



Strategies of the merger universities in Guangxi Vocational University of Agriculture

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Abstract. The purposes of this research are 1) to study the current status of the merger of Guangxi Vocational University of Agriculture, 2) to provide strategies for the integration process of Guangxi Vocational University of Agriculture after the merger, and 3) to develop guidelines for resolving issues arising from the merger. The population for this research was 77 key leaders of Guangxi Vocational University of Agriculture. The statistics used were percentage, mean, standard deviation, and content analysis.

The results revealed that:

The current status of the merger was viewed positively in all aspects of the 7S dimensions which are skills, style, shared values, strategy, staff, system, and structure rated as "good" by respondents.

Recommended strategies include aligning academic offerings to workforce needs, streamlining organizational structures, implementing unified data systems, promoting student-centric values, enhancing staff skills, evaluating, and optimizing human resources, and utilizing collaborative leadership approaches.

Targeted integration of operations and culture across campuses can facilitate an effective merger. A focus on leadership, strategic vision, cultural integration, and stakeholder engagement is pivotal.

Keywords: university merger, integration strategy, McKinsey 7S Model, Guangxi Vocational University of Agriculture

1 Introduction

University mergers have become an increasingly common phenomenon globally, posing complex challenges for integration (Aamodt & Hovdhaugen, 2018)^[1]. This research aims to study the merger of Guangxi Vocational University of Agriculture in China and propose strategies for effective integration. Using McKinsey's 7S model framework, this study surveyed 77 university leaders to assess the current status across seven dimensions - strategy, structure, systems, skills, staff, style, and shared values (Kotter, J., 1988)^[2]. The results indicate a broadly positive perspective, while highlighting key areas for improvement. Recommended strategies emphasize aligning programs to market needs, streamlining structures, unifying systems, developing

competencies, optimizing human resources, and utilizing collaborative leadership. By targeting integration of operations and culture, universities can facilitate productive mergers.

1. To study the current status of the merger of Guangxi Vocational University of Agriculture.
2. To provide strategies for the merge Guangxi Vocational University of Agriculture.

2 Theories and related Research

Concept of The McKinsey 7S Model

The McKinsey 7S Model is a management tool and framework used to assess and optimize organizational performance and effectiveness. This theory was introduced by the management consulting firm McKinsey & Company in the 1970s.(Kotter, J.,1988)^[2]

Research on the merger university

Research related to organizational integration after mergers indicates that the differences in organizational practices, culture, identity, and structure between different organizations before the merger pose significant challenges to the integration of the new organization (Birkinshaw et al., 2000).^[3]

This also applies to university mergers, making the integration process after university merger complex, challenging, and lengthy, posing considerable challenges for university leadership and management (Aagaard et al., 2016).^[4]

Scholars attempt to open this "black box" from different perspectives. Some studies focus on personnel integration and argue that personal factors should be carefully considered during the merger process. The pressure on employees before the merger and their participation during the merger have a significant impact on the merger process (Becker et al., 2004).^[5]

2.1 Research methodology

The Population

The population of this study is 77 key leaders of Guangxi Vocational University of Agriculture.

Research Instruments:

The research utilized a questionnaire and interview to gather data.

Questionnaire

The questionnaire instrument collected data on staff agreement levels at Guangxi Vocational University of Agriculture. It was based on the 7S model factors and included suggestions. Part 1 collected respondent demographics. Part 2 used 5-point Likert scales to survey the 7S factors and suggestions. The questionnaire was developed by reviewing concepts, theories and previous research; formulating a 7S model; expert review; piloting for reliability using Cronbach's alpha (0.91) and KMO test

(0.884); and application to 77 leaders. It was validated for content congruence (0.67-1.00) and revised based on expert input.

Table 1. Reliability of Questionnaire

Cronbach's α	Item	Sample
0.91	35	30

Table 1 presents the reliability analysis of the questionnaire instrument. It shows the Cronbach's alpha coefficient, number of items, and sample size used to assess reliability. The questionnaire contained 35 items and was piloted on a sample of 30 respondents. This yielded a Cronbach's alpha of 0.91, indicating a high level of internal consistency and reliability for the questionnaire.

Table 2. Validity of Questionnaire

KMO test and Bartlett's test		
KMO		0.884
	Approximate chi-square.	2725.456
Bartlett's sphericity test	df	190
	P	0.000***

Table 2 shows the validity analysis of the questionnaire using the KMO test and Bartlett's test. The KMO measure of sampling adequacy was 0.884, indicating the sample was adequate for factor analysis. Bartlett's test was highly significant (chi-square = 2725.456, df = 190, $p < 0.001$), indicating the correlation matrix was suitable for factor analysis. Together these results demonstrate the questionnaire had good validity for identifying underlying factors.

Interview

In order to ensure the validity of the questions and gain more insights, the researcher interviewed six key leaders of the two universities involved in the merger. Their valuable feedback and opinions were sought to further validate and strengthen the implications

Data collection:

The researcher distributed online questionnaires to university leaders with a 7-day deadline. The entire population was sampled. The questionnaire was designed based on research questions, literature, and concepts to explore the post-merger situation. Reliability and validity testing ensured data quality. Statistical analysis like percentage, mean, standard deviation established validity. Data underwent mean and standard deviation analysis using software to examine the current situation and problems. Six leader interviews further validated the integration strategy and recommendations. Results were analyzed in the following chapter.

Data Analysis:

1. This allowed categorization of the level of agreement on each 7S factor based on the calculated mean.

2. Respondent demographics were analyzed using percentages.

3. Mean and standard deviation summarized the perceived level of agreement on the 7S factors.

4. Mean values were interpreted as (Likert, R. , 1937):^[6]

4.50-5.00 = Excellent agreement

3.50-4.49 = Relatively good agreement

2.50-3.49 = Generally good agreement

1.50-2.49 = Poor agreement

1.00-1.49 = Very poor agreement

2.2 Research results

Table 3. Basic Information of Respondents

	Personal Information	Frequency	Percentage (%)
Q1 - Gender	Male	43	61%
	Female	30	39%
Q2 - Age	Under 25 years old	0	0
	25 - 35 years old	10	13%
	36 - 45 years old	30	39%
	Over 45 years old	37	48%
Q3 - Work Experience	1-5 years	4	5%
	6-10 years	17	22%
	11-15 years	24	31%
	More than 15 years	32	42%
Q4 - Education Level	Diploma	0	0
	Bachelor	17	22%
	Master	42	55%
	PH.d	18	23%
Q5 - Position Level	No professional title	0	0
	Junior professional title	0	0
	Intermediate professional title	30	39%
	Senior professional title	47	61%
Total		77	100%

Table 3 shows the frequency and percentage for respondents' gender, age, work experience, education level, and position level. 61% of respondents were male. 48% were over 45 years old. 42% had over 15 years work experience. 55% held a Master's degree. 61% held a senior professional title. No respondents were under 25 or held no professional title. In summary, the respondent sample was predominantly male, highly educated, experienced, and held senior professional titles. The sample reflects demographic patterns expected of university leadership.

Table 4. The Average Value (M) and Standard Deviation (S.D.) and Rank of Mckinsey 7S

	Dimension	M	S.D.	Level	Rank
1.	Strategy	4.24	0.64	Good	3
2.	Structure	4.18	0.67	Good	7
3.	System	4.20	0.66	Good	6
4.	Shared Values	4.24	0.64	Good	3
5.	Skills	4.31	0.64	Good	1
6.	Staff	4.24	0.66	Good	3
7.	Style	4.28	0.67	Good	2
	Overall	4.24	0.65	Good	

Table 4 shows the mean, standard deviation, level and rank for each of the 7S dimensions. All dimensions received "Good" level ratings, with means ranging from 4.18 to 4.31. Skills had the highest mean (4.31) and was ranked 1st. Structure had the lowest mean (4.18) and was ranked 7th. The overall total mean was 4.24, indicating respondents rated the 7S factors as generally good. Small standard deviations (0.64-0.67) indicate there was little variation in respondents' perceptions within each factor. In summary, the table shows respondents viewed the 7S factors positively overall, with Skills being rated the highest and Structure needing more focus. The small deviations suggest consistency in responses.

3 Conclusion

1. The merger is viewed positively, with all 7S dimensions rated as "good." Skills ranked highest, followed by Style, Shared Values, Strategy, and Staff. System was 6th and Structure was lowest priority.

2. Recommended strategies: align academic programs to workforce, streamline organizational structures, implement unified data systems, promote student-centric values, enhance staff skills, optimize human resources, utilize collaborative leadership. Targeted integration of operations and culture can facilitate an effective merger.

Recommendations

The key recommendations for Guangxi Vocational University of Agriculture's integration and merger are:

1. Strengthen strategic planning under Communist Party guidance, focusing on agricultural distinctiveness, program growth, and talent development.

2. Restructure departments, establish a Campus Construction Office, and reinforce inter-departmental collaboration for streamlined operations.

3. Build an effective administrative framework centered on ideological management and oversight of activities and digital media.

4. Promote core values underscoring student success and community responsiveness via multi-channel publicity.

5. Create a Teacher Affairs Department to build faculty skills in technology, pedagogy, societal engagement.

6. Strategically assess personnel, address redundancies, retain qualified staff through initiatives like the High-Quality Talent Recruitment Program.

7. Adopt a collaborative leadership style with open communication, reciprocal appointments, and resource sharing.

In summary, by synthesizing Party guidance, optimization of resources, ideological governance, community values, faculty development, calibrated human resources strategy, and cooperative leadership, the integration aims to propel the university's advancement and excellence.

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