of two-factor theory-based human resource management practice on business model innovation; (2) it enriches and expands the empirical research on the pre-dependent variables of business model innovation.

The management enlightenment of this study is: enterprises should actively implement hygiene human resource management practice and motivation human resource management practice, which can not only improve employee satisfaction, but also positively promote business model innovation.

The shortcomings of this study are as follows :(1) the data reported by the author is mainly self-reported, which may cause some homologous errors;(2) empirical studies are mainly conducted with cross-sectional data. In the future, vertical research may be attempted, such as research based on the follow-up survey of the impact of human resource management practices and changes in business models.

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