# Contribution of Information Technology Capital Expenditure Towards PT Indosat Tbk. Revenue

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#### Abstract

Mainly believed that IT Spending has influenced business performance. This research will validate about the contribution of information technology capital expenditures (IT CapEx) which focused on information technology equipment assets towards PT Indosat Tbk. revenue. By measuring IT CapEx and company's overall revenue, found that there is less significant correlation between the two variables. It give us the direction for the forecasting that is through linear regression equation.

Keywords: IT Capital Expenditures, IT Value, IT Resources, PT Indosat, Revenue, Correlation

## I. INTRODUCTION

The study case will focused on PT. Indosat Tbk. as the third largest telecommunication operator in Indonesia. Originally established in Indonesia as a Foreign Investment Company (PMA) in 1967, and then was bought and thus fully owned by the Indonesian government in 1980. In 1994, the government listed the company on both the New York Stock Exchange (NYSE) and the Indonesia Stock Exchange (IDX) but kept 65 percent of the company's shares. But in 2008, Indosat shares indirectly acquired by Qatar Telecom (Qtel) QSC (Qtel) through Indonesia Communications Limited (ICLM) and Indonesia Communications Pte. Ltd. (ICLS) number of 40.81%. The Indonesian government and the public have the remaining shares respectively 14.29% and 44.90%. In 2009, It (QTel) bought shares of series B were 24.19% of the public to become the majority shareholder of Indosat with 65% [1]. Furthermore, Indosat owned by Qatar Telecom (Qtel) QSC (Qtel) on behalf Ooredoo Asia Pte. Ltd. (formerly Qtel Asia Pte. (65%), the Indonesian government (14.29%) and the public (20.71%). Indosat 3G frequencies to obtain additional licenses from the Ministry of Communications and Information Technology, and its subsidiaries, IM2, won the tender WiMAX license held by the government. Indosat gains most of its revenues from its cellular phone business segment (83 percent), followed by fixed data; MIDI-Multimedia, communication data & internet (13)percent), and fixed telecommunication (4 percent). [2]

The main business of Indosat is to plan, build, develop, sell, operate, and maintain telecommunication services and also information networks according to the provisions of laws and regulations of Indonesia in a Broadest area. And to improve telecommunication and information services with respect to the provisions of laws and regulations of Indonesia. On the other perspective, the supporting business is to provide reliable payment transaction and remittance services through telecommunication and information networks. This enabled Indosat to worked by itself as a parent company or through the company's subsidiaries. The main Indosat subsidiaries is serving cellular business via variety of products.

This paper will study about the contribution of the Information Technology capital expenditures which focused on Information Technology equipment assets towards overall company's revenue. The remainder of this paper will be systematized as follows. In the next section "Research Methodology" will presenting about research methodology of the research. "Case Study" section will describe about the contribution of IT CapEx towards company's Revenue. And on the "Discussion" section, will discuss about the result of the research. Finally, the "Conclusion" section conclude all of the topics in the research.

## II. RESEARCH METHODOLOGY

This case study intends to validate about the contribution of Information Technology Capital Expenditures (IT CapEx) towards the Company's revenue. To do the research, first it is to choose a company as a study object which is PT Indosat because it's an IT-based industry and relatively easy to search out data about the company due to the published enterprise. And then collect the data as the second step, which refer to the PT Indosat annual report that published between 2007 and 2013. Thirdly, analyze the annual report to give a presentation about overall company revenue and assets. From the annual report we could get much information about cash flows, company's fixed assets, depreciation, etc. After collecting the data needed in research, do an analyzing about contribution of the IT CapEx towards overall revenue by measuring the affecting factor in IT Spending and it's relation to the revenue. Then give a detailed presentation about founded aspects on research in a discussion section.

#### III. CASE STUDY

When analyzing the relationship between Information Technology spending on PT Indosat revenue that based on company's annual report which published every year. The range of referred annual report is over 7 years, from 2007 to 2013 [2-7]. As for the annual report can be accessed through the Indonesia Stock Exchange website.

A. PT Indosat Revenue PT Indosat which is engaged in telecommunications services provider Digital Communication System (DCS) earned the company revenues from various business such as:

• Cellular

• Multimedia, Data Communication, Internet (MIDI)

• Telecommunication Equipment Of the three businesses, the company's revenue can be seen over the years in the following table:

	Year of Revenue (Millions Rupiah)								
	2007	2008	2009	2010	2011	2012	2013		
Cellular	12,752,496	14,178,922	14,300,163	16,027,062	16,750,879	18,489,329	19,374,638		
MIDI	2,168,584	2,735,495	2,720,984	2,476,276	2,576,032	2,908,033	3,265,847		
Tele. Equip.	1,567,415	1,744,716	1,803,039	1,293,177	1,249,982	1,021,450	1,214,787		
Revenue	16,488,495	18,659,133	18,824,186	19,796,515	20,576,893	22,418,812	23,855,272		
% Revenue	-	13.16%	0.88%	5.17%	3.94%	8.95%	6.41%		

 TABLE I.
 YEAR OF REVENUE

The table shows that the revenue are increase every year from the three businesses of company. Mobile sector is the pulse of business that contributed the largest revenues to the company. Then followed by revenues from Multimedia, Data Communication and Internet (MIDI) and Telecommunications Equipment.

We can observe further that as a total, the largest revenue increase is in 2008 with the percentage of 13.16%. While the smallest increase in company's revenue was in the year 2009 which is only 0.88%. However, if we take each percentage of increase in the company's annual revenue, we found an average increase in the revenues of 6.42%.

### B. Information Technology Spending

Capital Expenditure is the acquisition or addition of fixed assets. This does not include the cost of repair or maintenance of those assets [8]. So in this case, IT CapEx of PT Indosat covers all information technology expenditures are fixed assets of the company [9]. The IT CapEx has a direct contributes to the industry profit and return on assets [10]. Information technology spending of PT Indosat referring to the company's fixed assets in the company's annual report which is calculated from the difference between the beginning balance and the ending balance from the sector of information technology equipment in the direct part of the cost of ownership. While the technology information spending of PT Indosat from each year is presented in the following table:

	Year of IT Spending (Millions Rupiah)								
	2007	2008	2009	2010	2011	2012	2013		
Begin.	1,080,576	1,642,238	1,856,437	2,162,426	3,046,084	3,395,355	3,649,793		
Balance									
End. Balance	1,642,238	1,856,437	2,162,426	2,501,892	3,395,355	3,649,793	4,352,467		
IT CapEx	561,662	214,199	305,989	339,466	349,271	254,438	702,674		

TABLE II. YEAR OF IT SPENDING

From the table above, it can be seen there is fluctuations in annual IT spending of PT Indosat. When judging in terms of asset value of information technology equipment of the company, There's found the existence of a consistent increase each year. The biggest IT Spending was in 2007 that gained an increase of 51.98% from the beginning of the year. Whereas in 2012 the company only spend IT by 7.49% that is worth Rp. 254,438,000,000. In average, IT spending percentage of the company from 2007 until 2013 rated at 19.34%. In practice, IT spending that is done by Indosat does not further described in detail in the annual report. Thus the assumption that emerged out of these expenditures are as the following:

• As a company that engaged in the field of

telecommunications, PT Indosat are Information Technology based firm/organization. However, in this study, part of the exploration of the information technology refers to the information technology equipment sector.

• Several other factors beyond IT spending is not discussed in detail, including the procurement of IT in a subsidiary of PT Indosat, As there is no further information in the annual report of PT Indosat.

• To assess the contribution of IT CAPEX towards PT Indosat revenue, will be performed a comparison between the two variables.To explore further about the growth of IT spending in PT Indosat, the ratio of IT spending growth are as below:

		Year of IT CapEx (Millions Rupiah)							
	2007	2008	2009	2010	2011	2012	2013		
IT CapEx	561,662	214,199	305,989	339,466	349,271	254,438	702,674		
%IT CapEx Growth	-	-61.86%	42.85%	10.94%	2.89%	-27.15%	176.17%		

TABLE III. YEAR OF IT CAPEX

Table III shows that the growth rate of IT spending fluctuated, and within the year of 2008 the company suffered a decrease in the level of IT spending drastically that is equal to -61.86% from the previous year. While the majority of IT spending budgets is in 2013 that

amounted 176.17% when compared to the year of 2012. However, in general the average growth rate of IT spending has increased by 23.97% per year. The percentages of IT spending from the company's overall revenue at PT Indosat, shown in the Table IV:

TABLE IV.YEAR OF IT CAPEX TO REVENUE

	Year of IT CapEx to Revenue (Millions Rupiah)							
	2007	2008	2009	2010	2011	2012	2013	
IT CapEx	561,662	214,199	305,989	339,466	349,271	254,438	702,674	
Revenue	16,488,495	18,659,133	18,824,186	19,796,515	20,576,893	22,418,812	23,855,272	
% IT CapEx & Revenue	3.41%	1.15%	1.63%	1.71%	1.70%	1.13%	2.95%	

While Table IV shows that the largest contribution from IT CAPEX to be the biggest to the company in 2007 that worth 3.41% of total revenue. Whereas in 2012 the opposite condition occurred where the value of the IT capital expenditure is only 1.13% when

compared to the company's revenue. But if we show a comparison between the growth of IT CAPEX toward revenue growth from the company, it will be produce an overview as presented in the table below:

Growth	Year of IT CapEX Growth to Revenue Growth (Millions Rupiah)							
	2007	2008	2009	2010	2011	2012	2013	
% IT CapEx	-	-61.86%	42.85%	10.94%	2.89%	-27.15%	176.17%	
% Revenue	-	13.16%	0.88%	5.17%	3.94%	8.95%	6.41%	

TABLE V. YEAR OF IT CAPEX TO REVENUE GROWTH

The table above present the growth of each variable when compared to the previous year. The average percentage growth in IT CaPex that amounted 23.97% annually. While the average increase in revenue of the company amounted 6.42% each year. This shows that there is progress/increase of the company IT spending each year, especially in the information technology equipment as a whole

has increased from year to year. So are the company's revenue has increased every year. But if we assess the contribution of the IT CaPex and corporate revenues, found that there is less significant correlation between the two variables. This is evidenced by the correlation between the two variables that resulted in Table VI:

Correlations							
		IT CapEx	Revenue				
CapEx	Pearson Correlation	1	0.228				
	Sig. (1-tailed)		0.312				
	Ν	7	7				
Revenue	Pearson Correlation	0.228	1				
	Sig. (1-tailed)	0.312					
	Ν	7	7				

TABLE VI.CORRELATIONS

What the table above shows to us is with the significance level of five percent, it can be concluded that there is no significant correlation between IT CapEx and the

company revenue. The result lead us to make the summary of the model which presented in Table V:

TABLE VII.

MODEL SUMMARY

Model Summary	(Predictors: (Consta	nt), CapEx)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.228	0.052	-0.138	2632532.420

We could take a summary from the Table VII that the contribution of the Information Technology Capital expenditures factor especially in Information Technology equipment sector is only worth 5.2 Percent to the PT Indosat revenue. That means only a very few contribution to the general company revenue from the IT CapEx.

### IV. DISCUSSION

This research shows that IT CapEx in PT Indosat only have a few contribution to the general company revenue. It is supposed that the IT CapEx give more contribution to the company revenue, because PT Indosat is an IT-based enterprise. Meanwhile, some other results from another research proof that IT CapEx have a significant correlation to the company revenue. Lukman, A. in his research IT Value Analysis by Resource-Based View Theory: The Case Study of PT. Telekomunikasi Indonesia, Tbk., proving that between IT Value and business performance has had close correlations. The same research

that chooses similar company which also a telecommunication company, PT Telekomunikasi Indonesia, Tbk., shows that investment of IT absolutely contributes to increase revenues, and IT resources have a

positive relationships to business performance which shows improved business performance that presented by financial performance [11].

Because of the few contribution of IT CapEx towards PT Indosat revenue, if we continue using CapEx factor for revenue forecasting, Table VIII below give us the direction for the forecasting that is through linear regression.

### TABLE VIII. LINEAR REGRESSION

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
1 (Constant)	1.885e7	2567844.545		7.341	0.001
IT CapEx	3.175	6.075	0.228	0.523	0.624

From the table above, we can determine the linear regression equation (Where x is the CapEx factor and y is the revenue), y =1.885e7 + 3.175x

Through this equation, if the condition still similar with the recent periods, then in twenty years ahead the revenue will have no significant progress. Affected by the CapEx factor.

### V. CONCLUSION

As a conclusion, this paper contributes to IT Value study in measuring the correlation between IT Capital Expenditure especially on the information technology equipment assets and overall company revenue. The paper has investigated the relationship between IT Value and business performance that can be traced by measuring the company revenue and IT CapEx to get the correlation result that proves contribution of IT CapEx towards company overall revenue. A few contribution of IT CapEx towards company's revenue caused by a small significant correlation between two elements. If the condition still similar with the recent periods, then in twenty years ahead the revenue will have no significant progress. Affected by the CapEx factor. Analyzing the company which is PT Indosat does not involve it subsidiaries. Deeper research could be reached by involving all of the company subsidiaries and reducing biases that happens in this research.

Furthermore, this research needs more study to give stronger presentation about the contribution of IT CapEx towards company's revenue by discover and explore other aspects that affect business performance. Inclusively, elements and aspects from IT Architecture, Resource Planning, Assets Depreciation, and from the Information Security sector.

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