# The Influence of Spatial Planning and Work Facilities on the Work Effectiveness of Radio Republic of Indonesia (RRI) Medan Employees

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#### ARTICLE INFO



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Keywords: Spatial Layout; Work Facilities; Work Effectiveness

## ABSTRACT

Finding out how office design and amenities affect productivity is the primary goal of this study. This study makes use of quantitative research methods. Questionnaires were used as a means of gathering information for this study. The data processing in this research was carried out using the SPSS 22 program, and the sample size was 30 respondents. Findings from the study's multiple linear regression analysis revealed that, while the spatial layout variable (x1) had no effect on RRI Medan employees' work effectiveness (-0.047), the facility variable work (x2) had a positive effect (0.494). Coefficient of determination (R square) findings show that spatial planning and work facilities affect work effectiveness by 0.618, or 61.8%, whereas other factors, not addressed in this study, impact it by 38.2%.

# ABSTRAK(TIMES NEW ROMAN 11)

Mengetahui bagaimana desain dan amenitas kantor mempengaruhi produktivitas merupakan tujuan utama dari penelitian ini. Penelitian ini menggunakan metode penelitian kuantitatif. Kuesioner digunakan sebagai sarana pengumpulan informasi untuk penelitian ini. Pengolahan data dalam penelitian ini dilakukan dengan menggunakan program SPSS 22, dan ukuran sampel adalah 30 responden. Temuan dari analisis regresi linier berganda penelitian ini mengungkapkan bahwa, sementara variabel tata ruang (x1) tidak berpengaruh terhadap efektivitas kerja karyawan RRI Medan (-0,047), variabel fasilitas kerja (x2) memiliki efek positif (0,494). Temuan koefisien determinasi (R square) menunjukkan bahwa tata ruang dan fasilitas kerja mempengaruhi efektivitas kerja sebesar 0,618, atau 61,8%, sedangkan faktor-faktor lain, yang tidak dibahas dalam penelitian ini, mempengaruhinya sebesar 38,2%.

#### INTRODUCTION

All efforts, both alone and in groups, that move closer to achieving a predetermined goal are called activities. Any and all actions, both physical and mental, are considered activities. It is also possible to organize activities through organizations that are deliberately formed to achieve common interests and goals. The focus is on developing, implementing, and maintaining the rules and objectives of how people interact with each other in a business environment. Organizations play an important role in today's society as a link for society to carry out important activities that meet their basic needs.

Organizations such as the Public Broadcasting Institution (LPP) Radio Republik Indonesia (RRI) Medan realize the importance of a planned workplace layout. The mission of Radio Republik Indonesia (RRI) Medan, a public radio station in Indonesia, is to provide news, educational programs, socially responsible entertainment, and public service advertisements in an effort to maintain Indonesia's positive reputation abroad. Digital technology is revolutionary and changes the face of business in every way (Nurbaiti et al., 2023). In order to

compete with other news broadcasts, Radio Republik Indonesia (RRI) often refreshes its content. Seeing the recent incidents, Radio Republik Indonesia (RRI) created an application called RRI Play Go. 188 live streaming radio stations, more than 500.000 music options, breaking news, podcasts that allow users to create personalized playlists, and links to parliament TV and RRI Net are all available to users of the RRI Play Go app.

One of the most important factors in motivating staff to work well is the arrangement of office space. A well-managed office space is an essential component in any office building. There are many different departments and jobs in any organization, and everyone is doing their part to keep things running smoothly. Businesses and other organizations should immediately launch these initiatives to minimize potential negative impacts and increase social and environmental impacts (Hastalona et al., 2019). The strange arrangement of the LPP Radio Republik Indonesia (RRI) Medan office is the culprit. In this case, the office is placed in the old and new buildings. There is a considerable gap between the two structures; It is believed to be about 150 meters high. As a result, workers are spread across different departments, causing delays and obstacles in their work when they rely on input from each other but cannot get it immediately due to the long distance of the office. Unlike other studies that the author calls as an example of the phenomenon of spatial planning, this study does not include things that are located uncomfortably or difficult to access.

Facilities, in addition to the physical layout, can affect worker productivity. In Moenir's view, workplace facilities serve as an efficient operational backbone during working hours, last for a considerable period of time, and provide future benefits (Manullang et al., 2022). The problem in the office facilities at LPP Radio Republik Indonesia (RRI) is the lack of supply of HVS paper which is very important for workers to complete their tasks. In addition, there is only one large stapler in the finance department, when in fact there should be one stapler in each department or area. Every department relies on a large stapler to keep business records. The author has conducted previous research that mentions workplace infrastructure problems, such as inadequate parking lots and outdated chair facilities, as an example of this incident.

Efficient work is essential for an organization to achieve its goals without any hindrances. The effectiveness of an employee, according to Handoko, is determined by their ability to set goals and the resources they have to achieve those goals (Erawati et al., 2017). Only with high-caliber human resources can optimal performance be achieved. Organizational actions are designed to achieve specific goals at each stage. In short, there are definite strategies that other businesses and organizations may use to win over competitors (Marliyah et al., 2023). When individuals are satisfied with their work, they become more productive because they love what they do and experience less stress, worry, burnout, and other negative emotions (Yafiz et al., 2022). The extent to which an organization succeeds or fails in achieving its goals is another way to see its effectiveness. According to Siagian, effective means completing tasks on time (Mesiono, 2018).

Organizations and businesses must provide important elements, such as adequate work facilities and efficient spatial design, in order to produce a quality workforce. Employees at LPP RRI Medan will be able to operate more efficiently and effectively when this is completed. Operational disruptions, inefficient staff, and other unintended outcomes are the possible consequences of poor office design and facility design that businesses or organizations should avoid.

In research Anggraini et al., (2022) The layout of the office greatly affects how efficient its employees are. Organizations and businesses rely on well-planned office space to support the day-to-day tasks and operations of their personnel. The results of the study Triana, (2018) that the productivity of employees at the Rancah District Office, Ciamis Regency is greatly influenced by the quality of their work environment. Therefore, increasing employee work efficiency can be achieved through the provision of office facilities. Based on the problems described at the LPP Radio Republik Indonesia (RRI) Medan office, the researcher thought to conduct a study with the following title: "The Influence of Spatial Planning and Work Facilities on the Work Effectiveness of Radio Republik Indonesia (RRI) Medan Employees".

#### RESEARCH METHOD

# Type of Research

This study uses a quantitative research method. Studies that use quantitative methods to establish and verify hypotheses are known as quantitative research. Sugiyono (2019) stated that when studying populations or samples, researchers often turn to quantitative methods, which are positivist-based methodological approaches. Sometimes, researchers will use research tools to collect data and then analyze it using quantitative and statistical methods (Ervianti et al., 2023).

### Location and Time of Research

This research was conducted at the Public Broadcasting Institution of Radio Republik Indonesia Medan located on Jl. Gatot Subroto No. 214, Sei Kambing C.II, Kec.

# Population and Sample

Sugiyono (2007) describes a population as a collection of objects or individuals selected to be studied based on predetermined criteria (such as quantity and quality) that allow conclusions to be drawn (Hasdiana, 2018). The target group of this research is personnel from the Broadcasting, News, Engineering, LPU, and Human Resources Section of the Public Broadcasting Agency of the Republic of Indonesia (RRI) in Medan. According to Somantri (2006), a sample is a part of a larger population that is randomly selected from the larger population to provide an accurate representation of the larger population (Jannah, 2016). The sample used in this study amounted to thirty people from the field of broadcasting, five from news, six from engineering, seven from LPU, and five from human resources.

In this study, the sampling probability method was used for data collection. Probability sampling is a type of random sampling that aims to give workers in all departments and fields a fair chance to shine (Hasdiana, 2018). Sampling was carried out on the entire working population at the Radio Republik Indonesia (RRI) Medan office, as carried out in this study.

## Data Collection Techniques

Online surveys serve as the primary instrument for gathering information for this study. The purpose of the questionnaire is to gather information from people by asking them to write down their thoughts and feelings. The questionnaire offered asks respondents to identify themselves and includes a series of statements about the variables studied. With a

weight of 1 for "yes" and 0 for "no", the research tool uses the Guttman scale, which consists of questions with two possible answers and the relative importance of each question.

## RESULTS AND DISCUSSION

## Validity Test

Sugiyono (2016) argues that finding out how reliable the research questionnaire claims is is the core of validity testing. Checking the validity of an item by comparing its score with the total number of items collected by the researcher (Ervianti et al., 2023). The total number of items collected by the researcher is in the Table 1.

Table 1. Validity test table

	Worl	k Effectiveness Variable (Y	<u> </u>			
No	R Calculate	R Table Description				
1	0.685	0.3610	0.3610 Valid			
2	0.459	0.3610 Valid				
3	0.800	0.3610 Valid				
4	0.665	0.3610 Valid				
5	0.459	0.3610 Valid				
Spatial Variables (X1)						
No	R Calculate	R Table Descript				
110	N Calculate	K Table	Description			
1	0.520	0.3610	Valid			
$\frac{1}{2}$						
1	0.520	0.3610	Valid			
2	0.520 0.704	0.3610 0.3610	Valid Valid			
1 2 3	0.520 0.704 0.589	0.3610 0.3610 0.3610	Valid Valid Valid			
1 2 3 4	0.520 0.704 0.589 0.548	0.3610 0.3610 0.3610 0.3610	Valid Valid Valid Valid			
1 2 3 4 5	0.520 0.704 0.589 0.548 0.508	0.3610 0.3610 0.3610 0.3610 0.3610	Valid Valid Valid Valid Valid			

	W	ork Facility Variable (X2)	
No	R Calculate	R Table	Description
1	0.723	0.3610	Valid
2	0.670	0.3610	Valid
3	0.401	0.3610	Valid
4	0.651	0.3610	Valid
5	0.694	0.3610	Valid

Source: Output spss 22

Since the value of each variable statement item is greater than the value of the r table (in this case 0.3610), the validity test concludes that the findings obtained for the variables Spatial Planning, Work Facilities, and Work Effectiveness are valid.

# Reliability Test

Since the value of each variable statement item is greater than the value of the r table (in this case 0.3610), the validity test concludes that the findings obtained for the variables Spatial Planning, Work Facilities, and Work Effectiveness are valid (Hikam, 2023). The results of the validity test are listed in the Table 2.

**Table 2.** Reliability test table

Variable	Cronbach Alpha	Information
Work effectiveness (Y)	0.614	Reliabel
Spatial layout (X1)	0.742	Reliabel
Work facilities (x2)	0.606	Reliabel

Source: Output spss 22

The reliability test of the variables of Spatial Planning, Work Facilities, and Work Effectiveness produced satisfactory findings, with a Cronbach alpha value of 0.6 or more indicating reliable reliability.

## Normality Test

The Kolmogorov Smirnov test which tests the distribution of test results to assess normality is used to test the normality in this study. This is a normal distribution. A statistical significance (sig) of > 0.05 indicates that the data follow a normal distribution (Margareth, 2017). The results of the Kolmogorov Smirnov Test are located in the Table 3.

 Table 3. Normality test table

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			30
Normal Parametersa,b	Mean		.0000000
	Std. Deviation		1.09800104
Most Extreme Differences	Absolute		.222
	Positive		.117
	Negative		222
Test Statistic			.222
Asymp. Sig. (2-tailed)			.001c
Monte Carlo Sig. (2-tailed)	Sig.		.094 <sup>d</sup>
	99% Confidence	Lower	.086
	Interval	Bound	.000
		Upper	.101
		Bound	.101
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correct	ion.		

d. Based on 10000 sampled tables with starting seed 2000000.

Source: Output spss 22

The findings of the normality test using the Kolmogorov Smirnov technique clearly show that the residual values do not follow the normal distribution. Below the significance level of 0.05, the Asymp value is at 0.001. Therefore, the data processing in this study must use the Monte Carlo method. The Monte Carlo test is designed to find out whether or not the data in the study sample follows a normal distribution (Yusri, 2020).

The remaining values of the study were found to have a normal distribution according to the findings of the Monte Carlo test. The significance value from 0.001 increased to 0.094

after the Monte Carlo test, as can be seen. A significance level of 0.094 which is already greater than 0.05 indicates that the residual value follows the normal distribution.

## Multiple Linear Regression Test

Sugiyono stated that one way to predict the influence of many independent factors on a dependent variable is through the use of multiple linear regression analysis (Ervianti et al., 2023). The results of the multiple linear regression analysis test are located in the Table 4.

Table 4. Multiple linear regression test table

#### Coefficientsa

	Unstandard	ized Coefficient	Standardized Coefficient		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	2.231	.719		3.102	.004
Spatial layout	047	.143	076	331	.743
Work facilities	.494	.226	.500	2.185	.038

a. Dependent Variable: y Source: Output spss 22

The following is an explanation of the results of multiple linear regression analysis:

$$Y = a + b1.x1 + b2.x2$$

$$=2.231 + (-0.047) + 0.494$$

Considering that the variable of spatial arrangement and work facilities has a value of zero (0), the variable of work effectiveness has a positive value of 2.231 because the value of the constant (a) is 2.231. The spatial planning variable (b1) did not have a positive effect on the work effectiveness variable (Y) which was shown by a coefficient value of -0.047. The variable of work facilities (b2) has a positive effect on work effectiveness (Y) which is shown by a coefficient of 0.494. Assuming that no other factors are taken into account, it can be said that there is an increase in work effectiveness of 0.494 for every additional work facility by one unit.

# Determination Coefficient Test (R Square)

The determination coefficient (R2) measures how well the model takes into account variance in important variables, according to Ghozali. The determination coefficient can be between zero and one (Ervianti et al., 2023). The test results of the Determination Coefficient Test (R Square) are located in the Table 5.

**Table 5.** Determination coefficient test table

Model Summary

Туре	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.786a	.618	.589	.455

a. Predictors: (Constant), Work facilities, Spatial planning

Source: Output spss 22

The results of the determination coefficient (R2) test showed that the R Square was 0.618 or 61.8% so that it can be said that the variables of work facilities and spatial planning affect work effectiveness by 0.618 or 61.8%, while the other variables, variables that were not discussed in this study, amounted to 38.2%.

#### **CONCLUSIONS**

The researcher's findings showed that the spatial variable (x1) had no effect on the work effectiveness of RRI Medan employees (-0.047 in the multiple linear regression test), while the work facility variable (x2) had a positive effect (0.494) on the work effectiveness of RRI Medan employees. Based on the findings of R-squared, spatial planning and work facilities accounted for 0.618, or 61.8%, of the variation in work effectiveness, while other factors mentioned but not examined here accounted for 38.2%. So that LPP RRI Medan, which is part of the Public Broadcasting Institution of Radio Republik Indonesia, can improve its workplace so as to encourage employees to be more enthusiastic in their work and more productive overall. Hopefully the results of this research can be a reference or reference for similar studies in the future. Researchers can address differences and maximize favorable outcomes to improve employee effectiveness by adding additional factors in future research, which will gain freshness. similar studies in the future. Researchers can address differences and maximize favorable outcomes to improve employee effectiveness by adding additional factors in future research, which will gain freshness.

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