

# The Human Resource Management Model of Digital Media Major in Public Universities under Liaoning Province

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## Abstract

The objectives of this research were: (1) To examine the components and indicators of human resource management of digital media major in public universities under Liaoning Province; (2) To propose the model of human resource management of digital media major in public universities under Liaoning Province; and (3) To propose guidelines for implementation the human resource management model of digital media major in public universities under Liaoning Province.

The research was a mixed methodology research. The population is consisted of administrators and teachers of digital media major in universities in Liaoning province, total 1,350 people. The sample was 294 administrators and instructors. The researcher determined sample size with G\*Power, and obtained by the stratified random sampling technique. The 7 key informants were mainly presidents, deans, head of department and discipline leaders of public universities with digital media major in Liaoning Province, and were obtained by purposive sampling method. The instruments used for data collection were semi-structured interview form, five-point rating scale questionnaires and Focus Group Discussion form. The response rate of questionnaires was 100%. Statistics used for data analysis included frequency, percentage, mean, Standard Deviation, Confirmatory Factor Analysis (CFA), and content analysis was employed.

The research findings were: (1) There were five components and 25 key indicators of human resource management of digital media major in public universities under Liaoning Province, which consisted of Incentive Mechanism, Performance Management, Team Building, Development Training and Resource Environment; (2) Model validation of five components were founded and model fit with empirical data for all indicators. And (3) There were total 19 guidelines of human resource management model of digital media major in public universities under Liaoning Province..

**Keywords:** Human Resource Management; Human Resource Management Model; Digital Media Major; Public Universities under Liaoning Province.

## Introduction

Education is forever an ancient yet ever-new theme. It permeates the entire course of human reproduction and social progress, constantly facing new challenges brought about by the changes of the times. In the continuous adaptation to new environments, education steadfastly upholds the sacred mission of "passing on civilization," giving it a luster that combines weight and vitality (Li Youyi, Zhao Shuming & Liu Hong, 2001:128-139). Higher education and its implementing unit—the public university, as the upper terminal of the education system, inevitably undergo more environmental shocks and transformative pressures caused by economic, technological, and cultural development. Undeniably, in recent years, the macro planning of the education sector, bold attempts by higher education institutions, and the continuous development of educational management theories have collectively propelled the gradual deepening of China's higher education reform. However, it should be recognized that as higher education reform enters the micro level, it has just entered the most challenging stage. The key to the success or failure of the entire higher education reform lies in whether it can grasp the epochal connotation and laws of public university management, explore the substantive approaches and measures of its management mechanism reform, and promote the maximization of its own functions and social value (Wang Yugang & Wei Qiu, 2002:115-116). This is the ultimate goal of a series of higher education reforms. However, it is also the most difficult aspect as it directly involves the final carrier of intellectual resources in public universities—people, especially university teachers. The personnel allocation system reform, with its core principles of "job establishment, competition for positions" and "salary determined by positions, changing with positions," has had a significant impact on personnel reforms in Chinese universities (Gong Xiangming, 2001:82-83). Therefore, the rational arrangement of the human resources development mechanism for public university teachers is not only a decisive battle for higher education reform but also an inevitable path for the amplification of functions in higher education under new historical conditions.

This paper summarizes the problems existing in human resource management model of digital media major in public universities under Liaoning Province, and analyzes the reasons for the problems in combination with relevant management theories. Propose specific improvement countermeasures for each part of human resource management, and present specific work in the improvement countermeasures. The process makes the digital level of human resource management model of digital media major in public universities under Liaoning Province more intuitive, and provides a reference path for the optimization and improvement of digital media major management.

## Research Objectives

1. To examine the components and indicators of human resource management of digital media major in public universities under Liaoning Province.
2. To propose the model of human resource management of digital media major in public universities under Liaoning Province.
3. To propose guidelines for implementation the human resource management model of digital media major in public universities under Liaoning Province.

## **Research Methodology**

### **1. Population and sample**

Population consisted of 1,350 who were teachers and administrators .They came to 12 public universities of human resource management in Liaoning province, which are classified according to scale and professional skills of universities. The sample size was 294 teachers and administrators with a stratified sampling technique. The key informants consisted of 7, who are professors, experienced teachers and some experienced managers drawn from public universities with digital media major in Liaoning Province. The key informants were 9 experts in a focus group discussion to guide and confirm the model.

### **2. Research instruments**

The researcher used a three-part questionnaire; Part 1: Demographic indicators, general information (5 items), and Part 2: indicators on human resource management of digital media major in public universities under Liaoning province (five-point rating scale) (83 items). Part III: Recommendations and Additional Comments.

The instrument starts from step (1) as a questionnaire. Content validity and reliability were used to evaluate the quality of the questionnaire. For content validity, it was checked by 5 experts and analyzed using index item objective congruence (IOC), and the item value between 0.60-1.00. For reliability, Cronbach's Alpha was used for analysis at 0.969.

### **3. Data collection**

Data collection is done by researcher, make contact with key informants and identify themselves. Send the questionnaire by email. The steps of data collection are as follows:

Step 1: Applied to the BTU Faculty of Education for permission to continue research and to conduct research in accordance with the directed procedures and research plan.

Step 2: The sample has been directly informed of its content scope and research objectives, and has received a formal permission letter from the university to the sample, allowing them to conduct and collect data from faculty in accordance with a letter of approval issued by the relevant authority.

Step 3: To distribute questionnaires online at the same time.

### **4.Data analysis**

The data of demographic indicators were analyzed by descriptive statistics; frequency, and percentage. The indicators of effectiveness management were analyzed by descriptive statistics; mean, Standard Deviation (S.D.). The components of human resource management were analyzed by Confirmatory Factor Analysis (CFA).

## **Research Results**

### **Section 1: Result of Content Analysis for Research Objective 1**

The researcher reviews literature found 62 indicators and there were 82 indicators from the interview of key informants. The researcher was to combined the content analysis of the literature review and the analysis of semi-structured interviews with experts, a total of 92 indicators are identified. After the expert IOC certification, indicators with a score of less than 0.6 were removed, Finally, with 5 components and 83 indicators, and 83 indicators will be used for questionnaire distribution. And prepared a research instrument as a five-point rating scale questionnaire.

**Section 2 : Result of Data Analysis for Research Objective 2**

According to statistics, there are about 1,350 digital media major’s teachers and administrators in 12 public universities of Liaoning Province. In this survey, researcher distributed 294 questionnaires and recovered 294 questionnaires as the final questionnaire results.

**Part I: Result of Data Analysis on Questionnaire: Demographic Information**

By analyzing the distribution and structural characteristics of public universities in Liaoning Province, the researcher selected 294 personnel from public universities in Liaoning Province to conduct a questionnaire survey including 153 males (52.04%), 89 people aged 35-44 accounted for 30.27%, 109 had master's degrees, accounting for 37.07%, 84 people have 6-10 years of working experience, accounted for 28.57%, 131 professors accounted for 44.56%.

**Part II Result of Data Analysis on Questionnaire: Confirmatory Factor Analysis**

Table 1 Results of the coefficient of variation table of the questionnaire

indicators	Arithmetic Mean ( $\bar{x}$ )	Standard Deviation (S.D.)	Skewness (Sk)	Kurtosis (Ku)	Coefficient of Variation (CV)	Level
IM1	3.53	1.10	-0.34	-0.60	31.15	High
IM2	4.21	0.69	-0.86	1.41	16.48	Highest
IM3	3.61	1.01	-0.40	-0.28	27.82	High
IM4	3.66	0.99	-0.14	-0.86	27.08	High
IM5	3.51	1.05	-0.49	-0.23	30.03	High
IM6	3.76	1.04	-0.43	-0.60	27.57	High
IM7	3.75	1.04	-0.48	-0.56	27.72	High
IM8	3.77	0.95	-0.36	-0.57	25.26	High
IM9	3.61	1.08	-0.38	-0.61	29.98	High
IM10	3.53	1.10	-0.34	-0.60	31.15	High
IM11	4.21	0.69	-0.86	1.41	16.48	Highest
IM12	3.61	1.01	-0.40	-0.28	27.82	High
IM13	3.66	0.99	-0.14	-0.86	27.08	High
IM14	3.51	1.05	-0.49	-0.23	30.03	High
IM15	3.76	1.04	-0.43	-0.60	27.57	High
IM16	3.75	1.04	-0.48	-0.56	27.72	High
PM1	3.50	1.02	-0.26	-0.52	29.26	High
PM2	3.50	1.08	-0.27	-0.63	30.72	High
PM3	3.47	1.04	-0.15	-0.76	30.01	High
PM4	3.63	1.09	-0.35	-0.69	29.92	High
PM5	3.53	0.98	-0.04	-0.65	27.82	High
PM6	3.64	1.03	-0.29	-0.67	28.30	High
PM7	3.45	1.10	-0.21	-0.72	31.81	High
PM8	3.69	0.92	-0.17	-0.45	24.88	High
PM9	3.71	0.95	-0.10	-0.99	25.55	High
PM10	3.62	1.04	-0.27	-0.66	28.79	High
PM11	3.53	1.08	-0.28	-0.51	30.62	High
PM12	3.66	0.92	0.00	-0.81	25.27	High

indicators	Arithmetic Mean ( $\bar{x}$ )	Standard Deviation (S.D.)	Skewness (Sk)	Kurtosis (Ku)	Coefficient of Variation (CV)	Level
PM13	3.75	1.00	-0.30	-0.80	26.55	High
PM14	3.68	0.98	-0.21	-0.71	26.74	High
PM15	3.44	1.08	-0.18	-0.64	31.38	High
TB1	3.71	0.93	-0.25	-0.79	25.17	High
TB2	3.75	1.02	-0.36	-0.67	27.29	High
TB3	3.71	0.96	-0.31	-0.63	25.92	High
TB4	3.77	0.96	-0.29	-0.89	25.53	High
TB5	3.57	1.05	-0.15	-0.76	29.48	High
TB6	3.76	1.06	-0.38	-0.72	28.07	High
TB7	3.59	1.05	-0.28	-0.70	29.18	High
TB8	3.76	1.04	-0.42	-0.75	27.61	High
TB9	3.78	1.00	-0.36	-0.75	26.36	High
TB10	3.72	0.99	-0.38	-0.67	26.50	High
TB11	3.80	1.01	-0.42	-0.60	26.69	High
TB12	3.64	1.02	-0.18	-0.99	27.89	High
TB13	3.68	0.97	-0.32	-0.57	26.36	High
TB14	3.72	0.99	-0.29	-0.69	26.66	High
TB15	3.74	0.98	-0.36	-0.57	26.13	High
DT1	3.78	0.97	-0.41	-0.51	25.77	High
DT2	3.95	0.97	-0.65	-0.14	24.49	High
DT3	3.77	1.03	-0.37	-0.76	27.28	High
DT4	3.72	0.99	-0.39	-0.48	26.48	High
DT5	3.95	1.01	-0.75	0.07	25.63	High
DT6	4.01	0.95	-0.72	0.02	23.72	High
DT7	4.06	0.92	-0.72	-0.20	22.67	High
DT8	3.97	0.98	-0.82	0.45	24.81	High
DT9	3.90	0.93	-0.49	-0.29	23.87	High
DT10	3.99	0.96	-0.76	0.07	24.04	High
DT11	3.68	1.00	-0.40	-0.28	27.12	High
DT12	3.91	0.91	-0.59	0.10	23.31	High
DT13	3.71	1.00	-0.36	-0.49	26.98	High
DT14	3.84	0.93	-0.53	-0.15	24.11	High
DT15	3.72	1.00	-0.37	-0.67	26.93	High
DT16	3.93	0.94	-0.53	-0.28	23.85	High
DT17	3.66	0.99	-0.32	-0.48	27.05	High
DT18	3.93	0.96	-0.56	-0.44	24.41	High
DT19	3.98	0.91	-0.60	-0.20	22.87	High
RE1	3.69	1.15	-0.42	-0.72	31.00	High
RE2	3.71	1.12	-0.51	-0.59	30.19	High
RE3	4.07	0.99	-0.81	-0.14	24.24	High

indicators	Arithmetic Mean ( $\bar{x}$ )	Standard Deviation (S.D.)	Skewness (Sk)	Kurtosis (Ku)	Coefficient of Variation (CV)	Level
RE4	3.95	0.93	-0.41	-0.82	23.47	High
RE5	3.68	1.08	-0.44	-0.48	29.43	High
RE6	4.05	0.92	-0.62	-0.43	22.57	High
RE7	3.82	1.07	-0.56	-0.53	27.99	High
RE8	3.79	1.06	-0.58	-0.40	28.00	High
RE9	3.84	1.05	-0.63	-0.29	27.32	High
RE10	3.74	1.07	-0.45	-0.57	28.52	High
RE11	4.03	0.94	-0.64	-0.36	23.33	High
RE12	3.90	1.00	-0.53	-0.56	25.73	High
RE13	4.01	0.95	-0.55	-0.56	23.74	High
RE14	3.72	1.06	-0.44	-0.57	28.57	High
RE15	3.75	1.11	-0.53	-0.57	29.67	High
RE16	3.98	0.89	-0.42	-0.74	22.41	High
RE17	3.72	1.10	-0.33	-0.85	29.45	High
RE18	4.06	0.99	-0.77	-0.21	24.27	High

From Table 1, it is found that overall, the 83 question arithmetic mean (between  $\bar{x}$ ) 3.44 - 4.21, which indicates that the arithmetic mean ( $\bar{x}$ ) of the level value of the variable was high to highest, and the S.D value was between 0.69 - 1.15, the standard values of standard kurtosis and skewness calculated are 0.00 and 1.41, indicating that the respondents' opinions on the variable differ little.

**Table 2** The KMO test and the Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.959
Bartlett's Test of Sphericity	Approx. ChiSquare	6428.658
	df	300
	Sig.	0.000

The results of KMO test in the following figure show that the value of KMO is 0.959. Meanwhile, the results of Bartlett spherical test show that the p-value of significance is 0.000 \* \* \*, which is significant at the level, the null hypothesis is rejected, the correlation is variable, the factor analysis is effective, and the degree is suitable.

Confirmatory factor analysis is used to test whether the relationship between factors and test items conforms to the designed research model, so most empirical papers will use confirmatory factor analysis to test the fit of the data and the model.

Convergent validity means that items or tests measuring the same underlying trait fall on the same factor dimension, and there is a high correlation between the measured values of the items or tests. Average of variance extracted (AVE) and composite reliability (CR) were calculated according to the standardized factor load of each item of potential variable. The higher the combined validity, the higher the latent variable consistency. The higher the internal consistency of the dimension, the more convergence; The average variance extraction represents the average ability of potential indicators to explain observed indicators. The higher the AVE, the stronger the potential indicators' ability to explain observed indicators, and the higher the convergence validity. When CR in the study is greater than 0.7 and AVE is greater than 0.5 (0.36-0.5 is the acceptance threshold), it indicates that it has good convergence validity.

**Table 3** Convergence validity analysis for each variable

	Latent and observable	Standardized Factor loading	S.E.	C.R.	CR	AVE	p	R <sup>2</sup>
Human resource management	Component 1	0.829			0.923	0.705		0.688
	IM5	0.849						0.722
	IM6	0.821	0.055	17.432			***	0.675
	IM7	0.796	0.056	16.589			***	0.634
	IM9	0.865	0.055	19.003			***	0.748
	IM14	0.863	0.056	18.924			***	0.745
	Component 2	0.738	0.081	10.728	0.933	0.736	***	0.545
	PM1	0.857						0.734
	PM2	0.865	0.055	19.416			***	0.747
	PM5	0.865	0.05	19.45			***	0.749
	PM6	0.848	0.053	18.782			***	0.720
	PM13	0.854	0.051	19.004			***	0.730
	Component 3	0.843	0.077	12.176	0.934	0.739	***	0.711
	TB1	0.88						0.775
	TB8	0.861	0.053	20.414			***	0.742
	TB11	0.82	0.055	18.553			***	0.672
	TB12	0.889	0.051	21.747			***	0.790
	TB15	0.846	0.051	19.711			***	0.716
	Component 4	0.771	0.077	10.976	0.929	0.722	***	0.594
	DT2	0.839						0.705
	DT5	0.866	0.058	18.692			***	0.750
	DT7	0.865	0.052	18.673			***	0.749
	DT9	0.824	0.055	17.248			***	0.679
	DT18	0.854	0.055	18.291			***	0.730
	Component 5	0.756	0.091	10.942	0.932	0.734	***	0.572
	RE1	0.856						0.732
	RE2	0.859	0.051	19.147			***	0.738
	RE7	0.875	0.048	19.793			***	0.766
	RE9	0.847	0.049	18.677			***	0.717
	RE17	0.847	0.051	18.693			***	0.718

Discriminant validity refers to the low correlation or significant difference between the potential traits represented by a dimension and the potential traits represented by other dimensions. If the Chi-square value difference is larger and reaches a significant level, it

indicates that there is a significant difference, and the discrimination validity is higher. The evaluation condition is that the internal correlation of each dimension is greater than its correlation with other dimensions, and the items with small correlation coefficient of observed indicators in the dimension that does not meet the conditions and lower correlation coefficient than the external dimension are eliminated.

**Table 4** Discriminant validity

Indicator	Pearson																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25			
IMS(1)	1																											
IM6(2)	0.683	1																										
IM7(3)	0.658	0.666	1																									
IM9(4)	0.748	0.704	0.687	1																								
IM14(5)	0.744	0.712	0.707	0.731	1																							
PM1(6)	0.531	0.498	0.479	0.529	0.500	1																						
PM2(7)	0.540	0.557	0.480	0.525	0.500	0.734	1																					
PM5(8)	0.514	0.480	0.414	0.522	0.474	0.730	0.756	1																				
PM6(9)	0.471	0.456	0.435	0.485	0.463	0.727	0.730	0.729	1																			
PM13(10)	0.443	0.438	0.385	0.442	0.386	0.737	0.734	0.749	0.734	1																		
TB1(11)	0.541	0.542	0.516	0.580	0.539	0.536	0.511	0.460	0.451	0.456	1																	
TB6(12)	0.478	0.496	0.434	0.532	0.517	0.441	0.427	0.424	0.422	0.358	0.762	1																
TB11(13)	0.425	0.416	0.428	0.478	0.431	0.419	0.412	0.423	0.408	0.373	0.725	0.725	1															
TB12(14)	0.501	0.495	0.490	0.559	0.505	0.479	0.451	0.490	0.477	0.471	0.768	0.792	0.716	1														
TB15(15)	0.474	0.477	0.429	0.490	0.494	0.379	0.381	0.379	0.393	0.339	0.739	0.724	0.687	0.778	1													
DT2(16)	0.481	0.501	0.483	0.479	0.489	0.477	0.441	0.441	0.448	0.419	0.498	0.463	0.601	0.530	0.470	1												
DT3(17)	0.418	0.489	0.356	0.446	0.457	0.443	0.421	0.422	0.441	0.390	0.479	0.466	0.469	0.497	0.449	0.728	1											
DT7(18)	0.409	0.461	0.357	0.416	0.394	0.483	0.412	0.426	0.444	0.425	0.429	0.479	0.466	0.472	0.408	0.709	0.769	1										
DT9(19)	0.493	0.481	0.436	0.517	0.464	0.492	0.499	0.501	0.477	0.444	0.477	0.441	0.463	0.493	0.433	0.707	0.711	0.696	1									
DT16(20)	0.475	0.491	0.468	0.489	0.518	0.478	0.442	0.426	0.465	0.386	0.461	0.476	0.469	0.613	0.461	0.706	0.727	0.767	0.691	1								
RF1(21)	0.444	0.418	0.363	0.457	0.448	0.384	0.380	0.376	0.369	0.373	0.513	0.460	0.485	0.539	0.483	0.402	0.407	0.380	0.416	0.409	1							
RE2(22)	0.431	0.398	0.327	0.462	0.399	0.417	0.412	0.388	0.395	0.363	0.648	0.518	0.641	0.556	0.513	0.453	0.451	0.408	0.457	0.419	0.739	1						
RE7(23)	0.438	0.429	0.408	0.499	0.456	0.368	0.384	0.351	0.334	0.326	0.549	0.483	0.502	0.521	0.497	0.450	0.411	0.400	0.442	0.394	0.749	0.746	1					
RC2(24)	0.464	0.414	0.411	0.487	0.424	0.378	0.363	0.379	0.333	0.326	0.567	0.494	0.516	0.565	0.529	0.429	0.433	0.426	0.442	0.433	0.721	0.725	0.748	1				
RE17(25)	0.456	0.451	0.439	0.480	0.453	0.379	0.407	0.343	0.351	0.346	0.534	0.498	0.627	0.644	0.479	0.405	0.360	0.352	0.421	0.390	0.728	0.729	0.746	0.707	1			

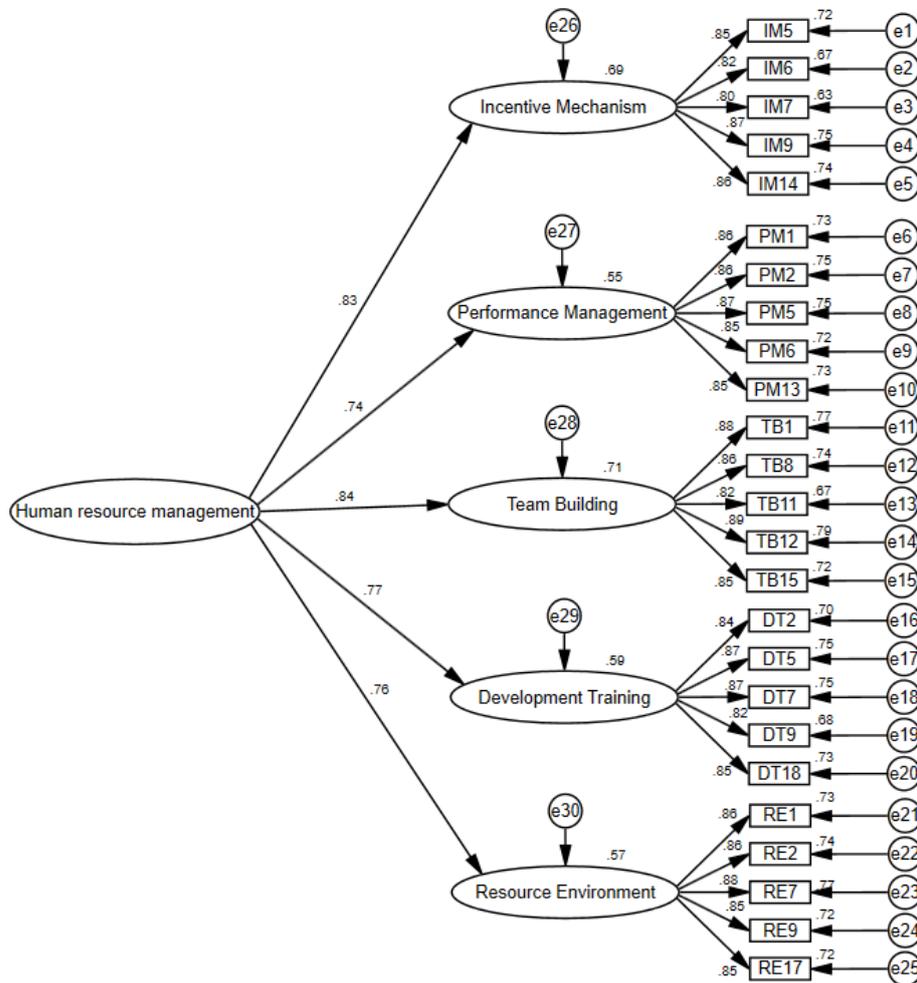
\* p<0.05 \*\* p<0.01

From Table 4, it can be seen that the correlation coefficients among all items are greater than 0, and the significance coefficients are less than 0.01, among which the correlation coefficients of TB12 and TB15 are the largest 0.778, and the correlation coefficients of PM13 and RE7 are the smallest 0.326.

From the first step, therefore the model of g human resource management from theory that selected by CFA. With AMOS program that shown above. This model was consisted of 5 component 25 indicators.

The researcher then performed a second order of CFA with the AMOS program to propose the model of human resource management. The results of the model of human resource management of digital media major in public universities under Liaoning Province, model by testing of the hypothesis model existent with the empirical data as follows:

Figure 1: Construction of second-order confirmatory factor model



chi-square=323.797;df=270;p=.014;  
 chi-square/df=1.199;GFI=.921;AGFI=.904;TLI=.991;CFI=.992;RMSEA=.026

Figure 1 shows the measurement model of AMOS for second-order confirmatory factor analysis. It is found that the model fitting index of the measurement model is chi-square=323.797 and df=270.  $p = .014$ , chi-square/df=1.199, GFI, AGFI, TLI, CFI > 0.9, RMSEA < 0.05 reached the optimal measurement standard, indicating that most of the model fits up to the standard.

The human resource management model of digital media major in universities under Liaoning Province consist of five components and 25 key indicators as follows:

Component 1: Incentive Mechanism of digital media major in universities in Liaoning Province (IM) 5 indicators.

Component 2: Performance Management of digital media major in universities in Liaoning Province (PM) 5 indicators.

Component 3: Team Building of digital media major in universities in Liaoning Province (TB) 5 indicators.

Component 4: Development Training of digital media major in universities in Liaoning Province (DT) 5 indicators.

Component 5: Resource Environment of digital media major in universities in Liaoning Province (RM) 5 indicators.

**Table 6** The rank order of Squared Multiple Correlations

Components	Squared Multiple Correlations R <sup>2</sup>	rank order	%Explain
Comp 3 Team Building	0.711	1	71.1%
Comp 1 Incentive Mechanism	0.688	2	68.8%
Comp 4 Development Training	0.594	3	59.4%
Comp 5 Resource Environment	0.572	4	57.2%
Comp 2 Performance Management	0.545	5	54.5%

As can be seen from Table 6, it can be seen from the order of R2 that Comp3 has the highest interpretation rate, indicating that Comp3 has the highest interpretation rate for Human resource management, followed by Comp1 and Comp4.

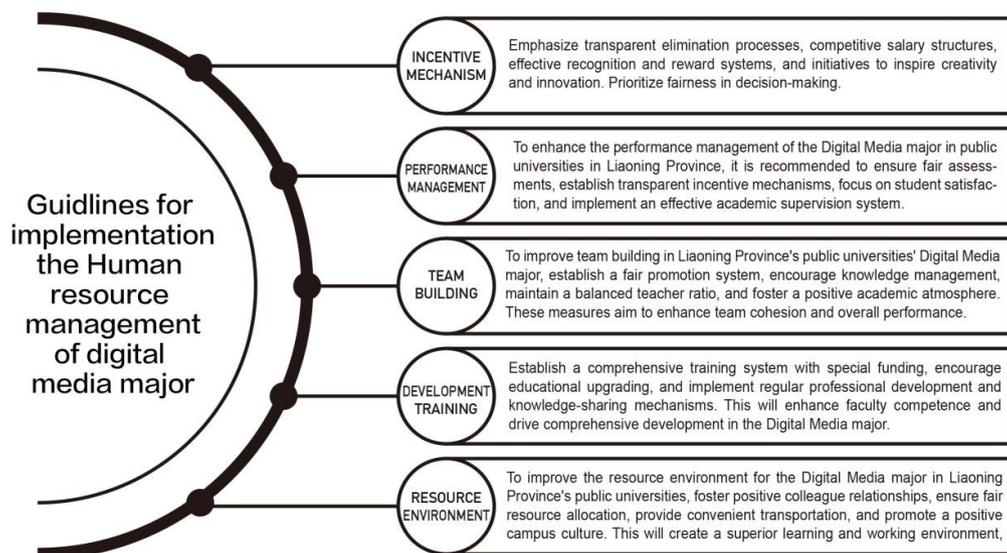
**Section 3: Result of Data Analysis for Research Objective 3 :**

A content analysis of the data from focus group discussions was performed. Based on the principle of freedom and voluntariness, the experts spoke freely in the discussion and proposed the direction of goal 3 . According to the research results of research objective 2 , and set guidelines for goal 3 for improving human resource management of digital media major in public universities under Liaoning Province. Respectively, for component 1, component 2, component 3, component 4, component 5,and to discuss the guidelines.

The researcher sorted out and analyzed the discussions of 9 experts and reached the following conclusions:In conclusion, there were total 19 managerial guidelines, The final summary is summarized into one guideline for each component: (1) Emphasize transparent

elimination processes, competitive salary structures, effective recognition and reward systems, and initiatives to inspire creativity and innovation. Prioritize fairness in decision-making. (2) To enhance the performance management of the digital media major in public universities in Liaoning Province, it is recommended to ensure fair assessments, establish transparent incentive mechanisms, focus on student satisfaction, and implement an effective academic supervision system. (3) To improve team building in Liaoning Province's public universities' digital media major, establish a fair promotion system, encourage knowledge management, maintain a balanced teacher ratio, and foster a positive academic atmosphere. These measures aim to enhance team cohesion and overall performance. (4) Establish a comprehensive training system with special funding, encourage educational upgrading, and implement regular professional development and knowledge-sharing mechanisms. This will enhance faculty competence and drive comprehensive development in the digital media major. (5) To improve the resource environment for the digital media major in Liaoning Province's public universities, foster positive colleague relationships, ensure fair resource allocation, provide convenient transportation, and promote a positive campus culture. This will create a superior learning and working environment, enhancing overall resource efficiency.

Figure 2: The guidelines for implementation the human resource management model of digital media major in public universities under Liaoning Province.



## Discussion

Based on the research objectives, the discussion will be presented as follows:

### Section 1 Discussion about major findings of objective 1:

In Section 1, Combined with literature review and semi-structured interviews with 7 key informants, the researcher constructs the dimensional framework of human resource management of digital media major in public universities in Liaoning Province from five components: incentive mechanism, performance management, team building, development training and resource environment.

**Component 1: Incentive Mechanism.** It is the key variable to achieve the development goal of digital media major, which directly affects the performance and influence of the major, and is of great significance to the development of the major and social influence. The results of this study are consistent with the theoretical research results of Cao Nana (2022:117-119). In order to improve the human resource management of digital media major in public universities in Liaoning Province, it is necessary to optimize the incentive mechanism. The importance of this mechanism is that it provides a mechanism for the elimination of faculty members who do not meet the standards, thus maintaining the competitiveness and quality of the team. It encourages faculty and staff to continuously improve themselves, and promotes the overall quality of the digital media profession. According to research by Chen Chunping (2003:153-155), offering a good salary package is critical to attracting and retaining outstanding talent. A certain level of salary incentive can motivate faculty members to be more engaged in their work and make greater contributions to teaching and research in digital media majors. Research by Duan Genliang (2003:148-151) found that through a clear recognition and reward system, faculty and staff can be motivated and motivated to work. This helps to create a good working atmosphere and drive the professional members to achieve more significant achievements in the field of digital media. Gu Mingyuan (1990) points out that encouraging creativity and innovation is essential for the long-term prosperity of the digital media profession. This mechanism ensures the stability and trust of the academic environment by stimulating the creativity of students and staff, and at the same time, the impartiality of decision-making. When the decision-making process is seen as fair and transparent, faculty and staff are more likely to be fully engaged in the various aspects of the digital media profession, thereby advancing professional development.

**Component 2: Performance Management.** It can promote the coordination and development of all aspects of the major, improve the comprehensive strength and competitiveness of the major, ensure that the major can better fulfill the mission of education and research, and provide better services for students and the society. The results of this study are consistent with the theoretical or research findings of Huang Mingfen (2009). Fair and impartial performance management ensures the fairness of the evaluation process, and specific and clear evaluation criteria help ensure that faculty and staff understand the expectations and goals, thus improving work efficiency. This contributes to the overall development of the digital media profession and ensures that everything works towards the goals set. Cui Hu (2003:102-103) found a clear hierarchical reward system to be an effective means of motivating and rewarding faculty and staff. Through clear levels of reward, higher levels of teaching and research outcomes can be stimulated. In addition, through the research of Bie Ronghai (2011:33-36), it is found that students' satisfaction with teaching directly affects the performance evaluation of faculty and staff. Improving students' satisfaction is conducive to shaping a positive academic atmosphere and promoting the healthy development of digital media majors.

**Component 3: Team Building.** It is the guarantee of the success of human resource management model of digital media major, can provide high-quality teaching and research, and provide strong support for the sustainable development of the major. The results of this study are consistent with the theoretical or research results of Sun Huo (2015:35-38). Wang Xichun (2002:24-26) believes that a reasonable promotion system is an important way to motivate faculty and staff to improve their personal quality and actively participate in professional development. It ensures that faculty members have a clear path to career

advancement, inspiring them to strive for the long-term prosperity of the digital media profession. Consistent with the research results of Wu Mei (2011:144-148), it is believed that effective knowledge management is conducive to the accumulation and inheritance of digital media professional knowledge. By establishing a knowledge base and sharing mechanism, collaboration between team members can be promoted to drive cutting-edge research and innovation in the field of digital media. In addition, Lv Lijing (2015) found that a reasonable proportion of teachers is essential to maintain the teaching quality of digital media majors. Ensure that there are sufficient and highly qualified faculty and staff, so that the program can fully cover all fields and meet the diverse disciplinary needs of students.

Component 4: Development Training. Funding for specific training is essential for the development of the digital media profession. This enables faculty and staff to participate in high-level training programs, maintain their professional level in the field of digital media, and promote continuous innovation in the profession. The results of this study are basically the same as the theory or research of Huang Mingfen (2009). Encouraging faculty and staff to upgrade their education and participate in training and academic research in related fields is essential for the development of the digital media profession. This helps to keep professional education cutting-edge and effective. The research direction is consistent with Bai Hongyi and Zhang Zhian (2010:29-31). Fan Sijie (2023:46-48) found that the establishment of a comprehensive training system is the basis for improving the professional level of digital media. Regular professional development training, seminars and knowledge sharing mechanisms help to keep the team learning and improving, and promote the development of the profession as a whole.

Component 5: Resource Environment. Campus culture plays a key role in shaping a good academic environment for the development of digital media majors. A positive campus culture helps inspire creativity and innovation in students and staff, driving the digital media profession forward. The results of this study are based on the theory or research of Liang Chunsong (2018:98-99): The fairness of resource allocation directly affects the teaching and research level of digital media majors. Ensuring a fair and reasonable allocation of resources can motivate faculty and staff and maintain team cohesion and stability. The research direction is consistent with Sun Yongqing (2021:117-124). Research by Zhang Jianxiang (2002:162-165) found that providing easy access to transport helps attract and retain talent while meeting the flexibility needs of students and staff. Good transportation conditions contribute to creating a comfortable and pleasant learning and working environment and promote the overall development of the digital media profession, which corresponds to Song Jiajin's study (1998:49-52).

### **Section 2 Discussion about major findings of objective 2:**

The components and indicators model of implementation human resource management of digital media major in public universities under Liaoning Province. Based on the major findings, Studying from five components, that the development of human resource management model, the 25 key indicators are founded and model fit with empirical data for all indicators. Through these indicators. The model was analyzed by confirmatory factor analysis, and good model results were obtained based on the data.

First, the research method is based on the valid data obtained by the analytical tools, with good validation results and good model results. The corresponding structural equation model was established by analyzing the model data by confirmatory factor analysis. Through

model analysis, this study obtained a good model structure on the basis of available data analysis. However, in addition to the data itself, further research and analysis by experts in related fields are needed to better illustrate the validity of the model. Through the confirmatory factor analysis, five components of human resource management of digital media major in public universities under Liaoning Province will be discussed.

### **Section 3 Discussion about major findings of objective 3:**

There are a total of five guidelines: one for each component. The results of this study are the same as the components of Objective 1. This research puts forward a more comprehensive and effective method to improve the human resource management model of digital media major in public universities under Liaoning Province. By standardizing the management behavior of managers, the team of digital media teachers in Liaoning Province has successfully established an incentive mechanism, which provides a good working environment and development opportunities for teachers. Integrating all resources, standardizing the work of the school, and gradually forming a perfect system, to ensure that the work contribution of faculty members is fairly evaluated (Li Mengxiang, 2020:131). Performance appraisal is an effective means to improve the work efficiency, scientific research and practice level of the whole team, and also helps digital media education to stand out in the regional competition. By focusing on the construction of the university cultural environment, the team of digital media teachers in Liaoning Province emphasizes the concept of being student-centered and respecting the diverse needs of teachers (Gu Kai, 2021:166-167). Team building is essential to the innovation and growth of the digital media profession. Development training is an important means to constantly adapt to the needs of industry development and improve the ability of teaching staff (Bai Hongyi and Zhang Zhian, 2010:29-31). Building a good resource environment provides a solid foundation for the quality of education, and also enhances the competitiveness of digital media majors.

## **Recommendation**

### **Part I: Recommend for Policies Formulation**

1. Revamp the incentive mechanism to enhance operational efficiency and managerial effectiveness in the digital media department of public universities.
2. Emphasize the role of performance appraisal in assessing and enhancing the quality and performance of the public university's digital media program.
3. Prioritize the construction of the teaching staff to enhance the major's competitiveness.
4. Improving the quality of developmental training enhances the professional competence and teaching proficiency of higher education faculty, facilitating their adaptation to new educational concepts and technological advancements.
5. Create a favorable resource environment to facilitate the development of the digital media major, enhancing the quality and level of the program.

### **Part II: Recommendation for Practical Applications**

Here are the simplified versions of the points you provided:

1. Implement a flexible incentive plan with rewards for individual performance, clear promotion pathways, and support for professional development like training and research funding, to boost faculty motivation and dedication.

2. Establish a fair performance evaluation system focusing on teaching, research, and social services, with clear feedback and development directions to encourage faculty initiative and career growth.

3. Foster a collaborative team culture through regular team-building activities like seminars and workshops to enhance cooperation, experience sharing, and innovation among faculty members.

4. Develop personalized career plans covering technology updates, innovative teaching methods, and leadership training to improve faculty members' skills and meet university development needs.

5. Increase investment in teaching and research resources, including equipment upgrades, technological support, and better laboratory conditions, to create an inspiring work environment that fuels faculty creativity and enthusiasm.

### **Part III: Recommend for Further Research**

#### **1. Research and development of Incentive Mechanism**

Study the lasting impact of personalized incentives on educational staff, including the effectiveness of tailored incentive plans based on individual differences, and the long-term effects of innovative incentive programs on innovation and high performance. Additionally, conduct cross-cultural investigations to understand the influence of cultural factors on incentive systems and provide global management strategies aimed at supporting ongoing motivation and outstanding performance among educational staff.

#### **2. Research and development of Performance Appraisal**

Conduct research on multidimensional performance metrics in higher education, exploring diverse indicators like qualitative teaching contributions and research impact. Evaluate the impact of performance feedback on faculty development and job satisfaction over time. Compare different performance evaluation models in academia to identify best practices for continuous improvement.

#### **3. Research and development of Team Building**

Explore interdisciplinary collaboration's impact on team performance and productivity in university human resource management. Investigate personalized professional development programs' effectiveness in enhancing job satisfaction and team effectiveness. Study inclusive leadership's impact on team building and employee engagement to guide strategies for creating inclusive work environments in higher education institutions.

#### **4. Research and development of Development Training**

Research the impact of emerging technologies like virtual reality and artificial intelligence on training in higher education, focusing on personalized, effective, and remote learning. Explore cross-cultural training best practices and strategies to increase employee motivation and engagement in learning.

#### **5. Research and development of Communication Management**

Explore sustainable resource practices' impact on human resources management in higher education, focusing on eco-friendly approaches and resource efficiency. Research the integration of digital technologies in HR management to streamline processes and optimize resource allocation. Examine the effects of remote work trends on HR resource environments, including virtual work settings and flexible schedules, to adapt HR practices to remote work dynamics.

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