

## **Quality Management Practices of Malcolm Baldrige National Quality Award (MBNQA) Studies at College in Southeast Sulawesi, Indonesia**

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**ABSTRACT:** This study purpose was to explore relationship of MBNQA quality management practices, namely effect of leadership, workforce focus, strategic planning, and customer focus to operations focus, measurement, and analysis and knowledge transfer and organization performance. Design study used was an explanatory approach. Data was collected through survey methods. Sample of 135 respondents were leader that responsible on college quality management implementation. Data analysis used was Partial Least Square. Research results showed that good leadership can improve strategic planning, workforce focus, and customer focus and organization performance. Strategies planning have a significant effect on operation focus, but have no significant effect on workforce focus and customer focus. Workforce focus significantly affects on operations focus and measurement, analysis and knowledge transfer, but organization performance did not make a real contribution. Customer focus has significant effect on operation focus, but measurement, analysis and knowledge transfer had no significant effect. Operations focus has significant effect on measurement, analysis and knowledge transfer, and organization performance. Finally, measurement, analysis and knowledge transfer contribute significantly to improved organization performance. This research can provide practical implication to enrich knowledge and understanding for university leaders to improve organization performance through MBNQA quality management concepts implementation. Importance of quality management for college can be done through organization good governance; implementation of strategic development; workforce empowerment; promote programs; good work system to improve education quality; knowledge improvement and good result achievement was caused by leadership support. This study originality was to demonstrate an integrated conceptual model of MBNQA quality management relationship.

**KEYWORDS:** Quality Management, Baldrige Award, Organization performance

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### **I. INTRODUCTION**

Quality management has received worldwide attention since world crisis in 1930 and driven by globalization spirit. Quality concepts and paradigms have been proposed by scientists and practitioners. Global model of excellence that introduced for first time was Deming Prize. In 1987 United States introduced a quality management MBNQA. Information flow and demand for quality has prompted many states to adopt quality management, including Indonesia, especially in college field. To meet higher demands of education quality Indonesia, experts and practitioners adopt successful model from quality management in manufacturing sector to education sector. Self-assessment application that integrated with accreditation model in college institutions was application of business quality management model into education sector. Empirical reality of quality management application to education in Indonesia create many problems that must be resolved, especially in college that having low educational achievement in international arena. Low quality at college was indicated by a few world-class universities in Indonesia.

Empirical facts at national level as well at the local level in Southeast Sulawesi in 2009 showed that Indonesia only have seven colleges or 8.5% that entering into 500 world college ranking version of Times College Supplement (THES). All 7 universities were located in western part of Indonesia. College quality agency through accreditation systems conducted by National Accreditation Board in 2010 shows that from 8,105 accredited courses in Indonesia, Sulawesi only have 26 (0.32%) accredited course with A accreditation, the rest accredited with B and C. Small number with A accreditation in Sulawesi areas, including Southeast Sulawesi, show low quality of college in the region. This condition raises the question of how to improve quality of college in Southeast Sulawesi to align with other areas. Ironically, poor education quality problems in Indonesia, especially in Southeast Sulawesi, were very slow to overcome. It seems less able to follow globalization demands. Global effect of quality was very important U.S. government bestows MBNQA for quality achievement.

Indonesia education quality assurance at college level adopted MBNQA in determining quality standards of college. Krajewski et al. (2010) said there were seven main criteria MBNQA award, namely: (1) leadership, (2) strategic planning, (3) customer and market focus, (4) measurement, analysis and knowledge management; (5) workforce focus, (6) process management, and (7) results. Quality management theory becomes a reference measurement and testing relationships of seventh criteria to practice MBNQA at Southeast Sulawesi College. Several empirical studies that become reference to test the effect of leadership on workforce focus, strategic planning, and customer focus and organization performance were Calvo-Mora et al. (2006), Gomez et al. (2011). Faisal Talib et al. (2011) found leadership has positive and significant effect on workforce focus and strategic planning. Leadership has positive and significant effect on process management, strategic planning, measurement, analysis and knowledge management; market focus and organization performance (Masood Badri et al., 2006; and Jayamaha et al., 2008; 2011). Furthermore, leadership has positive and significant effect on organization performance Fenghueih and Zagd, (2010) and Changiz Valmohammadi (2011). There was a gap of research findings that leadership did not have significant effect on customer focus (Jayamaha et al., 2008; Fotopoulos, 2010; and Anupam Das et al., 2011) and leadership has negative and significant effect on workforce focus (Fenghueih & Zagd, 2010). Result differences related to measurement indicators difference, object under study, cultural differences, specific leadership styles and basic theories used. Therefore, this research to be important done to test contradict findings of previous research. Strategic planning relates to goal setting and program in effort to achieve goal. Research results showed strategic planning has significant effect on workforce focus, customer focus, process management, and business result (Lau et al., 2004; Calvo-Mora et al., 2006; Masood Badri et al., 2006). Business strategic has positive effect on organization performance (Anastasia, 2012; Daniel & Micaela, 2009). There were research gaps where strategic planning did not significantly affect on operation focus (Fenghueih & Zagd, 2010) and people results, customer results and society results (Gomez et al., 2011) as well as process management (Jayamaha et al., 2011). Inconsistencies of these studies findings provide an opportunity to examine relationship of strategic planning to workforce focus, customer and operations focus.

Effect of workforces focus related to human resources empowerment that involved in an organization was very important to determine organization focus in carrying out activities of quality, measurement, and analysis and knowledge management and determine organization performance. Previous research results show workforce focus significantly affect on process management, customer focus and business results (Ahmad & Schroeder, 2002; Calvo-Mora et al., 2006; Jayamaha et al., 2008; Fotopoulos and Psomas, 2010) and measurement, analysis and knowledge management (Masood Badri et al., 2006; Nada Zupan & Kase, 2007; Lin, 2007) as well as organization performance (Vinod Kumar et al., 2009; Jayamaha et al., 2008). There was a research gap that workforce focus had no significant effect on measurement, analysis and knowledge transfer (Fotopoulos and Psomas, 2010) and key performance measures (Gomez et al., 2011) as well as organization performance (Shaukat Brah et al., 2002). Research findings differences were caused by measurement process of analysis and knowledge management was determined by organization's focus on human resources, measurement difference, studied object, and basic theory. Therefore, this research was very important to research in order to examine the contradictory findings. Customer focus affects operations focus and measurement, analysis and knowledge transfer. Research results showed that customer focus has positive and significant effect on operation focus or process and data quality management (Fotopoulos & Psomas, 2010, Jayamaha et al., 2008) and key performance measures (Gomez et al., 2011). Finally Masood Badri et al. (2006) found market focus has a significant effect on organization performance and measurement, analysis and knowledge management. Furthermore, focus organization relates to on how to operate *Tridarma* (three dedications) activities in college. Operations focus positive and significant effect on measurement, analysis and knowledge management (Ching C. Lee et al., 2001; Molina et al., 2007; Masood Badri et al., 2006) and organization performance (Vinod Kumar et al., 2009; Gomez et al., 2011; Jayamaha et al., 2008). Measurement of analysis and knowledge management will integrate technology and human resource capacity. Related to measurement, analysis and knowledge management will determine organization performance. Results showed measurement, analysis and knowledge management has positive and significant effect on organization performance (Molina, 2007; Masood Badri et al., 2006; and Balvir Talwar, 2011). It was inconsistent with Jayamaha et al. (2011) that measurement, analysis, and knowledge management were not significantly effect on process management.

Based on previous research gap, it can to explore relationship between MBNQA quality management practices that developed in America namely: leadership, workforce focus, strategic planning, customer focus, operation focus (process management), measurement, analysis and knowledge transfer, both directly and indirectly using mediation role of process management and measurement, analysis, and knowledge management on organization performance. Therefore, it needs further study at universities in Southeast Sulawesi where previous researchers still debate and need clarity so t need studies that analyze empirically.

Theoretical study result, past research gaps and concept and empirical phenomena of MBNQA construction practices were still gives important gaps and interesting for further study. MBNQA model application in many countries was aimed to increase college competitiveness. Indonesian colleges still have very poor competitiveness. Indonesia College that entering into 500 world ranking only 7 from hundreds of college institutions (Ministry of Education, 2010). This problem raises question on how to improve college performance in order have high competitiveness. Therefore, key problems in this study were:

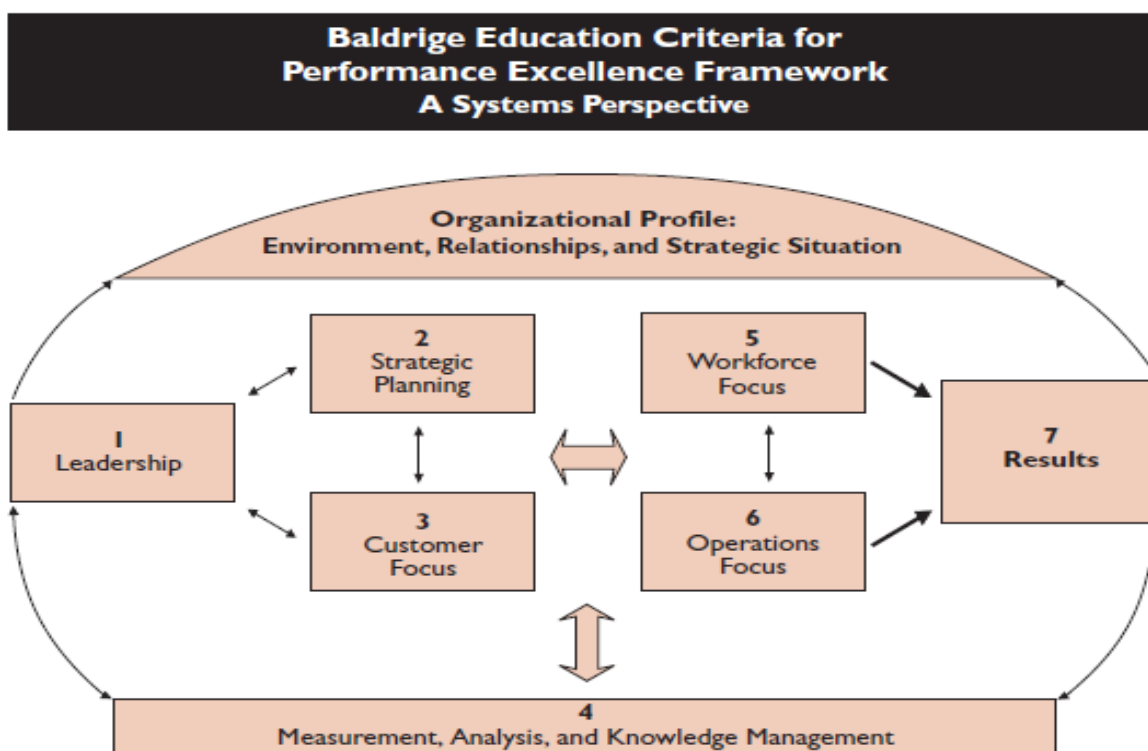
1. Was leadership having significant effect on strategic planning, workforce focus, and customer focus and organization performance?
2. Was strategic planning having significant effect on workforce focus, customer focus and operation focus?
3. Was workforce focus having significant effect on operation focus, measurement, analysis and knowledge transfer, and organization performance?
4. Was customer focus having significant effect on operations focus and measurement, analysis and knowledge transfer?
5. Was operation focus having significant effect on measurement, analysis and knowledge transfer, and organization performance?
6. Was measurement, analysis and knowledge transfer having significant effect on organization performance?

Furthermore, this research objective was to examine and explain effect of MBNQA Criteria on College performance. In addition, it will test and explain effect of operation focus (process management) and measurement, analysis and knowledge transfer as mediation relationship between workforce focus and customer focus. More specifically, this study aims to examine and explain: (1) Effect of leadership on strategic planning, workforce focus, customer focus and organization performance; (2) Effect of strategic planning on workforce focus, customer focus and operations focus; (3) Effect of workforce focus, operation focus, measurement, analysis and knowledge transfer and organization performance; (4) Effect of customer focus on operations focus and measurement, analysis and knowledge transfer; (5) Effect of operations focus on measurement, analysis and knowledge transfer and organization performance; (6) Effect of measurement, analysis and knowledge transfer on organization performance; Finally, this research was expected to contribute both theoretically and empirically. Theoretical contribution expected was to provide empirical evidence the relationship between MBNQA criteria, especially in developing countries like Indonesia. Further practical contribution of this research provides guidance for college leaders about key success factors in managing an institution that was able to generate superior performance. In addition it provides direction for development of quality management for college institutions in order to achieve satisfactory performance and as a reference source and information for further research.

## **II. LITERATURE REVIEW, HYPOTHESIS AND CONCEPTUAL MODEL**

### **2.1 Quality Management**

Basis theoretical studies to assess and measuring relationship between variables in this study refers to basic theory of operations management. Haizer and Render (2010) stated one of strategic decisions in operational management was quality management. Theoretically, the quality can be defined as ability of a product or service to meet customer needs. American Society for Quality states Quality was the overall features and characteristics of products/services that can satisfy needs. Low quality can affect organization performance as a whole, ranging from supplier to customer, from product design to maintenance (Haizer and Render, 2010). Quality and performance should become main focus of each company. High quality significantly affect on organization performance improvement (Krajewski et al., 2010). Accumulation of quality achievement was called Total Quality Management (TQM). It was a philosophy that emphasizes three principles to achieve high level of performance and quality. These principles were related to customer satisfaction, employee involvement, and continuous improvement in performance (Krajewski et al., 2010). Therefore, in order to test direction of theoretical study and explains practice of Malcolm Baldrige National Quality Award (MBNQA) at universities in Southeast Sulawesi, it supported by quality management theory. Along with environment development and global change, since year 2009, MBNQA criteria for education sector has not changed. MBNQA Framework for 2011-2012 was presented in Figure 1.



Source: NIST (2009)

**Figure 1 MBNQA Framework in Education Sector of 2011-2012**

## **2.2 Relationship between leadership on workforce focus, strategic planning, customer focus and organization performance.**

Leadership reflects general consensus and alertness level and focus to achieve mission. Leadership in quality context should be visible, stable and present in all management levels (Dean & Bowen, 1994). Leader actions become a reference and as a driver of quality management implementation process. Empirical studies are used to examine the effect of leadership on workforce focus, strategic planning, customer focus and organization performance (Calvo-Mora et al., 2006) found leadership has significant effect on workforce focus, strategic planning and policy, but leadership did not have significant effect on partnerships. Shaukat Brah et al. (2000); Fenghueih & Zagd, (2010) and Changiz (2011) found a positive and significant effect of leadership on organization performance. Furthermore, Gomez et al. (2011), Talib et al. (2011) found leadership has positive and significant effect on workforce focus and strategic planning. Consistent with Masood Badri et al. (2006), leadership has positive and significant effect on Management process, staff focus, strategic planning; measurement, analysis and knowledge management; market focus and organization performance. There was a research gap from Jayamaha et al. (2008) findings that leadership has positive and significant effect on strategic planning and measurement, analysis, and knowledge management, but leadership did not have significant effect on customer focus. Furthermore, Fotopoulos (2010) and Anupam Das et al. (2011) said that leadership has no significant effect on customer focus. In addition, Fenghueih and Zagd, (2010) stated leadership has negative and not significant effect on workforce focus. Result differences were caused by diversity indicators in measurement, object studied, because of cultural differences and specific leadership styles and basic theories used, so this research is important to be done to test findings contradiction of previous research. Based on theoretical argument and empirical studies, hypothesis was formulated as follows:

- H1a. Leadership has significant effect on strategic planning
- H1b. Leadership has significant effect on workforce focus
- H1c. Leadership has significant effect on consumer focus
- H1d. Leadership has significant effect on organization performance

### **2.3 Effect of strategic planning on workforce focus, customer focus and operations focus**

Strategic planning was an activity that done, both socially and intellectually, to achieve success and competitive advantage in a particular sector (Calantone et al., 2003). Related to strategic ideas, it was establishment of trust and vision exchange and trust to follow knowledge management behaviors. It was very important where employees support and making vision exchange and trust in their workplace (Wong, 2006). Goal was formulation of a strategic plan to meet company goals through company's operations (Whelen & Hunger, 2004). As an organization focused on consumer and focus on enterprise operations, strategic planning establishment will affect efforts to reach that goal. It related to strategic planning and goal setting program in an effort to achieve goal. Clear strategic plan will determine organization effectiveness to achieve its goals, through direction of workforce, always focus on consumer and establishment of clear operation standards. Research that supporting effects of strategic planning on workforce focus, customer focus and operations focus (Calvo-Mora et al., 2006) found a positive and significant effect of strategic planning on workforce focus or management staff, partnership and focus on process management. Masood Badri et al. (2006) found strategic planning has positive effect on process management, faculty and staff focus or workforce focus. In addition, Anastasia (2012) and Daniel & Micaela (2009) found business strategic has positive effect on organization performance. Lau et al. (2004) found strategic planning has significant effect to increase customer and market focus, process management, and business result.

Strategic planning relates to goal setting and program in effort to achieve goal. Clear strategic plan will determine the organization effectiveness to achieve its goals, through workforce direction, always focus on consumer and establishment of clear operation standards. Preposition of research findings Balvir Talwar (2011) states that strategic planning related to how company develop, communicate, implement and improving policies and strategies to achieve performance excellence and have a strong competitive position in market arena or market focus and organization performance. Consistent with proposition that expressed by Sangeeta et al. (2008), education quality was determined by clear and specific policies and procedures; customer focus; differentiation; management-by-fact/information system; instructional competence; emphasis on continuous improvement; well-defined communication channels; strategic and operational planning; effective and efficient leadership; and budget priorities. Strategic planning was an activity that was done both socially and intellectually to achieve success and competitive advantage in a particular sector (Calantone et al., 2003). In latest study by Loukas & Chytiris (2012), strategic planning in certain environmental conditions contributes to organization performance. Adversely, Fenghueih and Zagd, (2010) found that strategic planning did not affect significantly on product quality or operation focus. In addition, Gomez et al. (2011) found that policy and strategy did not significantly affect on results people (workforce focus), customer results and society results. Furthermore, Jayamaha et al. (2008; 2011) found strategic planning has positive and significant effect on human resource and customer focus and market focus, strategic planning but did not affect significantly on process management.

There were research gaps that strategic planning did not significantly affect on operations focus (Fenghueih and Zagd, 2010) and people results, customer results and society results (Gomez et al., 2011). Furthermore, Jayamaha et al. (2008; 2011) stated the Strategic planning did not have a significant effect on process management. Inconsistencies in these studies findings provide an opportunity to examine relationship of strategic planning to workforce focus, customer focus and operations focus. Based on theoretical and empirical arguments, hypotheses formulation of relationship between strategic planning on workforce focus, customer focus and focus were follows:

H2a. Strategies planning have a significant effect on workforce focus

H2b. Strategies planning have a significant effect on consumer focus

H2c. Strategies planning have a significant effect on operations focus

### **2.4 Relationship between workforce focus on customer focus, measurement, analysis and knowledge transfer, and organization performance**

Workforce focus was related to ability and capacity required to build workforce in a conducive environment to achieve high performance. Workforce that empowered, managed and developed to fullest condition will improve its ability to carry out its activities (Krajewski et al. (2010). It means that organizations that focus on workforce will focus on institution operations. Effect of workforce focus related to human resources empowerment in organization will determine organization focus toward quality, measurement, and analysis and knowledge management in order to determine organization performance. In knowledge-base economy view, humans were viewed as a very important asset (Fang et al., 2005), as recognized by academics on the importance of human aspects, as to provide training and compensation (Juan J. Tarı & Molina-Azorin, 2010). Oltra (2005) states that knowledge resources and human resources gradually considered as the main force environmental diversity. Furthermore, Alvesson (1993) claims that human were inventor and main owner knowledge.

This study examines positive and significant relationship between workforce focus on operation focus or process management (Ahmad & Schroeder, 2002; Calvo-Mora et al., 2006; Jayamaha et al., 2008). Then, workforce focal has positive and significant effect on management (Calvo-Mora et al., 2006) and customer satisfaction or customer focus (Fotopoulos & Psomas, 2010). Furthermore, Jayamaha et al. (2008; 2011) stated human resource focus has positive and significant effect on process management and business results. There was a research gap findings of Fotopoulos and Psomas (2010) that workforce focus did not significantly affect on measurement, analysis and knowledge transfer. Then Gomez et al. (2011) found that workforce focus had no significant effect on customer results, society results and key performance measures. In addition, Shaukat Brah et al. (2000) discovered the principle of employee training or workforce focus did not determine organization performance. From theoretical arguments and empirical studies that have been presented, hypothesis the effect of workforce forces on operation focus, measurement, and analysis and knowledge transfer and organization performance can be formulated as follows:

H3a. Workforce focus has significant effect on operations focus

H3b. Workforce focus has significant effect on measurement, analysis and knowledge transfer

H3c. Workforce focus has significant effect on organization performance

## **2.5 Relationship between customer focus on operations focus and measurement, analysis and knowledge transfer**

In efforts to reach success, every organization decision making must customer centered and conducted in accordance with consumer's suggestion in knowledge creation activity, knowledge set that value to consumer, which was done through assessment of consumer complaints and knowledge usage to satisfy compliance and continuously improve satisfaction (Ju et al., 2006). In constant environment change, company with total quality oriented that implementing innovative activities will give more attention to information and actions to meet consumers needs (Maria & Alvarez-Gonzalez (2007). Customer focus related to institutional effort that involving students and stakeholders to achieve long-term success. This involvement in business organizations was ability to listen consumer's voice, to build relationships and to use information obtained from consumers to boost innovation. Sila (2007) and Shaukat Brah et al. (2002) stated organization's long-term success depends on meeting customer needs effectively and efficiently. Research result show that Customer focus has positive and significant effect on operations focus (Fotopoulos and Psomas, 2010), key performance measures (Gomez et al., 2011) and process management (Jayamaha et al., 2008). Finally Masood Badri et al. (2006) found a significant effect of market focus on organization performance, measurement, and analysis and knowledge management. From theoretical arguments and empirical studies, hypothesis the effect of consumer focus on consumer focus, operations focus and measurement, analysis and knowledge transfer was formulated as follows:

H4a. Customer focus has significant effect on operations focus

H4b. Customer focus has significant effect on measurement, analysis and knowledge transfer

## **2.6 Effect of operation focus on measurement, analysis and knowledge transfer, and organization performance.**

Process management emphasizes on value-added to process, increasing productivity for each employee and company's quality improvement (Motwani, 2001). Ju et al. (2006) stated that main requirements of process management was to lower costs, boost efficiency and reduce cycle-time, all of them will be applied to conduct of knowledge management. There were several processes and performance shown knowledge management (Wong, 2005) and experts emphasized on several processes related to knowledge management (Nada Zupan & Kaše, 2007). Relationship of operation focus can not separate from process management. Process management itself was principle of conduct and systematical principles with greater emphasis on managing process than outcome (Anderson et al., 1994; Teh et al., 2008). Empirical research result as reference to test the effect of operations focus on measurement, analysis and knowledge transfer and organization performance were Lee et al. (2001) and Molina et al. (2007). They stated operations focus has positive and significant effect on measurement, analysis and knowledge transfer. Then Masood Badri et al. (2006) stated operation focus has positive and significant effect on measurement, analysis and knowledge management. Conversely, measurement, analysis and knowledge management has a positive effect on organization performance, strategic planning, faculty and staff focus, and operations focus.

Process management emphasizes on value-added to process, increasing productivity for every employee and company quality improvement (Motwani, 2001; Ju et al., 2006). Vinod Kumar et al. (2009), Gomez et al. (2011), Jayamaha et al. (2008) stated that operation focus has positive and significant effect on organization performance. In addition, Fenghueih and Zagd (2010) found that operation focus has positive and significant effect on strategic business performance. Referring to theoretical arguments and empirical studies mentioned above, research hypothesis can be formulated as follows:

H5a. Operations focus has significant effect on measurement, analysis and knowledge transfer

H5b. Operations focus has significant effect on organization performance

## 2.7 Relationship between Measurement, analysis and knowledge transfer on organization performance

Knowledge relates to information, skills and understanding that acquired from experience and human learning (Jasphara, 2004). In observing knowledge, knowledge management plays a very important role in government departments. College institutions also can help government agencies to strengthen effectiveness of services and improve its performance (Suzana, 2004 and Wiig, 2002). Wiig (2002) states that knowledge management were responsibility to strengthen development of employee's long-term competitiveness to address national and global problem. Institutions that implementing a comprehensive knowledge management in each activity were expected to contribute to overall success (Wiig, 2002). Agency always focused to create work knowledge effectively in order to achieve performance Wiig (2002). His focus was not on making a list of department's knowledge management within organization but to analyze interaction between employee knowledge and design technology to create, acquire and disseminate knowledge (Jasphara, 2004).

Testing the effect of measurement, analysis and knowledge transfer on organization performance was adopted from (Anastasia, 2012; Molina, 2007 and Masood Badri et al., 2006). They showed that measurement, analysis and knowledge management had a positive and significant effect on organization performance result. Balvir Talwar (2011) stated knowledge and information management have positive and significant effect on business result. In addition, Changiz (2011) found that communication and information systems quality, tools and techniques have positive and significant effect on organization performance. In addition, Jayamaha, et al. (2011) stated that measurement, analysis, and knowledge management has a positive and significant effect on strategic planning, human resource and customer focus, market focus, but had no significant effect on process management. Based on above theoretical arguments, then hypothesis follows was proposed:

H6. Measurement, analysis and knowledge transfer has significant effect on organization performance

Based on theoretical study and previous research results, conceptual model and research hypotheses can be presented in Figure 2.

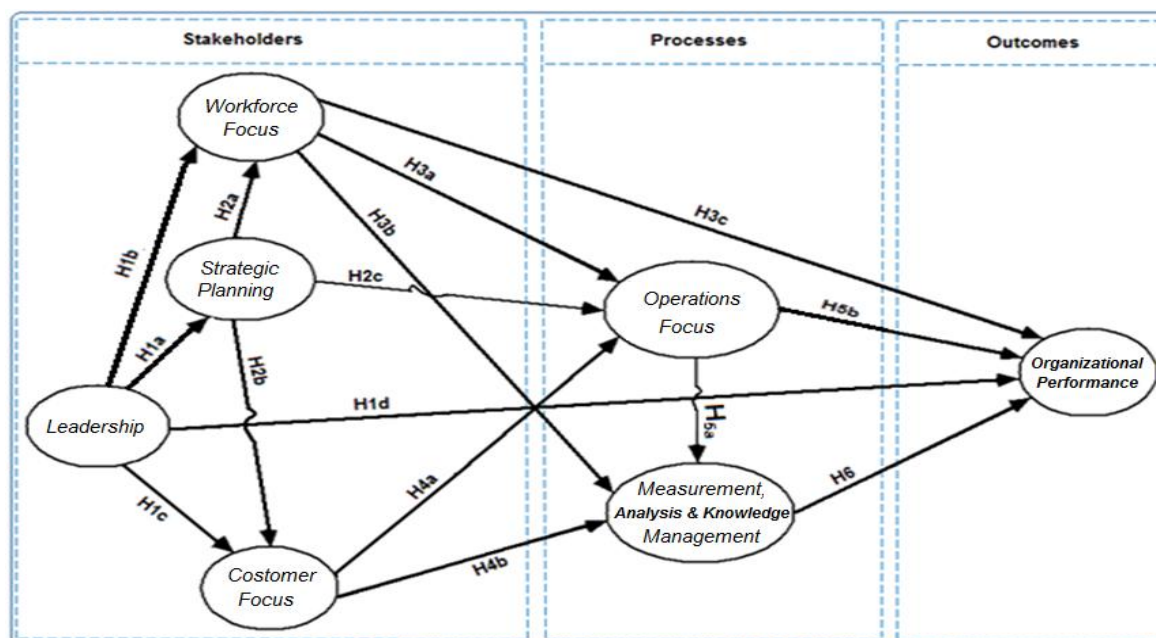


Figure 2 Research Framework and Research Hypotheses

## III. RESEARCH METHODS

This research uses positivist paradigm design with explanatory research typology. Data was collected by cross-section survey methods through a questionnaire. Explanatory research was intended to provide an explanation the causal relationships between variables through hypothesis test or it aims was to acquire right conclusions of causality between variables, and then choose alternatives action (Cooper & Schindler, 2003). The study population was all leaders involved in college quality management in Southeast Sulawesi as many as 135 people that scattered on 7 colleges and has been listed on National Accreditation Board. Leadership was a key element that involved in quality management of college institutions, namely leader at program of study/majors, faculty and university.

Thus, analysis unit in this study were leaders of college institutions. Sampling techniques in this study was population sampling method. Population sampling techniques was used because population number in this study was relatively small and easy to find. Therefore, respondents in this study were elements of leadership that was responsible for implementation of college's quality management, namely: university head, dean and chair department/program of study. Based on these considerations, numbers of samples were 135 respondents. Data collection of this research was survey, spreading questionnaire to college head of Southeast Sulawesi province. It was enclosed questionnaire where statement was made in such a way that limited respondents to choose one answer from some alternative given. Questionnaires distribution was done by visiting college leaders (Rector, Dean and Head of Department/Study Program) in Southeast Sulawesi and explains the questionnaire and waiting when questionnaire can take. Measurement data for all study variables use Likert scale. Likert Scale in this study was determined using 5-point Likert from 1 to 5 for all variables, 1 indicates "strongly disagree/good", 2 indicates "disagree/good", 3 indicates "quite agree/good", 4 indicates "agree/good", and 5 indicates "strongly agree/good" (Malhotra, 2010; Cooper & Seindler, 2003). Furthermore, before instrument in this study distributed, researchers run validity and reliability test to instrument. Validity and reliability results showed that all items statement of variables were valid because all indicators correlation  $\geq 30$  and Cronbach alpha  $\geq 0.60$ . It means that all statements were valid and reliable. It can be concluded that whole statements item that used to measure MBNQA criteria namely: leadership, strategic planning, workforce focus, customer focus, operation focus, measurement, analysis and knowledge transfer, and organization performance were valid and reliable. Thus instruments or questionnaires used was valid and reliable or have acceptable level of validity and reliability to measure indicator variables and subsequent data analysis. Data analysis method used in this study was Partial Least Square (PLS).

#### IV. ANALYSIS AND RESULTS

Respondents were leaders with responsibility to implement college quality management in Southeast Sulawesi. The test results in Table 1 shows that AVE value of all variables  $\geq 0.70$ . It means the latent variables construct of leadership, strategic planning, workforce focus, customer focus, operations focus, measurement, analysis and knowledge transfer, and organization performance have good discriminant validity. Research instrument that used to measure latent variables or constructs in this study meet discriminant validity criteria. Furthermore, Leadership variable has composite reliability value of 0.971; strategies planning of 0,929; workforce focus of 0.918; customer focus of 0.896; Operations focus of 0,914; measurement, analysis and knowledge transfer of 0.858 and 0.876 for organization performance variables. It mean seven latent variables analyzed have a good composite reliability because its value was greater than 0.70. It can be concluded that all instruments used in this study met criteria or feasible to measure of latent variables as a whole because it has a high compatibility and reliability. Analysis method used in this study was PLS. First step to evaluate PLS model was to test linearity of relationship between latent variables in structural model. Linearity data test be done to see whether the model used was a linear model. Test results can be seen linearity assumption the relationship between leadership, strategic planning, workforce focus and customer focus, operation focus, measurement, analysis and knowledge transfer, and organization performance can be said as linear because they smaller than significance level of 5 percent ( $p > 0, 05$ ). It can be concluded that all relationships between the variables within structural model was linear, so linearity assumption in PLS analysis were met. Thus, it proves that the data used was meet linearity requirements and can be analyzed further. Loading estimate value, mean, AVE and composite reliability of each indicator of this study, were presented in Table 2.

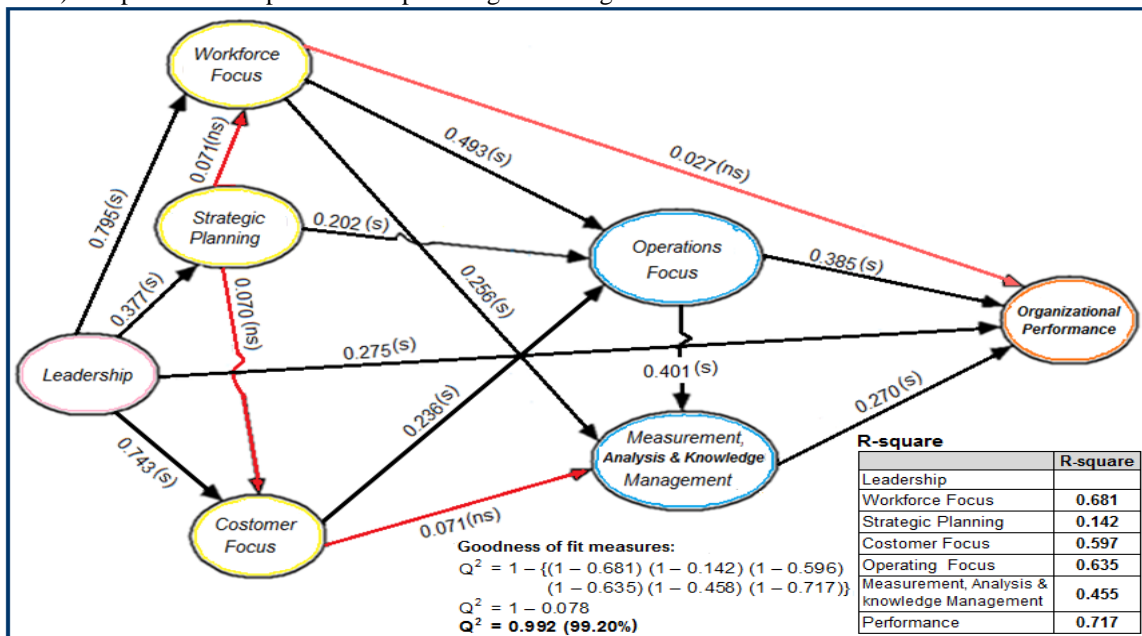
**Table 2 Value Estimate Loading, Mean, AVE and Composite Reliability**

Constructs	Indicators	Estimate Loading	Mean	AVE	Composite Reliability
Leadership (LD)	LD <sub>1</sub> . Top management role	0.941	3.68	0.870	0.971
	LD <sub>2</sub> . Organizations governance	0.943	3.84		
	LD <sub>3</sub> . Performance monitoring	0.912	3.64		
	LD <sub>4</sub> . Social responsibility	0.942	3.69		
	LD <sub>5</sub> . Ethical leadership behavior	0.925	3.66		
Strategic Planning (SP)	SP <sub>1</sub> . Strategic development	0.909	3.60	0.765	0.929
	SP <sub>2</sub> . Strategy plan goals	0.892	3.78		
	SP <sub>3</sub> . Empowerment	0.809	3.81		
	SP <sub>4</sub> . Performance projection	0.886	3.62		
Workforce Focus (WF)	SP <sub>1</sub> . Workforce empowerment	0.868	3.51	0.692	0.918
	SP <sub>2</sub> . Workforce development	0.856	3.76		
	SP <sub>3</sub> . Workforce assessment	0.773	3.81		
	SP <sub>4</sub> . Workforce capability	0.846	3.89		
	SP <sub>5</sub> . Workforce atmosphere	0.814	3.79		
Customer Focus	CF <sub>1</sub> . Student knowledge	0.737	3.80	0.59	0.896



(CF)	CF <sub>2</sub> . Labor market involvement	0.760	3.84		
	CF <sub>3</sub> . Building a quality culture	0.778	3.64		
	CF <sub>4</sub> . Listening student's aspirations	0.792	3.58		
	CF <sub>5</sub> . Organization involvement	0.734	3.76		
	CF <sub>6</sub> . Promoting program	0.806	3.89		
Operating Focus (OF)	OF <sub>1</sub> . Work system	0.929	4.00	0.841	0.914
	OF <sub>2</sub> . Work process	0.905	3.99		
Measurement, Analysis & knowledge Management (MAKM)	MAKM <sub>1</sub> . Measurement used	0.695	3.76	0.604	0.858
	MAKM <sub>2</sub> . Analytical approach	0.760	4.01		
	MAKM <sub>3</sub> . Data/information availability	0.804	4.07		
	MAKM <sub>4</sub> . Presence often knowledge/ideas	0.840	3.91		
Organizational Performance (OP)	OP <sub>1</sub> . Student learning outcomes	0.765	4.12	0.586	0.876
	OP <sub>2</sub> . Consumer focus result	0.750	3.40		
	OP <sub>3</sub> . Workforce focus result	0.774	3.89		
	OP <sub>4</sub> . Focus result	0.718	3.42		
	OP <sub>5</sub> . Leadership support result	0.817	4.13		

Analysis method used in this study was PLS. First step to evaluate PLS model was to test linearity of relationship between latent variables in structural model. Linearity data test be done to see whether the model used was a linear model. Test results can be seen linearity assumption the relationship between leadership, strategic planning, workforce focus and customer focus, operation focus, measurement, analysis and knowledge transfer, and organization performance can be said as linear because they smaller than significance level of 5 percent ( $p > 0, 05$ ). It can be concluded that all relationships between the variables within structural model was linear, so linearity assumption in PLS analysis were met. Thus, it proves that the data used was meet linearity requirements and can be analyzed further. Structural model was evaluated with respect to predictive relevance ( $Q^2$ ) models to measure how well observed values were generated by model. Calculations result was  $Q^2 = 0.992$  or 99.20%. It means that accuracy of this research model can explain diversity of leadership, strategic planning, workforce focus, customer focus, operations focus, measurement, and analysis and knowledge transfer and organization performance variables about 99.20%. Remaining 0.80% was explained by other variables that not included in research model. Thus, model can be used to test hypothesis. Hypothesis testing and structural models (Inner models) were evaluated by looking at value of path parameter coefficient relationship between latent variables. Purpose of structural relationship model testing was to determine relationship between the latent variables that designed in this study. Analysis results can be seen from the path coefficients, the critical point (t-statistic) and p-value were presented in path diagram of Figure 3 and Table 3.



Notes: ns = not significant and s = significant (p-value) at  $\alpha = 0.05$

Figure 3 Diagram for Hypothesis Testing and Path Coefficient

**Table 2 Hypothesis Testing and Path Coefficient for PLS**

Direct Influence			Path Coefficients	t-statistic	p-value	Empirical Evidence	
H <sub>1</sub> :	H <sub>1a</sub> .	LD --> SP	0.377	4.548	0.000	Significant	Accepted
	H <sub>1b</sub> .	LD --> WF	0.795	18.272	0.000	Significant	Accepted
	H <sub>1c</sub> .	LD-->CF	0.743	13.587	0.000	Significant	Accepted
	H <sub>1d</sub> .	LD --> OP	0.275	2.640	0.009	Significant	Accepted
H <sub>2</sub> :	H <sub>2a</sub> .	SP --> WF	0.071	1.311	0.192	Not Significant	Rejected
	H <sub>2b</sub> .	SP --> CF	0.070	1.144	0.255	Not Significant	Rejected
	H <sub>2c</sub> .	SP --> OF	0.202	3.342	0.001	Significant	Accepted
H <sub>3</sub> :	H <sub>3a</sub> .	WF --> OF	0.493	5.871	0.000	Significant	Accepted
	H <sub>3b</sub> .	WF --> MAKM	0.256	2.397	0.018	Significant	Accepted
	H <sub>3c</sub> .	WF --> OP	0.027	0.344	0.731	Not Significant	Rejected
H <sub>4</sub> :	H <sub>4a</sub> .	CF --> OF	0.236	2.224	0.028	Significant	Accepted
	H <sub>4b</sub> .	CF --> MAKM	0.071	0.626	0.532	Not Significant	Rejected
H <sub>5</sub> :	H <sub>5a</sub> .	OF --> MAKM	0.401	2.956	0.004	Significant	Accepted
	H <sub>5b</sub> .	OF --> OP	0.385	5.330	0.000	Significant	Accepted
H <sub>6</sub> .		MAKM --> OP	0.270	3.822	0.000	Significant	Accepted

Notes: LD = Leadership; SP = Strategic Planning; WF = Workforce Focus; CF = Customer Focus; OF = *Operating Focus*; MAKM = *Measurement, Analysis & Knowledge Management*; and OP = *Organizational Performance*

Hypothesis testing results in Table 2 shows from 15 direct effect tested; there were 11 with significant effect. It was evidenced by value of critical points (t-statistic)  $\geq 2.00$  and the probability value  $< \alpha = 0.05$ , namely: Leadership has a positive and significant effect on strategic planning, workforce focus, customer focus and organization performance (H1a, H1b, H1c, H1d was accepted); strategies planning has positive and significant effect on operation focus (H2C was accepted); workforce focus have positive and significant effect on operations focus and measurement, analysis and knowledge transfer (H3a, H3b was accepted); customer focus has positive and significant effect on operation focus (H4b was accepted); operations focus has positive and significant effect on measurement, analysis and knowledge transfer, and organization performance (H5A, H5B was accepted); and measurement, analysis and knowledge transfer, has positive and significant effect on organization performance (H6 was accepted). There were four hypothesis that insignificant because t-statistic values  $< 2.00$  with a probability value  $> \alpha = 0, 05$ . They are: strategic planning did not have significant effect on workforce focus and customer focus (H2a; H2b was rejected); workforce focus did not have significant effect on organization performance (H3c was rejected), and customer focus did not have significant effect on measurement, analysis and knowledge transfer (H4b was rejected).

## V. DISCUSSION

Leadership was one important criterion in MBNQA practice to improve quality management to create competitiveness and high organization performance. Analysis results found that effect of leadership on strategic planning, workforce focus, customer focus and organization performance were positive and significant (H1a, H1b, H1c, and H1d was accepted). This study results can prove that better leadership, the higher implementation of strategic planning, workforce focus, customer focus and organization performance. This study findings reflect that implementation of good leadership at college was able to support various changes to increase strategic planning, workforce focus, customer focus and organization performance. Research results showed that organization governance that measured by leadership roles to involve in formulating action plans to achieve strategic goals, leadership involvement in communicating vision, with a clear mission, strong leadership commitment to implement policy/strategy and leadership role to provide guidance of performance expected setting were a reflection of leadership implementation that become crucial strategic development as reflection of strategic planning. Furthermore, it can determine workforce empowerment that measured through empowerment effectiveness to organize workforce implementation as a reflection of workforce focus. Moreover, it can determine customer focus that measured through program promotion and outcome achievement due to leadership support/good social responsibility as a reflection of organization performance. This study finding support research of Masood Badri et al. (2006), Gomez et al. (2011), and Talib et al. (2011) who tested MBNQA criteria for the education sector in United Arab Emirates. They found that leadership was able to increase university focus toward workforce focus. This study finding reinforces research of Calvo-Mora et al. (2006) that leadership has significant effect on workforce focus, strategic planning and policy. It is also consistent with findings of Shaukat Brah et al. (2000); Fenghueih & Zagd, (2010) and Changiz (2011) that leadership has positive and significant effect on organization performance.

Furthermore, Gomez et al. (2011); Talib et al. (2011) stated that leadership focus has significant effect on strategic planning and workforce focus. This results also confirm theoretical study proposition of Masood Badri et al. (2006) that good leadership was able to increase management process, strategic planning; measurement, analysis and knowledge management; market focus and organization performance. In addition, this study findings confirm theoretical study of Rafikul Islam (2007) that leadership criteria was criteria with highest weight, followed by criteria of organization performance, strategic planning, and faculty and staff focus on MBNQA implementation. Anupam Das et al. (2011) and Balvir Talwar (2011) stated that good leadership competence was determined by customer focus, continuous improvement, employee involvement, and supplier quality management. This study finding inconsistent with research of Jayamaha et al. (2008) that leadership have positive and significant effect on strategic planning and measurement, analysis, and knowledge management, but leadership did not have significant effect on customer focus. Furthermore, Fotopoulos (2010) and Anupam Das et al. (2011) stated that leadership did not have significant effect on customer focus. In addition, Fenghueih and Zagd, (2010) stated that leadership has negative and insignificant effect on workforce focus. Reasons that underlying findings differences were diversity in measurement, object under study.

Strategic planning relates to goal setting and program in effort to achieve goal. Strategic planning in this study was reflected through indicators of strategic plan development process; strategies plan to achieve goals; development and empowerment plan and projected performance of education quality has not been implemented properly. Estimate loading indicator value show good strategic development implementation was considered as most important indicator. Test results found that strategic planning did not have significant effect on workforce focus and customer focus (H2a and H2b was rejected). This result was based on indicator testing of measurement model of strategic planning indicator, good strategic development performance, but has not been properly implement according to respondents' assessment. Respondent's assessment show that strategic planning that become priority or precedence in implementation was indicator of action plans development and empowerment. This study result reinforces findings of Gomez et al. (2011) that policy and strategy had no significant effect on people results and customer results. It found that strategic planning did not significantly effect on process management (Fenghueih and Zagd, 2010; Jayamaha et al., 2008; 2011). Strategic planning has positive and significant effect on operation focus (H2c was accepted). It means that when university in setting strategic planning follow formal and informal processes by utilizing various forecast, projections, options, or scenarios to direct changes or modifications in programs, services or use technology to involve faculty, employees and stakeholders, coupled with identifying factors that affect organization's future through collecting or analyzing data and relevant information, followed by monitoring future focus on students, stakeholders and market by not forget to strength or weakness of competitors, then it means that strategic plan was aimed at students learning or development. This study findings support research of Win & Cameron (1998), Wilasom & Collier (2000), Detert & Jenni (2000). It means that mediation of strategic planning of MBNQA can improve Operations focus both in developed countries and developing countries as Indonesia.

Furthermore, this study confirms findings of Calvo-Mora et al. (2006) that strategic planning has positive and significant effect on workforce focuses or management staff, partnership and focus on process management. Masood Badri et al. (2006) found that strategic planning has positive effect on process management, faculty and staff focus and workforce focus. In addition, Anastasia (2012) and Daniel & Micaela (2009) found business strategic has positive effect on organization performance. Lau et al. (2004) stated strategic planning has significant effect on customer increase and market focus, process management, and business result. This result inconsistent with findings that strategic plan was an activity done, both socially and intellectually, to achieve success and competitive advantage in a particular sector (Calantone et al., 2003). Latest study of Anderson (2000) stated strategic planning in certain environmental conditions contribute to organization performance. Contradiction results of Fenghueih and Zagd, (2010) found that strategic planning did not have significant effect on product quality or operation focus. In addition, Gomez et al. (2011) stated that policy and strategy had no significant effect on people, society and customers results.

Workforce focus was a college leader's element perception to organization's action to workforce empowerment; workforce development; workforce capabilities; workforce atmosphere and workforce assessment. Research results show focus group has a significant effect on operations focus and measurement, analysis and knowledge transfer (H3a and H3b was accepted). It means workforce focus change in effort to reveal workforce focus ability and capacity was needed to build an environment conducive to achieve operation focus and measurement, analysis and knowledge transfer. These study findings extend research findings of Ahmad & Schroeder (2002); Jayamaha et al. (2008) that workforce focus significant and positive effect on operation focus or process management. Workforce focus has positive and significant effect on process management (Calvo-Mora et al., 2006) and customer satisfaction or customer focus (Fotopoulos and Psomas, 2010). This study findings were consistent with research findings of Fang et al. (2005); Molina et al. (2007); Oltra (2005); Alvesson (1993);

Nada Zupan and Kase (2007), Hsiu-Fen Lin (2007) and Yahya & Goh, (2002). Furthermore, related to knowledge-base economy, humans were viewed as a very important asset (Fang et al., 2005), as recognized by academics on importance of human aspects, such as in providing training and compensation (Juan J. Tari & Molina-Azorin, 2008). Oltra (2005) states that knowledge resources and human resources gradually considered as main driver of environmental diversity. Masood Badri et al. (2006), Nada Zupan and Kase (2007), Hsiu-Fen Lin (2007), Yahya & Goh (2002) found that workforce focus has significant effect on measurement, analysis and knowledge management. Analysis results show that workforce focus did not have significant effect on organization performance (H3c was rejected). According to respondent, this result related to work focus was prioritized according to work in practice as an indicator of workforce ability to improve quality. But based on testing of measurement models, dominant or most important contribution was workforce empowerment indicators. These results indicate that workforce empowerment indicators was dominant in reflecting workforce focus variable, but have not done rightly that affect on slow achievement of organization performance. These results were consistent with research findings of Shaikat Brah et al. (2000) that principally employee training or workforce focus did not determine organization performance. Then This study findings do not support research findings of Vinod Kumar et al. (2009) and Jayamaha et al. (2008) that workforce focus has positive and significant effect on organization performance. Customer focus was reflected through indicators: student knowledge; labor market involvement to improve education quality; building a quality culture for students/stakeholders; listening to students/stakeholders aspirations quality improvement; involvement of all organization elements to improve student satisfaction, and promoting the program. Analysis results found that path coefficient value of customer focus has positive and significant effect on operation focus (H4a accepted). It means that the higher the customer focus then the higher operation focuses. Thus consumer focus variables can explain variation of operation focus changes. This fact was reinforced by study findings of Christos Fotopoulos and Psomas (2010) that customer focus has positive and significant effect on operation focus. Furthermore, Jayamaha et al. (2008) show customer focus and market focus has positive and significant effect on process management. Adversely, measurement, analysis, and knowledge management has a positive and significant effect on customer focus.

Consumers focus did not have significant effect on measurement, analysis and knowledge transfer shows (H4b was rejected). According with respondent perception, indicator that prioritized in implementation of measurement, analysis and knowledge transfer was data and information availability. But based on measurement models testing, the dominant or most important contribution was many knowledge/ideas. Thus, according with respondent assessment, college management should improve measurement, analysis and knowledge transfer with main priority should be based on many knowledge/ideas indicator that measured through knowledge/ideas implementation in education quality management. These studies findings differ with Gomez et al. (2011) that customer results have positive and significant effect on key performance measures. Masood Badri et al. (2006) found a significant effect of market focus on organization performance measurement, analysis and knowledge management. Operation focus was one of important criteria in quality management achievement. Therefore that actions taken by organization leaders to design a working system, main activities process, preparation to face emergency, and work processes design. Data analysis result found that operation focus has positive and significant effect on measurement, analysis and knowledge transfer and organization performance (H5A and H5B accepted). This study findings reflect that good operation focus implementation in college was able to support various changes in measurement, analysis and knowledge transfer and organization performance. It means working systems to improve education quality, reflection operation focus, frequently determine the creation of knowledge/ideas and achievement of results obtained from leadership support was a reflection of organization performance.

These study findings were consistent with research findings of Lee et al. (2001) and Molina et al. (2007) that operation focus has positive and significant effect on measurement, analysis and knowledge transfer. Masood Badri et al. (2006) stated that operation focus has positive and significant effect on measurement, analysis and knowledge management. This results support research of Vinod Kumar et al. (2009), Gomez et al. (2011), Jayamaha et al. (2008) that operation focus has positive and significant effect on organization performance. In addition, Fenghueih and Zagd, (2010), found operation focus has positive and significant effect on strategic business performance. Measurement, analysis and knowledge transfer was organization action related to organization performance measurement, performance analysis and review, business performance improvement through knowledge management and information management technologies. Analysis result found that path coefficient value of measurement, analysis and knowledge transfer has positive and significant effect on organization performance (H6 was accepted). It means the better implementation of measurement, analysis and knowledge transfer then the higher organization performance. Testing the effect of measurement, analysis and knowledge transfer will expand organization performance was consistent with research findings of Molina (2007) and Masood Badri et al.

(2006) that measurement, analysis and knowledge management and a positive and significant effect on organization performance result. This research supports Balvir Talwar (2011) and Changiz (2011) that knowledge and information management has positive and significant effect on business result. This finding inconsistent with study findings of Jayamaha et al. (2011) that measurement, analysis, and knowledge management has no significant effect on process management.

## **VI. THEORETICAL AND MANAGERIAL IMPLICATIONS**

This study findings reinforce quality management theory with approaches seven MBNQA practical criteria that developed by (Lewis & Smith (1994); Cheng & Tam (1997); Dean and Bowen (1994); Ahmad & Schroeder, (2002); Sangeeta Sahney et al. (2008) Jayamaha et al. (2008, 2011); Haizer and Render (2010); Krajewski et al. (2010)) that quality management implementation with MBNQA criteria were based on quality performance philosophy that should be main focus of each company. High quality has significant effect on organization performance improvement. In addition, that philosophy emphasizes on principles of customer satisfaction, employee involvement, and continuous performance improvement. Furthermore, this research revealed relationship importance with stakeholders or business partners in applying integrative concept of quality management with MBNQA criteria. Business partners/stakeholders work as partners with organization that must be concerned. Company ultimate success in implementing integrated quality management should through: leadership, strategic planning; workforce focus; consumer focus; operation focus; measurement, analysis and knowledge transfer and organization performance variables. It should implement rightly with business partners/stakeholders to build partnering relationships very profitable in long run. In addition, this research has contributed to conceptual development and theoretical insights on quality management implementation through MBNQA criteria to improve organization performance, both directly and mediated by operation focus and measurement, analysis and knowledge transfer that based on operations management and quality management theory.

Leadership was an important aspect of education quality management. Managerial implications of this study were expected leadership would improve workforce, determining the strategic planning and driving customer focus to increase capability and capacity of leadership at all levels. It was an urgent need. On the job training as well as of the job training should become a major concern. Thus the leadership competencies will be able to formulate a comprehensive strategy, accurate and easy to implement, so consumer focus attention becomes part of whole organization. This research results could help to provide insight and knowledge for leadership in college education to improve management quality and organization performance. Effective leadership not only communicates the importance of quality management to stakeholders or business partners, but it presents the objectives and philosophy of quality management to employees. This study contributes to college in implementing quality management concepts to increase competitiveness and organization performance.

## **VII. RESEARCH ORIGINALITY, LIMITATIONS AND FUTURE RESEARCH**

This research originality become basis to develop contingency modeling toward relationship models of MBNQA criteria implementation namely: leadership, strategic planning; workforce focus; consumer focus; operation focus; measurement, analysis and knowledge transfer and organization performance. These study findings prove existence of integrated conceptual model the relationship between MBNQA criteria implementation directly has significant effect on operation focus; measurement, analysis and knowledge transfer and organization performance where in previous researchers test it separately. Research results show operations focus mediate relationship between workforce focus and customer focus with organization performance. It can be concluded that increased workforce focus and consumer focused directly have significant effect to improve measurement, analysis, and knowledge transfer and organization performance. Thus there were ample empirical evidence that workforce focus and a good customer focus has significant effect on measurement, analysis, and knowledge transfer and organization performance by focusing on mediation process. Finally, research result show that operation focus increases directly has significant to improve organization performance. Thus there was ample empirical evidence that workforce focus and good operation focus has significant effect on organization performance.

This research has been carried out maximally, but given the wide discussion scope, this study has limitations in study sample and object. It only use respondent from college/university leader in Southeast Sulawesi. It may limit generalizability of these study findings in other sectors, especially education sector in other regions. Therefore, researchers can further develop this research with more extensive samples and objects across Indonesia. Furthermore, data analysis of this study based on survey date. It has limitation to present relationship analysis in one point of time (cross-sectional). Because dynamics environment constantly change, it

was necessary to identify the changes in future research and retest whether relationship between variables that analyzed in the study was change.

### VIII. CONCLUSION

Implementation of leadership, strategic planning, workforce focus, customer focus, operations focus, measurement, analysis and knowledge transfer, as well as good organization performance has an important role to support quality management achievement through MBNQA model criteria. This research findings note that good leadership can improve strategic planning, workforce focus, customer focus and organization performance. It means governance as measured through organization leadership involvement in formulating action plans to achieve strategic goals, leadership involvement in communicating vision, with a clear mission, strong leadership commitment to implement policy/strategy and leadership role to provide guidance to set performance have significant contribution on good strategic development implementation. It was reflection of strategic planning; workforce empowerment, promoting program and results obtained because leadership support /good social responsibility.

Strategic planning did not contribute significantly to improve workforce focus and customer focus, however able to significantly contribute to increase operations focus. These results indicate that good strategic development implementation more dominant to reflect strategic planning, but have not done rightly. It makes slow implementation of workforce focus and customer focus. Good workforce focus able to contribute significantly to increase operations focus and measurement, analysis and knowledge transfer, but it not make significant contribution to improve organization performance. Workforce focus more reflected in workforce empowerment to make significant contribution in increasing employment systems to improve education quality and frequent knowledge/ideas were considered necessary to reflect measurement, analysis and knowledge transfer, but not able to make a real contribution to improved outcomes obtained because leadership support /social responsibility was a reflection of organization performance .

Good customer focus can significantly improve operation focus. However did not affect significantly on measurement, analysis and knowledge transfer. According to respondent, this result was due to availability of data and information indicator was prioritized for measurement, analysis and knowledge transfer variable. However, based on measurements, the dominant or most important contribution was frequent knowledge/ideas. It means that consumers focus were more dominant to reflect promoting programs that measured through regular visits to community/industry to promote university or program. It able to make a real contribution to increasing frequent knowledge/ideas, but cannot make a significant contribution to improve results obtained from leadership support /social responsibility as reflection of organization performance. Data analysis result found that good operation focus significantly contributes to increase measurement, analysis and knowledge transfer, and organization performance. This study findings may prove that the better operation focus implementation, the higher measurement, analysis and knowledge transfer and organization performance. Furthermore, high measurement, analysis and knowledge transfer high contribute significantly to organization performance improvement. It means better implementation of measurement, analysis and knowledge transfer was reflected by frequent knowledge/ideas as measured by frequent knowledge/ideas for organization quality management to increase organization's performance.

### REFERENCES

- [1] Ahmad, S. and Schroeder, G. The importance of recruitment and selection process for sustainability of total quality management, *International Journal of Quality & Reliability Management*, Vol. 19 (2002), No. 5, pp. 540-50.
- [2] Al-Mabrouk K Critical Success Factors Affecting Knowledge Management Adoption: A Review of the Literature. *Innovations in Information Technology, IEEE Xplore* (2006), pp.1-6
- [3] Anastasia A. Katou Investigating reverse causality between human resource management policies and organizational performance in small firms Management. *Research Review* Vol. 35 (2012), No. 2, pp. 134-156
- [4] Anupam Das, Vinod Kumar and Uma Kumar The role of leadership competencies for implementing TQM An empirical study in Thai manufacturing Industry. *International Journal of Quality & Reliability Management* Vol. 28 (2011), pp: 195-219
- [5] Badan Pusat Statistik, Sulawesi Tenggara Dalam Angka. (BPS Sultra, 2011, Kendari)
- [6] Balvir Talwar, Comparative study of framework, criteria and criterion weighting of excellence models. *Measuring Business Excellence*. VOL. 15 (2011), NO. 1
- [7] Becket & Brookes, Quality Management Practice in Higher Education – What Quality Are We Actually Enhancing? *Journal of Hospitality, Leisure, Sport and Tourism Education* Vol. 7(1), (2008), pp: 40 – 54
- [8] Calvo-Mora, Antonio Leal and Jose L. Roldan, Using enablers of the EFQM model to manage institutions of higher education, *Quality Assurance in Education* Vol. 14 No. 2, (2006), pp: 99-122.
- [9] Changiz Valmohammadi, The impact of TQM implementation on the organizational performance of Iranian manufacturing SMEs. *The TQM Journal* Vol. 23(5), (2011), pp: 496-509.
- [10] Cooper Donald R, Schindler Pamela S, *Business Research Methods International Editions*, (McGrawHill., New York. (2003))
- [11] Daniel Jime'nez-Jime'nez dan Micaela Marti'nez-Costa The performance effect of HRM and TQM: a study in Spanish organizations. *International Journal of Operations & Production Management*, Vol. 29 No. 12, (2009), pp: 1266-1289
- [12] Dean, J.W. and Bowen, D.E. Management theory and total quality: improving research and practice through theory development, *Academy of Management Review*, Vol. 19 No. 3, (1994), pp: 392-418.

- [13] Faisal Talib, Zillur Rahman, M.N. Qureshi, Analysis of interaction among the barriers to total quality management implementation using interpretive structural modeling approach, *Benchmarking: An International Journal*, Vol. 18 Iss: 4, (2011), pp: 563 - 587
- [14] Fenghueih dan Zagd, Implementation of Total Quality Management In Mongolian Universities. *International Conference on Knowledge-Based Economy And Global Management Tainan, TAIWAN*, 4-5 November, (2010)
- [15] Fotopoulos and Psomas, Empirical validity of Baldrige criteria: New Zealand evidence *International Journal of Quality & Reliability Management* Vol. 25 No. 5, (2010), pp: 477-493
- [16] Goldberg, J.S. and Cole, B.R. "Quality management in education: building excellence and equity in student performance", *Quality Management Journal*, Vol. 9 (4), (2002), pp: 8-22.
- [17] Gomez & Costa A critical evaluation of the EFQM model, *International Journal of Quality & Reliability Management* Vol. 28 No. 5, (2011), pp: 484-502
- [18] Grant, D., Mergen, E. & Widrick, S. A Comparative Analysis of Quality Management in US and International Universities. *Total Quality Management*, Vol 15 (1), (2004), pp: 423-438.
- [19] Hair, Joseph F, William C. Black, Barry J. Babin, and Ronald L. Tatham, *Multivariate Data Analysis*, Seventh Edition. Pearson Education (2010).
- [20] Heizer. J and Render B, *Operations Management (Manajemen Operasi)*, Buku 2 Edisi 9 Penerbit Salemba Empat. Jakarta (2010).
- [21] Heizer. J and Render B, *Operations Management (Manajemen Operasi)*, Buku 1 Edisi 9 Penerbit Salemba Empat. Jakarta (2009).
- [22] Islam Rafikul, MBNQA criteria in education: assigning weight from a Malaysian perspective and proposition of an alternative evaluation scheme (2011).
- [23] Jayamaha Nihal Palitha, Nigel Peter Grigg and Robin Stephen Mann, Empirical validity of Baldrige criteria: New Zealand evidence; *International Journal of Quality & Reliability Management* Vol. 25 No. 5, (2008), pp: 477-493
- [24] Jayamaha Nihal Palitha, Nigel Peter Grigg and Robin Stephen Mann Empirical analysis of the Baldrige Criteria as both an organisational performance measure and a theoretical model, *Measuring Business Excellence* , Vol. 15 NO. 1, (2011), pp: 20-33.
- [25] Krawjeski, Rizmant dan Malhotra., *Operation Managemen, Processes and Supply Chains*. Ninth Edition, Pearson (2010).
- [26] Kumar Vinod , Choisine Franck , Grosbois Danuta de, Kumar Uma. Impact of TQM on company's performance, *International Journal of Quality & Management* Vol. 26, (2009).
- [27] Lau, Zhao, Xiao, Assessing quality management in China with MBNQA criteria. *International Journal of Quality & Reliability Management* Vol. 21 No. 7, (2004), pp: 699-713
- [28] Lee CC, Yang Yu LM, The Knowledge of customers and employees in product quality. *J. Manage Dev.*20(8), (2001), pp:691-704.
- [29] Lin H F Knowledge sharing and firm innovation capability: an empirical study. *Int. J. Manpower*. 28(4) (2007), pp: 315-332
- [30] Malhorta, Naresh, *Marketing Research, An Applied Orientation*, The Prentice-Hall. Inc., New Jersey, NJ. 2010.
- [31] Maria Leticia dan Alvarez-Gonzalez, TQM and firms performance: An EFQM excellence model research based survey. *Int. Journal of Business Science and Applied Management*, Volume 2, Issue 2, (2007), pp: 21-41
- [32] Masood Abdulla Badri and Hassan Selim; Khaled Alshare and Elizabeth E. Grandon; Hassan Younis and Mohammed Abdulla, The Baldrige Education Criteria for Performance Excellence Framework Empirical test and validation, *International Journal of Quality & Reliability Management* Vol. 23 No. 9, 2006, pp: 1118-1157
- [33] Mills Annette M and. Smith Trevor A. Knowledge management and organizational performance: a decomposed view, *Journal Of Knowledge Management* Vol. 15, 1 (2011).
- [34] Molina L M, Montes FJL, Ruiz-Moreno A Relationship between quality management practices and knowledge transfer. *J. Oper. Manage.* 25(2007), pp: 682-701
- [35] Sahney, Banwet & Karunes. An integrated framework of indices for quality management in education: a faculty perspective, *The TQM Journal* Vol. 20 No. 5, 2008, pp: 502-519
- [36] Santos-Vijande ML, Alvarez LI, TQM and firms performance: An EFQM excellence model research based survey. *Int. J. Bus. Sci. Appl. Manage.* 2(2), (2007), pp: 21-41.
- [37] Shaukat Brah SA, Wong JL, Rao BM TQM and business performance in the service sector: a Singapore study. *Int. J. Oper. Prod. Manage.*20(11), (2000), pp:1293-1312.
- [38] Teh PL, Ooi KB, Yong CC (2008). Does TQM impact on stressors? A conceptual model. *Ind. Manage. Data Syst.* 108(8), pp: 1029-1044
- [39] Wong KY Critical success factors for implementing knowledge management in small and medium enterprises. *Ind. Manage. Data Syst.*105(3), (2006), PP 261-279
- [40] Yahya S, Goh WK Managing human resources toward achieving knowledge management. *J. Knowledge Manage.*6(5), (2002), pp: 457-468
- [41] Zupan N, Kase R The role of HR actors in knowledge networks. *Int. J. Manpower* 28(4), (2007), pp: 243-259.