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## RESEARCH ARTICLE

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# Analysis of Public Hospital Managers' Intentions in The Use of Balanced Scorecards

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## ABSTRACT

**Background:** Regional public hospital has long been a 'Badan Layanan Umum Daerah' (BLUD) system. In BLUD system financial performance and non-financial performance must be reported once a year. The Performance report based on The Balanced Scorecard (BSC). In practice, many hospitals have not or are late in using the BSC. The purpose of this study was to assess managers' intentions in using the BSC. By using the Theory of Planned Behavior (TPB) to measure whether the determinants of behavioral attitudes, subjective norms, and control behavior are predictors of intention to use the BSC. **Methods:** This study used mix method sequential expalantory, a combining of a quantitative and qualitative approach with a cross-sectional design. The quantitative approach using questionnaire to measure 4 variables and then qualitative approach by document review and Focus Group Discussion (FGD) to get more comprehensive data broadly and in depth the variables. The influence of behavioral attitudes, subjective norms, and control behavior on manager intentions was analyzed by multiple linear regression. **Results:** Out of 67 respondents, the general intention was moderate (73%), low (15%), and high (12%). The results of the T-test showed an attitude significance of 0.205; subjective norm 0.001; behavioral control 0.004. The F test showed a p-value of 0.000. The coefficient of determination showed the effect of the three variables on the intention of 67.4%. **Conclusion:** The three variables simultaneously affect the intention, but partially only the subjective norm and behavioral control variables have a significant influence on the intentions of the managers.

**Keywords:** Theory of Planned Behavior; intention; manager; Balanced Scorecard

## INTRODUCTION

### Background

In its development, healthcare business management, especially hospital business today, is faced with various challenges. <sup>(1)</sup> High operating costs, internal inefficiencies, and rising demand for diversification suggest that the healthcare industry continues to face turbulent, confusing, and threatening healthcare agencies. <sup>(2)</sup> Hospital management must also be able to adapt and manage the balance of costs, quality, access, and consumer choice. <sup>(1)</sup> It has been clearly stated around the 1980s, that traditional measurements of financial performance would not work for most companies. There needs to be a mix of financial and operational aspects of the business. <sup>(3)</sup> The use of *the Balanced Scorecard* (BSC) model complements other strategic planning models already in use. <sup>(4)</sup> The BSC concept is a comprehensive performance gauge frame of mind because it involves four business perspectives and BSC also has a coherent nature due to the mutually influential relationship of each perspective. <sup>(5)</sup>

Kediri Regency Hospital, a Non-Education Type B Hospital under the Kediri Regency Regional Government. With a capacity of 272 beds in its operation to organize individual health services since 2010 implementing the management model of the Regional General Services Agency (BLUD) where the regulations mention performance assessment in blud environment consisting of assessment of financial performance and non-financial performance. <sup>(6)</sup> However, the reported performance measurement mechanism using BSC was only implemented in 2018. The phenomenon of late hospital organization in implementing BSC as happened in Kediri Regency Hospital was also revealed by Behrouzi et al., (2014) in his research. <sup>(7)</sup>

The delay in service organizations such as hospitals in using BSC will be seen from the number of government hospitals that are out of competition with private hospitals. One of the studies that show this is related to patient satisfaction in government hospitals and private hospitals is a study conducted by Andriana and Ichsan, n.d. (2016) showing higher levels of inpatient satisfaction in private hospitals than in public hospitals.<sup>(8)</sup>

The study aims to measure the intentions of natural area hospital managers using BSC as a performance measurement device using the *Theory of Planned Behavior* (TPB) approach, a behavioral psychology approach aimed at predicting individual behavior more deeply.<sup>(9)</sup> The theory developed by Icek Ajzen states that behavior is not entirely under the influence of the individual itself.<sup>(10)</sup> Ajzen also stated that the intention to perform the behavior in various ways can be accurately estimated from the determinant factors of attitudes towards behavior, subjective norms, and perceptions of perceived behavioral control.<sup>(11)</sup>

The application of TPB in behavioral research has been widely found in various fields.<sup>(10)</sup> But there have not been many studies that uncover and explain the phenomenon of intention that determines the behavior of using BSC as a performance measuring tool in non-profit health institutions such as government hospitals. Like the study conducted by Afdalia which examined the intention in implementing government regulations shows that "the intention to apply Government Regulation No. 71 of 2010 concerning Accrual-based Government Accounting Standards is influenced by determinants of attitudes towards behavior, subjective norms and readiness to change". Meanwhile, the determinants of perceived behavioral control do not have an effect on the intention to carry out the behavior of implementing the Government Regulation. In his research, the results of this study are expected to add scientific references in the applied science of hospital management. In addition, it is practically expected to help strengthen the decision-making process in hospital organizations in general and especially Kediri Regency Hospital in the implementation of *Balanced Scorecard*.<sup>(12)</sup>

## METHODS

This study used mix method sequential explanatory, a combining of a quantitative and qualitative. The early stages of the study used a descriptive quantitative approach that aimed to measure the effect of attitude variables on behavior, subjective norms, perceived behavioral control of managers' intentions in using BSC as a performance gauge in hospitals. Then to explore more openly the implementation of BSC in hospitals, focus group discussion (FGD) will be conducted where later respondents will be asked about their opinions and ideas and conducted a review of documents from the annual performance report that has been compiled. With these two approaches, this research could be classified in a type of *sequential explanatory mix method* that combines quantitative approaches in the early and qualitative stages. All managers in the Kediri Regency Hospital environment from top managers to first-line managers were the population of this study while using total sampling techniques to get more representative results. The manager here was someone who had the position/task/and function of coordinating and supervising the work of others to realize the achievement of organizational goals.<sup>(13)</sup> Located in Kediri Regency Hospital, this study was conducted in June - July 2021.

The quantitative approach in this study was the measurement of independent variables and dependent variables that were the hypothesis of this study using survey methods in the form of questionnaires and respondents were asked to fill out their opinions according to what was felt related to the statements or questions mentioned using the Likert scale. Balanced Scorecard Implementation Intention Questionnaire conducted validity testing to test a research instrument was declared valid if the correlation value was above the r-table<sup>(14)</sup>. Using Product-Moment Correlations and reliability tests using Cronbach's alpha formula. To find out whether or not the hypothesis proposed in the study results of multiple regression analysis will be obtained values from Test F, Test value t, and coefficient of determination.<sup>(15)</sup> Test t aimed to assess the existence or absence of partial influence of one free variable against a bound variable, test F serves to assess the existence or absence of the influence of independent variables simultaneously on dependent variables.

## RESULTS

### Demographic Characteristics of Respondents

From the target sample of 90 respondents, employees who have positions and functions as managers, who are willing to be a respondents and meet the criteria are as many as 67 respondents.

From Table 1 can be known the age category of most managers at the age of 51-60 years and at least 4% aged 21-30 years. The number of female respondents was 3:2 compared to men. Most manager education is bachelor and postgraduate.

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics	Frequency	Percentage
Age		
21-30	3	4%
31-40	16	24%
41-50	19	28%
51-60	29	43%
Gender		
Man	27	40%
Woman	40	60%
The last education		
High school	5	7%
D3	6	9%
S1	43	64%
S2	13	19%
Long Work		
1-10 years	15	22%
11-20 years	21	31%
year	23	34%
>30 years	8	12%
Manager level		
Manager level entry	50 people	75%
Middle manager	14 people	21%
Top Manager	3 people	4%

### Overview of Respondent Responses

Table 2. Distribution of respondent response

Variable	Category	Frequency	Percentage
Attitude	Low	2	3%
	Moderate	65	97%
	High	0	0%
Subjective Norms	Low	10	15%
	Moderate	45	67%
	High	12	18%
Behavioral Control	Low	11	16%
	Moderate	48	72%
	High	8	12%
Intention	Low	10	15%
	Moderate	49	73%
	High	8	12%

The attitude values shown by almost all respondents (97%) showed a moderate attitude towards the implementation of BSC in the hospital environment. While the intention value of managers 73% indicates a moderate intention, 15% low intention, and 12% indicates high intention in the use of BSC.

Table 3. Mean and standard deviations

Variable	n	Min	Max	Mean	Std Dev
Attitude	67	32	56	51.6	5.2
Subjective Norms	67	17	35	29.8	4.5
Behavioral Control	67	22	42	35.4	4.8
Intense	67	9	21	17.6	2.8

From the table above it can be known that the variable with the largest standard deviation was the attitude of 5.2 and the smallest standard deviation was 2.8 on the intention variable.

### Qualitative Study

The review of documents obtained by the Kediri Regency Hospital Performance Report in 2018 has used 4 BSC perspectives, namely financial performance perspective, customer perspective, service business perspective, and learning and growth. But the latest report in 2020 consists of only 2 perspectives.

Using miles and huberman models, after the data were collected researchers perform data reduction to retrieve important and relevant data. Furthermore, the presentation of data and the interpretation of meaning is carried out.

Table 4. Summary of FGD results

Respondents' statements about free variables	Explanation
Attitude	"I think the implementation of BSC in the hospital environment will be very profitable, in addition to being able to meet the demand from blud performance reports from the financial sector and non-financial sectors" (Women, General Section) "The preparation of the Annual Performance Report is something that must be implemented in this case some people understand it has been represented by LAKIP (Government Agency Performance Accountability Report), whose preparation is usually carried out at the beginning of the year after the budget year is completed so that enough LAKIP methods only to be used as a report" (Women, Program Section)
Subjective norms	"The leadership is the most influential in the implementation of each program. Because in government agencies more staff carry out the instructions of the leadership and leaders who determine where the development of this hospital" (Women, Service Section) "... The Supervisory Board that understands how to conduct a review and assessment of BLUD's performance will be able to provide influence and input to the board of directors and vice versa if the supervisory board is passive then the hospital also tends to wait" (Women, General Section)
Behavioral control	"Not all members of the drafting team know and know about the BSC." (Women's Program Section) "Knowledge and training are the first things required in the implementation of the Balanced Scorecard in a comprehensive measurement of hospital performance as many of the employees do not yet know and understand about the benefits and advantages of using this BSC" (Women, General Section)
The intention of BSC implementation	"In general, the contents of this BLUD performance report are still general and do not cover all lines, as usual, preceded by the profile of Kediri Regency Hospital, then Financial Performance and Service Performance. The hospital profile comes with updates from newly developed services such as PCR laboratory. Human Resources data updates, Financial Performance, Service performance such as BOR, ALOS, etc. But customer perspectives such as customer satisfaction and patient waiting times have not been touched because they didn't yet have the appropriate measuring instrument. And how the competency development program and HR skills are still as per incidental needs has not been programmed properly. Hopefully, next year's report can be made by fulfilling all four perspectives as in the BSC" (Women, Service Section)

From the above information, it could be interpreted that the dimensions of the manager's attitude as a form of views or beliefs in the use of BSC are beneficial or not, the source has the attitude that the use of BSC will be profitable, on the contrary, other sources state the use of BSC is not necessary because there are already other systems. In the dimension of subjective norms managers in the form of orders and instructions from hospital leaders or also directions from the supervisory board to use or not use BSC as a performance measuring system. In variable behavioral control is a possibility and confidence can use BSC as a performance measuring tool in hospitals and managers here reveal difficulties because not many managers understand BSC. While in the intention of public hospital managers in using BSC is the tendency of managers to use or not use BSC in performance measurement in hospitals, and from the above explanation, there is a desire from managers to use BSC as a performance measuring tool in public hospital environments.

**Multiple Linear Regression Test**

Table 5. Multiple Linear Regression Test Results

Variable	t	Sig	Information	Against intentions	Standard Coefficient Beta
Attitude	1.282	0.205	Insignificant	Has no effect	0.131
Subjective norms	3.383	0.001	Significant	Influential	0.400
Behavioral control	3.028	0.004	Significant	Influential	0.372
Variable	Value F	Sig	Information	Against intentions	Adjusted R Square
Attitude	46.446	0.000	Significant	Simultaneously influential	0.674
Subjective norms					
Behavioral control					

From Table 5, the t-test result is that the significance value of the subjective norm was 0.01 and the significance value of the behavior control was 0.04 (<0.05) which has the meaning of both subjective norm and behavioral control each giving affect the intention variable. While the significance value of the attitude was 0.205 (>0.05) which means the attitude does not effect on the intention variable. The value of F calculates 46,448 with P = 0.000. Therefore p < 0.05, which means that idependent variables together affect the intention. How influential

the three variables are in forming a manager's intention is 67.4%. While the most influential variable based on beta values is the subjective norm variable.

## DISCUSSION

### Attitude

Attitude is the judgment of a person in the form of likes or dislikes of an action or behavior.<sup>(16)</sup> In this study, the attitude variables of managers towards the implementation of BSC almost all of them showed moderate attitudes, and others that showed low attitudes which means that in general managers do not have a sufficient attitude not so sure whether BSC can be useful to measure hospital performance. This is supported by the expression of one although some managers have an assessment that the use of BSC will be profitable and useful but most managers feel that performance measurements in government agencies are already represented by LAKIP (Laporan Akuntabilitas Kinerja Instansi Pemerintah/ Government Agency Performance Accountability Report) so there is no need for other performance gauges.

Less positive assessments of managers are likely also due to the lack of information managers have about BSC. The results of this study also found that attitude variables do not affect the intention of managers. The results of the same study were also stated by the lack of experience from managers of the use of BSC making managers do not have confidence whether this BSC will be useful or not to be used as a measuring tool for the performance of hospital organizations. The same research results were also presented by<sup>(17)</sup> Which states that attitude variables have no effect on the intentions of millennial managers. The lack of experience from managers of the use of BSC makes managers do not have confidence whether this BSC will be useful or not to be used as a gauge of the performance of hospital organizations.

A phenomenon mentioned from previous research that countries with a culture of individualism showed that attitude variables had a greater influence on intentions than other variables, in contrast to countries that are collectivist such as Indonesia attitude variables have less effect on intentions than the other 2 variables in TPB.<sup>(18)</sup>

### Subjective Norms

In this study the subjective norm value of public hospital managers is mostly at a moderate level which means the social pressure felt in using BSC has not been so high or it can also be interpreted that the leadership has not provided sufficient direction and support to managers to use BSC, this was conveyed by the source in his explanation that the current leadership is still more oriented to improve facilities and infrastructure while in the preparation of performance reports. There are no direct instructions for using BSC.

This study successfully showed that subjective norm variables have an influence on the intentions of hospital managers in implementing BSC. This is, following the Theory of Planned Behavior by Ajzen (2005) where high subjective norms will increase the value of individual intentions in performing a behavior in accordance with this study is the behavior of using BSC as a performance measuring tool in the public hospital environment. In line with the research conducted that subjective norms affect the intention variables to implement Government Regulation No. 71 of 2010.<sup>(10)</sup>

If the beta values of the three independent variables are compared then it can be seen that the subjective norm beta values have the strongest influence over the three variables informing the manager's intention in the use of BSC. This is reinforced by his research that the culture of eastern countries emphasizes subjective norms as a determining factor of intentions than other factors. This can be understood from the culture of the Indonesian state that is collective by prioritizing family and *gotong royong*.<sup>(18)</sup>

### Behavioral Control

Behavioral control variables are perceptions of ease or difficulty in performing the behavior and are assumed to reflect past experiences as well as anticipated obstacles and obstacles.<sup>(10)</sup> The results showed that 72% of respondents felt the supporting factors and inhibitory factors in implementing BSC were equally numerous. 16% of respondents felt inhibition factors were more dominant than supporting factors so that perceiving BSC use was difficult, and only 12% of respondents perceived the use of BSC as easy. Indications of the perception of inhibition factors and difficulties that may be faced are also conveyed by sources that staff who understand about the Balanced Scorecard are still very little this will be an obstacle in implementing BSC. The lack of information that managers have will affect the self-efficacy of managers that using BSC as a performance measuring tool is not easy.

The significance value resulting from the t-test was 0.04 which means behavioral control have an influence on the intentions of hospital managers in implementing BSC. Research with similar results were conveyed by Ardi and Tjahjono that the student's intention to become an entrepreneur.<sup>(19)</sup>

### Intention

In TPB, intention is defined as an indication of an individual's willingness to perform a given behavior.<sup>(20)</sup> Intention shows how strong a person dares to try. Intentions reveal how much effort a person plans to make happen. Together, attitude variables, subjective norms, and perceptual behavior control had a significant positive

effect on the intentions of hospital managers by 67.4%. While the influence of 32.6% of managers' intentions was influenced by variables and other factors not studied in the study such as personality, resources, culture. The acceptance of the fourth hypothesis of this study is in accordance with the TPB developed by Ajzen.

### CONCLUSION

TPB describes a useful frame of mind to explain the main factors forming the intention of the behavior of hospital managers. The intention of the hospital manager in using BSC in general at moderate grades. Partially, behavioral attitude variables did not significantly affect the formation of the intention of hospital managers in using BSC, but partially subjective norm variables and behavioral control positively and significantly affected the formation of the intention of hospital managers in using BSC. If together the behavioral attitude variables, subjective norms, and perceived behavioral controls affect the formation of the intention of hospital managers in using BSC.

Recommendations for future research could also continue with intervention experiments to take a deeper look at factors in TBP. Practically the advice from this study is that hospital leaders and supervisory boards to take a more important role in providing direction and guidance to managers to relearn Permendagri No. 79 of 2018 on BLUD, then managers need to be given an introduction to the advantages and advantages of BSC as a comprehensive measurement of organizational performance.

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