

LIGHT BRICKS PRODUCTION AND MANAGERIAL DECISION IN UD. TWINS PERKASA MANADO

**Kevin Paul Tristan Robot
11201508013**

**Submitted to fulfill the requirement
of the undergraduate degree program**

**Department of International Business Administration
Faculty of Business & Social Sciences**

**BSD City, Serpong, Tangerang, Indonesia
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APPROVAL PAGE

UNDERGRADUATE THESIS PROPSAL

**Kevin Paul Tristan Robot
11201508013**

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**Department of International Business Administration
Faculty of Business & Social Science**

Acknowledge by;

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Thesis Advisor
Department of Management

Dean
Faculty of Business & Social Science

Dr. Satiri

Dr. Samuel Prasetya

PREFACE

This thesis is the report form of academic writing, which is developed by student research, in order to graduate based on the campus curriculum for undergraduate degree. This thesis report contains analysis of the managerial decision of a private corporation that selling a product for the construction which is light bricks. The managerial decision of this company gives the big impact for the company, whether in the positive or negative manner. That's why this paper will discuss and find out how the company face the impacts and what are the certain things that has been impacted from the company managerial decision especially for the production activities.

BSD City, Serpong, Tangerang, May 2018

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Department of Management

Dean
Faculty of Business & Social Science

Dr. Satiri

Dr. Samuel Prasetya

Table of Contents

PREFACE	3
CHAPTER I: INTRODUCTION	5
I.1. PRODUCTIVITY, HIGH DEMAND AND INVESTMENT	5
I.2. COMPANY PROFILE	5
I.3. RESEARCH PROBLEMS.....	5
I.4. RESEARCH OBJECTIVES.....	6
CHAPTER II: LITERATURE REVIEW.....	7
II.1. FINANCIAL THEORY	7
II.2. CHAIN SUPPLY MANAGEMENT THEORY	7
II.3. COMPANY PROFILE AND CASE.....	7
CHAPTER III: RESEARCH METHODOLOGY	8
III.1. RESEARCH PROCESS	8
III.2. SAMPLE SIZE METHOD	8
III.3. RESEARCH MODEL	9
III.4. SAMPLING PROCESS.....	9
III.5. HYPOTHESIS	10
III.6. PRE-TEST	10
III.6.1. PRE-TEST VALIDITY QUESTIONNAIRES	10
III.6.2. PRE-TEST REALIBILITY QUESTIONNAIRE	13
BIBLIOGRAPHY.....	17

CHAPTER I: INTRODUCTION

I.1. PRODUCTIVITY, HIGH DEMAND AND INVESTMENT

Productivity is an efficient measure of output per unit of input. Inputs include labor and capital, while output is usually measured in revenue and components. Measurements can be used simultaneously (Draff, 2015).

Demand is a necessary economic principle and a consumer's willingness to pay a price for a particular good or service. Hold on to all other factors, increase the price of the goods or lower the demand, and vice versa. Think of demand as your desire to get out and buy certain products. For example, the market is the total of what people want in the market. Productivity and Demand on company demand (Vitez, 2017).

Investment is an asset or item purchased in the hope that it will generate income or will appreciate in the future. In the economic sense, investment is the purchase of goods used in the future to create wealth. In finance, investment is a monetary asset purchased with the idea that the asset will provide income in the future or will be sold at a higher price to make a profit (Economy Watch, 2014).

I.2. COMPANY PROFILE

UD. Twin Perkasa is a company engaged in the production of light brick type CLC (Cellular Lightweight Concrete). Also a pioneer in producing light bricks in Manado City. Current production output has been widely used in building houses, chophouses, office where boarding, shopping centers and even housing. Besides being used in Manado city the products have also been widely used outside of Manado. UD. Twin Perkasa can produce up to 15 cubic per day with one machine and 20 buckets (UD.Twins Perkasa, 2016).

I.3. RESEARCH PROBLEMS

There are few research problems to be analysis in this essay, as follows:

1. This research is about the correlations between demand and productivity in UD Twin Perkasa.
2. This research is about increasing the productivity level that affects to the company financially.
3. This research is studying about the company strategy towards decision making on productivity, effectiveness and managing the further cost that will be affected by the strategy.
4. This research is about how the demand can be affecting the company's production and the finance of the company.

I.4. RESEARCH OBJECTIVES

These research objectives are to find out whether by increasing the productivity level would be effective in handling the high demand problem. The new strategy that implied by the company in order to maintaining the cost of production after increasing the machine capacity. Maintaining the labor and their salary after recruiting more human resources. Strategy on increasing the amount of production per day without reducing the quality of the light bricks.

CHAPTER II: LITERATURE REVIEW

II.1. FINANCIAL THEORY

The concept of financial theory involves studying the ways in which businesses and individuals raise money, as well as how money is allocated to projects while considering the risk factors associated with them. The financial concept also includes the study of money and other assets, managing and mapping project risks, controlling and managing assets, and managing money science. In simple terms, financing also means the allocation of funds for a particular business module or project (Sangle, 2014).

II.2. CHAIN SUPPLY MANAGEMENT THEORY

The company's production process is closely related to the supply and demand process of the company. The production process associated with the company's management of supply and demand is closely related to supply chain management. Supply chain management (SCM) is the active management of supply chain activities to maximize customer value and achieve sustainable competitive advantage. This is a conscious effort by supply chain companies to develop and run the supply chain in the most effective & efficient way. Supply chain activities cover everything from product development, sources, production, and logistics, as well as the information systems needed to coordinate these activities (NC State University, 2017).

II.3. COMPANY PROFILE AND CASE

The first thought of the supply chain is that practically every product that reaches the end user is a collection of businesses from various organizations. These organizations are collectively considered as a supply chain. The next thought of the supply chain is that supply chain have existed for a long time, but some organizations focus on their own interests only. This research will discuss about the production process and how the thinking and supply chain management of UD. Twins Perkasa. UD. Twins Perkasa is a company that produces and sale light bricks. UD. Twin Perkasa has been established since May 22, 2012, Kayu Bulan, Manado, North Sulawesi, by Mrs. Junita. UD. Twins Perkasa has been one of the pioneer companies producing light bricks in Manado. UD. Twin Perkasa who has become a pioneer of light brick production and sales company has a problem where the supply of light brick production is not enough due to the high demand from customers (UD.Twins Perkasa, 2016).This research will discuss whether the problem from UD. Twins Perkasa is from its production problems or its supply chain management and also analyze the factors that affect the problem and identify the best possible solution to minimize the production problem (UD.Twins Perkasa, 2016).

CHAPTER III: RESEARCH METHODOLOGY

III.1. RESEARCH PROCESS



Source: (Anantadjaya & Nawangwulan, 2018)

First step this research will find out the topics and the problems for this case of this research. Second step this research will look out for the theories and literature that could help in process of analysis, combining the data and problem solving of the case. Third step this research will collect and analysis the data in order to finding out the result or solutions for the problems base on the case. Fourth step after finding out the result from the analysis, the conclusion and solution from this problem. This research will found out how the interpretation of the result and solutions.

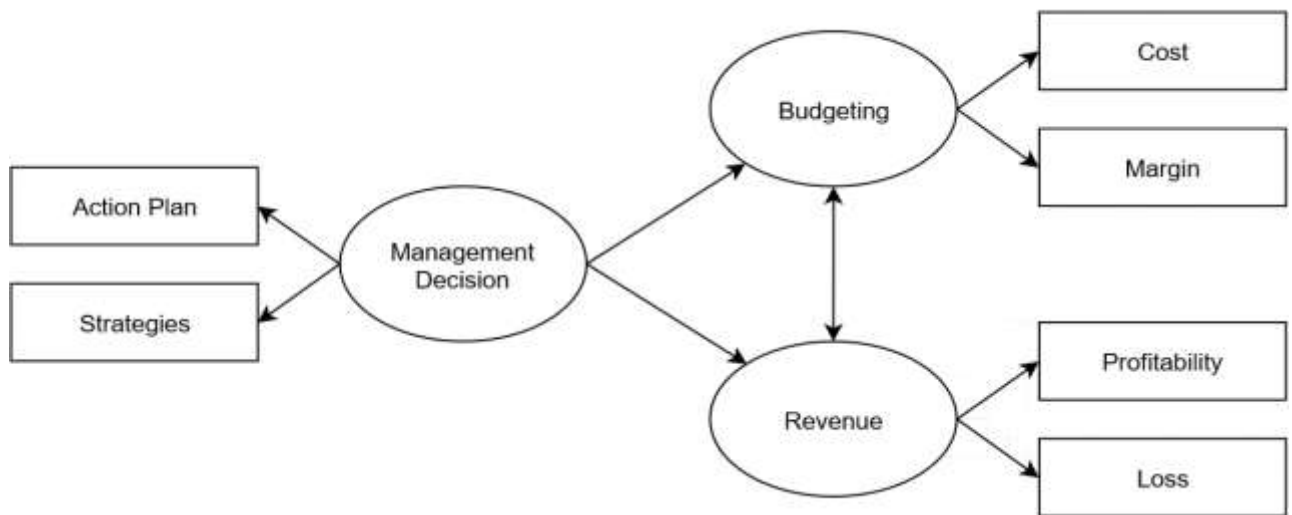
III.2. SAMPLE SIZE METHOD



Sources: (Anantadjaya & Nawangwulan, 2018)

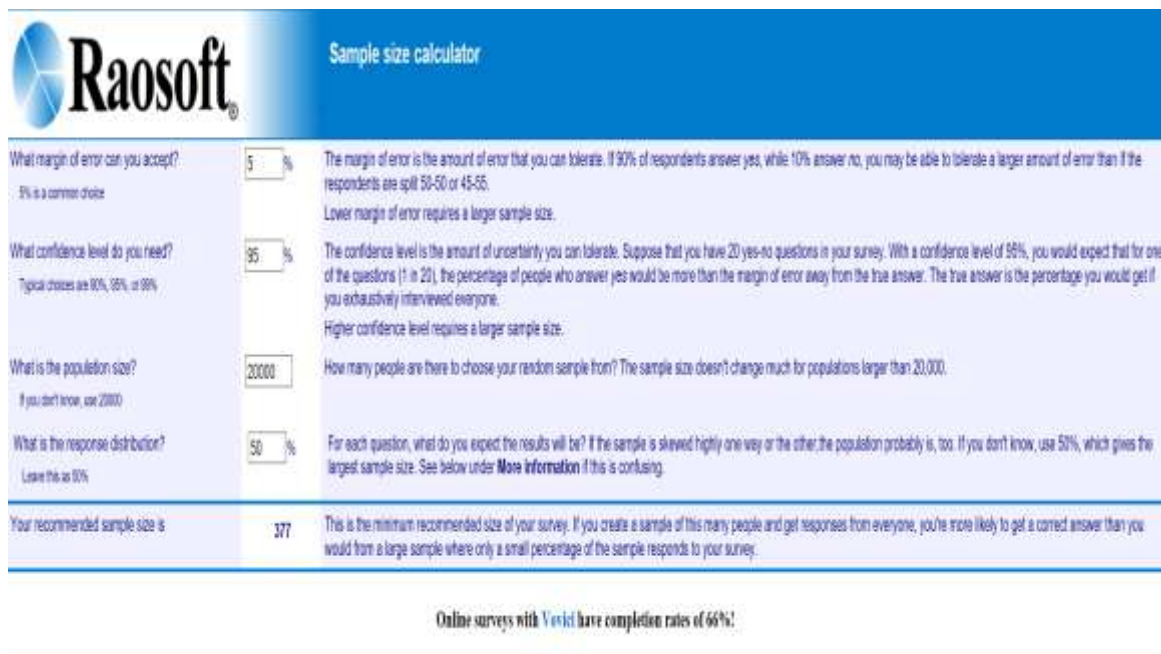
This sample size method is to record the data for supply, production activity and sales. The data are based on bottom until the top manager data that has been recorded in the company in order to find out the impact of productivity level against the sales and supply effectiveness for facing the high demand.

III.3. RESEARCH MODEL



Source: (Anantadjaya & Nawangwulan, 2018)

III.4. SAMPLING PROCESS



Sample size calculator

What margin of error can you accept? <small>5% is a common choice</small>	<input type="text" value="5"/> %	The margin of error is the amount of error that you can tolerate. If 90% of respondents answer yes, while 10% answer no, you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55. Lower margin of error requires a larger sample size.
What confidence level do you need? <small>Typical choices are 90%, 95%, or 99%</small>	<input type="text" value="95"/> %	The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer yes would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone. Higher confidence level requires a larger sample size.
What is the population size? <small>If you don't know, use 20000</small>	<input type="text" value="20000"/>	How many people are there to choose your random sample from? The sample size doesn't change much for populations larger than 20,000.
What is the response distribution? <small>Leave this at 50%</small>	<input type="text" value="50"/> %	For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under More information if this is confusing.
Your recommended sample size is	377	This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

Online surveys with **Yorick** have completion rates of 66%!

(Source: <http://www.raosoft.com>)

UD. Twin Perkasa has population 40 employees and we do the pretest by way of questionnaire to people of his workers with 5 % error, 95% confidence level and 50 % Response Distribution for UD. Twins Perkasa.

III.5. HYPOTHESIS

Based on our research, we believe that the management decision will affect the budgeting and the revenue of UD. Twin Perkasa. The thing that affect management decisions are action plan and strategies. The budgeting is affected by cost and margin. Also the revenue will be affected by profitability and loss.

III.6. PRE-TEST

III.6.1. PRE-TEST VALIDITY QUESTIONNAIRES ON EMPLOYEES IN UD. TWIN PERKASA

Correlations On Employees in UD. Twin Perkasa

Correlations

		X1	X2	X3	X4	X5	X6
X1	Pearson Correlation	1	.281	.358*	.147	.370*	.037
	Sig. (2-tailed)		.102	.035	.399	.028	.833
	N	35	35	35	35	35	35
X2	Pearson Correlation	.281	1	.257	.190	.093	.093
	Sig. (2-tailed)	.102		.136	.273	.594	.596
	N	35	35	35	35	35	35
X3	Pearson Correlation	.358*	.257	1	.428*	.294	.501**
	Sig. (2-tailed)	.035	.136		.010	.087	.002
	N	35	35	35	35	35	35
X4	Pearson Correlation	.147	.190	.428*	1	.173	.345*
	Sig. (2-tailed)	.399	.273	.010		.320	.043
	N	35	35	35	35	35	35
X5	Pearson Correlation	.370*	.093	.294	.173	1	.290
	Sig. (2-tailed)	.028	.594	.087	.320		.091
	N	35	35	35	35	35	35
X6	Pearson Correlation	.037	.093	.501**	.345*	.290	1
	Sig. (2-tailed)	.833	.596	.002	.043	.091	
	N	35	35	35	35	35	35
X7	Pearson Correlation	-.203	.093	-.440**	-.293	-.373*	-.392*
	Sig. (2-tailed)	.242	.594	.008	.087	.028	.020
	N	35	35	35	35	35	35
X8	Pearson Correlation	.318	-.098	.265	-.034	.331	-.046
	Sig. (2-tailed)	.063	.574	.123	.847	.052	.794
	N	35	35	35	35	35	35
X9	Pearson Correlation	.266	.421*	.379*	.227	.433**	.343*
	Sig. (2-tailed)	.122	.012	.025	.189	.009	.043
	N	35	35	35	35	35	35
X10	Pearson Correlation	-.071	.274	.531**	.036	.287	.378*
	Sig. (2-tailed)	.685	.111	.001	.837	.095	.025
	N	35	35	35	35	35	35

Correlations

		X7	X8	X9	X10
X1	Pearson Correlation	-.203	.318	.266	-.071
	Sig. (2-tailed)	.242	.063	.122	.685
	N	35	35	35	35
X2	Pearson Correlation	.093	-.098	.421*	.274
	Sig. (2-tailed)	.594	.574	.012	.111
	N	35	35	35	35
X3	Pearson Correlation	-.440**	.265	.379*	.531**
	Sig. (2-tailed)	.008	.123	.025	.001
	N	35	35	35	35
X4	Pearson Correlation	-.293	-.034	.227	.036
	Sig. (2-tailed)	.087	.847	.189	.837
	N	35	35	35	35
X5	Pearson Correlation	-.373*	.331	.433**	.287
	Sig. (2-tailed)	.028	.052	.009	.095
	N	35	35	35	35
X6	Pearson Correlation	-.392*	-.046	.343*	.378*
	Sig. (2-tailed)	.020	.794	.043	.025
	N	35	35	35	35
X7	Pearson Correlation	1	-.441**	-.256	-.231
	Sig. (2-tailed)		.008	.138	.183
	N	35	35	35	35
X8	Pearson Correlation	-.441**	1	.263	.150
	Sig. (2-tailed)	.008		.127	.391
	N	35	35	35	35
X9	Pearson Correlation	-.256	.263	1	.279
	Sig. (2-tailed)	.138	.127		.105
	N	35	35	35	35
X10	Pearson Correlation	-.231	.150	.279	1
	Sig. (2-tailed)	.183	.391	.105	
	N	35	35	35	35

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations On Employees in UD. Twin Perkasa

Correlations

			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
Kendall's tau_b	X1	Correlation Coefficient	1.000	.281	.347*	.136	.370*	-.003	-.203	.307	.266	-.102
		Sig. (2-tailed)	.	.101	.041	.412	.031	.985	.236	.064	.120	.546
		N	35	35	35	35	35	35	35	35	35	35
	X2	Correlation Coefficient	.281	1.000	.248	.227	.093	.091	.093	-.094	.421*	.266
		Sig. (2-tailed)	.101	.	.143	.172	.586	.579	.586	.569	.014	.116
		N	35	35	35	35	35	35	35	35	35	35
	X3	Correlation Coefficient	.347*	.248	1.000	.420*	.282	.482**	-.435*	.265	.372*	.477**
		Sig. (2-tailed)	.041	.143	.	.010	.096	.003	.010	.104	.028	.004

	N	35	35	35	35	35	35	35	35	35	35	
X4	Correlation Coefficient	.136	.227	.420*	1.000	.167	.316*	-.265	-.048	.229	.075	
	Sig. (2-tailed)	.412	.172	.010	.	.316	.046	.110	.764	.168	.647	
	N	35	35	35	35	35	35	35	35	35	35	
X5	Correlation Coefficient	.370*	.093	.282	.167	1.000	.326*	-.373*	.322	.433*	.274	
	Sig. (2-tailed)	.031	.586	.096	.316	.	.046	.030	.052	.012	.106	
	N	35	35	35	35	35	35	35	35	35	35	
X6	Correlation Coefficient	-.003	.091	.482**	.316*	.326*	1.000	-.412*	-.014	.363*	.358*	
	Sig. (2-tailed)	.985	.579	.003	.046	.046	.	.012	.927	.026	.027	
	N	35	35	35	35	35	35	35	35	35	35	
X7	Correlation Coefficient	-.203	.093	-.435*	-.265	-.373*	-.412*	1.000	-.421*	-.256	-.216	
	Sig. (2-tailed)	.236	.586	.010	.110	.030	.012	.	.011	.136	.201	
	N	35	35	35	35	35	35	35	35	35	35	
X8	Correlation Coefficient	.307	-.094	.265	-.048	.322	-.014	-.421*	1.000	.256	.155	
	Sig. (2-tailed)	.064	.569	.104	.764	.052	.927	.011	.	.122	.342	
	N	35	35	35	35	35	35	35	35	35	35	
X9	Correlation Coefficient	.266	.421*	.372*	.229	.433*	.363*	-.256	.256	1.000	.268	
	Sig. (2-tailed)	.120	.014	.028	.168	.012	.026	.136	.122	.	.113	
	N	35	35	35	35	35	35	35	35	35	35	
X10	Correlation Coefficient	-.102	.266	.477**	.075	.274	.358*	-.216	.155	.268	1.000	
	Sig. (2-tailed)	.546	.116	.004	.647	.106	.027	.201	.342	.113	.	
	N	35	35	35	35	35	35	35	35	35	35	
Spearman's rho	X1	Correlation Coefficient	1.000	.281	.351*	.141	.370*	-.003	-.203	.318	.266	-.103
		Sig. (2-tailed)	.	.102	.039	.420	.028	.986	.242	.062	.122	.554
		N	35	35	35	35	35	35	35	35	35	35
	X2	Correlation Coefficient	.281	1.000	.251	.234	.093	.095	.093	-.098	.421*	.270
		Sig. (2-tailed)	.102	.	.145	.176	.594	.587	.594	.576	.012	.117
		N	35	35	35	35	35	35	35	35	35	35
	X3	Correlation Coefficient	.351*	.251	1.000	.442**	.285	.504**	-.441**	.280	.377*	.478**
		Sig. (2-tailed)	.039	.145	.	.008	.097	.002	.008	.103	.025	.004
		N	35	35	35	35	35	35	35	35	35	35
	X4	Correlation Coefficient	.141	.234	.442**	1.000	.172	.345*	-.274	-.050	.237	.077
		Sig. (2-tailed)	.420	.176	.008	.	.323	.042	.111	.774	.171	.659
		N	35	35	35	35	35	35	35	35	35	35
	X5	Correlation Coefficient	.370*	.093	.285	.172	1.000	.342*	-.373*	.334	.433**	.277
		Sig. (2-tailed)	.028	.594	.097	.323	.	.044	.028	.050	.009	.107
		N	35	35	35	35	35	35	35	35	35	35
	X6	Correlation Coefficient	-.003	.095	.504**	.345*	.342*	1.000	-.432**	-.015	.381*	.373*
		Sig. (2-tailed)	.986	.587	.002	.042	.044	.	.010	.932	.024	.027
		N	35	35	35	35	35	35	35	35	35	35

X7	Correlation Coefficient	-.203	.093	-.441**	-.274	-.373*	-.432**	1.000	-.436**	-.256	-.219
	Sig. (2-tailed)	.242	.594	.008	.111	.028	.010	.	.009	.138	.206
	N	35	35	35	35	35	35	35	35	35	35
X8	Correlation Coefficient	.318	-.098	.280	-.050	.334	-.015	-.436**	1.000	.265	.163
	Sig. (2-tailed)	.062	.576	.103	.774	.050	.932	.009	.	.124	.348
	N	35	35	35	35	35	35	35	35	35	35
X9	Correlation Coefficient	.266	.421*	.377*	.237	.433**	.381*	-.256	.265	1.000	.272
	Sig. (2-tailed)	.122	.012	.025	.171	.009	.024	.138	.124	.	.115
	N	35	35	35	35	35	35	35	35	35	35
X10	Correlation Coefficient	-.103	.270	.478**	.077	.277	.373*	-.219	.163	.272	1.000
	Sig. (2-tailed)	.554	.117	.004	.659	.107	.027	.206	.348	.115	.
	N	35	35	35	35	35	35	35	35	35	35

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

III.6.2. PRE-TEST REALIBILITY QUESTIONAIRES ON EMPLOYEES IN

UD. TWIN PERKASA

Correlations On Employees in UD. Twin Perkasa

Correlations

	X1	X2	X3	X4	X5	X6
X1 Pearson Correlation	1	.281	.358*	.147	.370*	.037
Sig. (2-tailed)		.102	.035	.399	.028	.833
N	35	35	35	35	35	35
X2 Pearson Correlation	.281	1	.257	.190	.093	.093
Sig. (2-tailed)	.102		.136	.273	.594	.596
N	35	35	35	35	35	35
X3 Pearson Correlation	.358*	.257	1	.428*	.294	.501**
Sig. (2-tailed)	.035	.136		.010	.087	.002
N	35	35	35	35	35	35
X4 Pearson Correlation	.147	.190	.428*	1	.173	.345*
Sig. (2-tailed)	.399	.273	.010		.320	.043
N	35	35	35	35	35	35
X5 Pearson Correlation	.370*	.093	.294	.173	1	.290
Sig. (2-tailed)	.028	.594	.087	.320		.091
N	35	35	35	35	35	35
X6 Pearson Correlation	.037	.093	.501**	.345*	.290	1
Sig. (2-tailed)	.833	.596	.002	.043	.091	
N	35	35	35	35	35	35
X7 Pearson Correlation	-.203	.093	-.440**	-.293	-.373*	-.392*
Sig. (2-tailed)	.242	.594	.008	.087	.028	.020
N	35	35	35	35	35	35
X8 Pearson Correlation	.318	-.098	.265	-.034	.331	-.046
Sig. (2-tailed)	.063	.574	.123	.847	.052	.794
N	35	35	35	35	35	35

X9	Pearson Correlation	.266	.421*	.379*	.227	.433**	.343*
	Sig. (2-tailed)	.122	.012	.025	.189	.009	.043
	N	35	35	35	35	35	35
X10	Pearson Correlation	-.071	.274	.531**	.036	.287	.378*
	Sig. (2-tailed)	.685	.111	.001	.837	.095	.025
	N	35	35	35	35	35	35

Correlations

		X7	X8	X9	X10
X1	Pearson Correlation	-.203	.318	.266	-.071
	Sig. (2-tailed)	.242	.063	.122	.685
	N	35	35	35	35
X2	Pearson Correlation	.093	-.098	.421*	.274
	Sig. (2-tailed)	.594	.574	.012	.111
	N	35	35	35	35
X3	Pearson Correlation	-.440**	.265	.379*	.531**
	Sig. (2-tailed)	.008	.123	.025	.001
	N	35	35	35	35
X4	Pearson Correlation	-.293	-.034	.227	.036
	Sig. (2-tailed)	.087	.847	.189	.837
	N	35	35	35	35
X5	Pearson Correlation	-.373*	.331	.433**	.287
	Sig. (2-tailed)	.028	.052	.009	.095
	N	35	35	35	35
X6	Pearson Correlation	-.392*	-.046	.343*	.378*
	Sig. (2-tailed)	.020	.794	.043	.025
	N	35	35	35	35
X7	Pearson Correlation	1	-.441**	-.256	-.231
	Sig. (2-tailed)		.008	.138	.183
	N	35	35	35	35
X8	Pearson Correlation	-.441**	1	.263	.150
	Sig. (2-tailed)	.008		.127	.391
	N	35	35	35	35
X9	Pearson Correlation	-.256	.263	1	.279
	Sig. (2-tailed)	.138	.127		.105
	N	35	35	35	35
X10	Pearson Correlation	-.231	.150	.279	1
	Sig. (2-tailed)	.183	.391	.105	
	N	35	35	35	35

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations On Employees in UD. Twin Perkasa

Correlations

		X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
Kendall's tau_b	X1 Correlation Coefficient	1.000	.281	.347*	.136	.370*	-.003	-.203	.307	.266	-.102
	Sig. (2-tailed)		.101	.041	.412	.031	.985	.236	.064	.120	.546
	N	35	35	35	35	35	35	35	35	35	35

	X2	Correlation Coefficient	.281	1.000	.248	.227	.093	.091	.093	-.094	.421*	.266
		Sig. (2-tailed)	.101	.	.143	.172	.586	.579	.586	.569	.014	.116
		N	35	35	35	35	35	35	35	35	35	35
	X3	Correlation Coefficient	.347*	.248	1.000	.420*	.282	.482**	-.435*	.265	.372*	.477**
		Sig. (2-tailed)	.041	.143	.	.010	.096	.003	.010	.104	.028	.004
		N	35	35	35	35	35	35	35	35	35	35
	X4	Correlation Coefficient	.136	.227	.420*	1.000	.167	.316*	-.265	-.048	.229	.075
		Sig. (2-tailed)	.412	.172	.010	.	.316	.046	.110	.764	.168	.647
		N	35	35	35	35	35	35	35	35	35	35
	X5	Correlation Coefficient	.370*	.093	.282	.167	1.000	.326*	-.373*	.322	.433*	.274
	Sig. (2-tailed)	.031	.586	.096	.316	.	.046	.030	.052	.012	.106	
	N	35	35	35	35	35	35	35	35	35	35	
X6	Correlation Coefficient	-.003	.091	.482**	.316*	.326*	1.000	-.412*	-.014	.363*	.358*	
	Sig. (2-tailed)	.985	.579	.003	.046	.046	.	.012	.927	.026	.027	
	N	35	35	35	35	35	35	35	35	35	35	
X7	Correlation Coefficient	-.203	.093	-.435*	-.265	-.373*	-.412*	1.000	-.421*	-.256	-.216	
	Sig. (2-tailed)	.236	.586	.010	.110	.030	.012	.	.011	.136	.201	
	N	35	35	35	35	35	35	35	35	35	35	
X8	Correlation Coefficient	.307	-.094	.265	-.048	.322	-.014	-.421*	1.000	.256	.155	
	Sig. (2-tailed)	.064	.569	.104	.764	.052	.927	.011	.	.122	.342	
	N	35	35	35	35	35	35	35	35	35	35	
X9	Correlation Coefficient	.266	.421*	.372*	.229	.433*	.363*	-.256	.256	1.000	.268	
	Sig. (2-tailed)	.120	.014	.028	.168	.012	.026	.136	.122	.	.113	
	N	35	35	35	35	35	35	35	35	35	35	
X10	Correlation Coefficient	-.102	.266	.477**	.075	.274	.358*	-.216	.155	.268	1.000	
	Sig. (2-tailed)	.546	.116	.004	.647	.106	.027	.201	.342	.113	.	
	N	35	35	35	35	35	35	35	35	35	35	
Spearman's rho	X1	Correlation Coefficient	1.000	.281	.351*	.141	.370*	-.003	-.203	.318	.266	-.103
		Sig. (2-tailed)	.	.102	.039	.420	.028	.986	.242	.062	.122	.554
		N	35	35	35	35	35	35	35	35	35	35
	X2	Correlation Coefficient	.281	1.000	.251	.234	.093	.095	.093	-.098	.421*	.270
		Sig. (2-tailed)	.102	.	.145	.176	.594	.587	.594	.576	.012	.117
		N	35	35	35	35	35	35	35	35	35	35
	X3	Correlation Coefficient	.351*	.251	1.000	.442**	.285	.504**	-.441**	.280	.377*	.478**
		Sig. (2-tailed)	.039	.145	.	.008	.097	.002	.008	.103	.025	.004
		N	35	35	35	35	35	35	35	35	35	35
	X4	Correlation Coefficient	.141	.234	.442**	1.000	.172	.345*	-.274	-.050	.237	.077
		Sig. (2-tailed)	.420	.176	.008	.	.323	.042	.111	.774	.171	.659
		N	35	35	35	35	35	35	35	35	35	35

X5	Correlation Coefficient	.370*	.093	.285	.172	1.000	.342*	-.373*	.334	.433**	.277
	Sig. (2-tailed)	.028	.594	.097	.323	.	.044	.028	.050	.009	.107
	N	35	35	35	35	35	35	35	35	35	35
X6	Correlation Coefficient	-.003	.095	.504**	.345*	.342*	1.000	-.432**	-.015	.381*	.373*
	Sig. (2-tailed)	.986	.587	.002	.042	.044	.	.010	.932	.024	.027
	N	35	35	35	35	35	35	35	35	35	35
X7	Correlation Coefficient	-.203	.093	-.441**	-.274	-.373*	-.432**	1.000	-.436**	-.256	-.219
	Sig. (2-tailed)	.242	.594	.008	.111	.028	.010	.	.009	.138	.206
	N	35	35	35	35	35	35	35	35	35	35
X8	Correlation Coefficient	.318	-.098	.280	-.050	.334	-.015	-.436**	1.000	.265	.163
	Sig. (2-tailed)	.062	.576	.103	.774	.050	.932	.009	.	.124	.348
	N	35	35	35	35	35	35	35	35	35	35
X9	Correlation Coefficient	.266	.421*	.377*	.237	.433**	.381*	-.256	.265	1.000	.272
	Sig. (2-tailed)	.122	.012	.025	.171	.009	.024	.138	.124	.	.115
	N	35	35	35	35	35	35	35	35	35	35
X10	Correlation Coefficient	-.103	.270	.478**	.077	.277	.373*	-.219	.163	.272	1.000
	Sig. (2-tailed)	.554	.117	.004	.659	.107	.027	.206	.348	.115	.
	N	35	35	35	35	35	35	35	35	35	35

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	35	100.0
	Excluded ^a	0	.0
	Total	35	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.620	10

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