
CV. Tirta Buana Global Expansion in Construction Consultancy

Ghosh, Indras
ghosh.indras@gmail.com

Mubarrok, Khusni
mubarrokkhusni@gmail.com

Gai Sin, Liem, Ph.D
liemgaisin@aibpm.org

Alka Maurya
Amity University
amaurya@amity.edu

Abstract: this paper examines the different organisation aspect of a construction consultancy firm in Surabaya, Indonesia to find a suitable way for the firm to expand its operation across international borders. The purpose of this paper is to develop a sound research model to help understand the working of the different organisation and operation changes for a domestic firm to be able to expand globally. Qualitative data collected through physical observation and interviews. Additional secondary data was obtained through reports, articles, and journals.

I. BACKGROUND

Indonesia, the largest economy in South East Asia, has the biggest and the fastest growing construction industry in South East Asia. In 2017 construction industry is the second most profitable construction market in Asia. In the year 2017 alone, around US\$ 30 were added as public investments to add 10,200 meters of bridges, 61 seaports, 13 airports, 836 km of highway, and 710 km of railway lines to the country's infrastructure network. (DMG EVENTS , 2017)

The rapid growth of the infrastructure industry is not without a catalyst. When the current President of Republic Indonesia Joko Widodo came to office in 20th October 2014, he prioritized infrastructure development. This led to the rapid growth of the construction industry. From 2015 to 2017 the industry grew at a healthy rate of around 7% per annum, and it continues to rise. (Timetric, 2017)

The announcement of the 2017 budget saw the Government increasing its expenditure on infrastructure development by about 22% (From US\$ 24.0 billion in 2016 to \$30.0 billion in 2017). (Nasori & Lumanauw, 2017). *“Infrastructure development is expected to boost economic growth and*

improve connectivity among the regions,” according to President Joko Widodo during his financial note reading in a House of Representatives plenary session in 2017.

On consumer level, the average income of Indonesians is on the rise. ^(Exhibit 1) The rising income pushes the demand for residential as well as commercial property in Indonesia.

Keywords: *constructions, construction consultancy, engineering, civil engineering, international business.*

II. INTRODUCTION

CV. Tirta Buana is a joint venture specializing consulting engineering and project management located in Surabaya City, Indonesia. It was formed in 17th September 1997 by a seasoned and highly experienced civil engineer Ir. Adi Prawito. The firm started as a small one-man firm with only Mr. Prawito in the company. Soon, however, he expanded the firm when he found two highly qualified investors Dr. Laksono Djoko Nugroho and Mr. Awan Risdiyanto to run the business with him. Ir. Adi Prawito currently acts as the Director of the firm.

The company first started at regional level in August 2001, operating mainly in the city of Surabaya. In a few years, however, the company expanded its operations to neighboring cities and provinces such as Madura, Malang, Sidoarjo, Magetan, Gresik, and Mojokerto in the island of Java.

In just a few years the firm expanded its presence in Kalimantan Island where they were hired to oversee the water resource management planning of the famous Martapura River in June 2009. In its short operational lifetime, the firm has done a total of 119 projects by 2017 and is now a multi-million dollar company.

On the back of its many successes coupled with the favourable market conditions induced by Government policies, the firm is not looking to expand its presence beyond the national boundary. We will be looking the firm’s internal and external workings and take a look at the possibility of going global for the company in the current market conditions.

III. SCOPE OF OPERATIONS

The scope of operations is a crucial element of any organisation due to a number of reasons. First, it provides a clear direction for the firm to operate its limited resources. Second, it provides a solid foundation for market differentiation which enables the firm to have a unique identity in the market in comparison to its competitors.

CV. Terta Buana is a joint venture company. According to its Article of Association (Sertifikasi Badan Usaha, i.e. SBU) and its License of Construction Services (Jasa Konsultansi dan Surat Ijin Usaha Jasa Konstruksi , i.e. SIUJK), the company offers the following services:

- **Construction Planning**
 - Engineering Design Services for Foundation Construction and Building Structure
 - Engineering Design Services For Water Civil Engineering Works
 - Engineering Design Services For Civil Engineering Works Transportation

- **Construction Supervision**
 - Supervisory Service Works for Building Construction
 - Supervisory Service Works for Construction of Civil Engineering Transportation
 - Construction Supervisory Service of Civil Water Engineering Construction

From the above summary, it is clear that the firm focuses on mainly Planning and Supervision consultancy for the constructions of buildings, transportation infrastructure, and water management constructions.

The firm's have a strong direction as far as its market positioning is concern with all of its services focus on delivering quality civil engineering consultancy. The services offered by the firm are have a lot of business opportunities in the current market conditions.



Exhibit 1: Firm's Product Offerings
Source: CV. Tirta Buana

IV. ORGANISATION HIERARCHY

Another important aspect of any firm looking to expand its operation globally is its organisational hierarchy. Often require changes in its organisation structure to cope and adapt with the global environment. This is because the global business environment is often riskier and more volatile in the aftermath of the 2008 financial crisis. ^(Serafin, 2012) Essential, an organisation structure will enable monitoring, control, as well as assessment of risks and business opportunities. Taking a look at the structure of the firm will give us a fair idea how well the firm will be able to cope in the international market.

The organisation structure of CV. Tirta Buana is that of traditional hierarchy. The firm is headed by Ir. Adi Prawito who is the director of the firm. Under him four main functions of the firm exists, namely staffing manager, technical manager, administration manager, and finance manager. Each of the four positions is managed by one person with the exception of the Staffing Manager position which is managed by 2 persons.

The staffing manager acts as a Human Resource department of the company. It is responsible for hiring, firing, recruiting, salary payments, employees' welfare, etc. On the other hand, the Administration Manager is responsible for the daily working of the office and also acts as a connecting bridge between all of the other departments and the Director.

Finance Manager is tasked with recording all the inflow and outflow of cash in the organisation and maintaining the financial accounts and balance she of the company.

Perhaps the most crucial department of the firm is the Technical Department. Headed by a civil engineer, this department is tasked with overseeing the business concerns of the company. All the technical knowledge and consultancy activities of the firm flow through this department. Due to the many services offered by the firm, the firm has created separate departments for each of its construction consultancy service: Road and Bridges, Water Resources, Building Constructions, and Management and Finance Division.

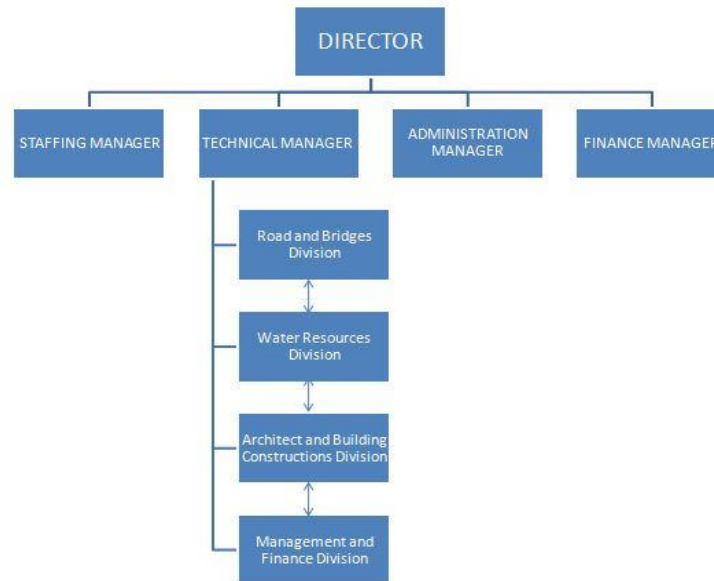


Exhibit 2: CV Tirta Buana’s Organisation Structure

Source: CV Tirta Buana

The firm has a very well defined and strong organisation structure. The structure is functional and tailored as per the business’ core competencies. The relatively simple structure allows for greater control over operations and enable to firm to be more flexible while reacting to changes in the market conditions.

Overall, the structure of the firm is appropriate and sound keeping in mind the size of the firm and its business concerns. However, there are few concerns over the firm’s structure moving forward. Additions are required to be made in the structure of the firm to ensure greater stability when the firm decides to go global.

V. FINANCE

International expansion is an expensive venture for any business. Large amount of outlay is required to set up operations on international operations. It is therefore important for a business to have a sound financial position before thinking of going international.

Going over the financial statements the following significant findings are found:

a. Profit and Loss Account

The firm has been performing well financially in the last 5 years, earning significant profit in each year from the year 2013 to 2017.

The firm earned an average of approximately Rp. 7.000.000.000 (Approx. USD 500,000) each year as revenue. Furthermore, the firm earned average gross profit of approx. Rp. 2.600.000.000 (approx. USD 185,714). Overall, the firm has average gross profit margin of 37.14%.

Over the same period the firm also managed to earn average net profit of around Rp. 830.000.000 (approx. USD 59,285). Thus, the firm has a profit margin of approx. 11.8%.

LAPORAN LABA RUGI CV. TIRTA BUANA		STATEMENTS OF PROFIT OR LOSS CV. TIRTA BUANA				
	2013 Rp	2014 Rp	2015 Rp	2016 Rp	2017 Rp	
PEREDARAN USAHA	6.903.163.968	5.391.510.216	6.374.676.491	9.843.596.749	6.729.856.741	REVENUES
HARGA POKOK PENJUALAN	(4.908.015.739)	(4.276.681.771)	(3.570.161.925)	(5.310.911.660)	(4.046.844.240)	COST OF REVENUES
LABA BRUTO	1.995.148.229	1.114.828.446	2.804.514.566	4.532.685.089	2.683.012.501	GROSS PROFIT
BIAYA ADMINISTRASI DAN UMUM	(755.472.819)	(907.798.977)	(1.927.478.880)	(3.560.599.130)	(1.828.589.283)	GENERAL AND ADMINISTRATIVE EXPENSES
LABA NETTO	1.239.675.410	207.029.469	877.035.686	972.085.959	854.423.218	INCOME OF THE YEAR

Exhibit 3: CV Tirta Buana’s Profit and Loss Account

Source: CV Tirta Buana

It is generally accepted that a healthy financial position of a business is indicated by average gross margin of 25% and average net profit margin of 8.5%. Thus keeping that in mind the firm has a “better than average” financial performance in the last 5 years

It is worth to note that there is a significant fluctuation in the revenues earned as well as “general and administration expenses” (overheads) in the last 5 years.

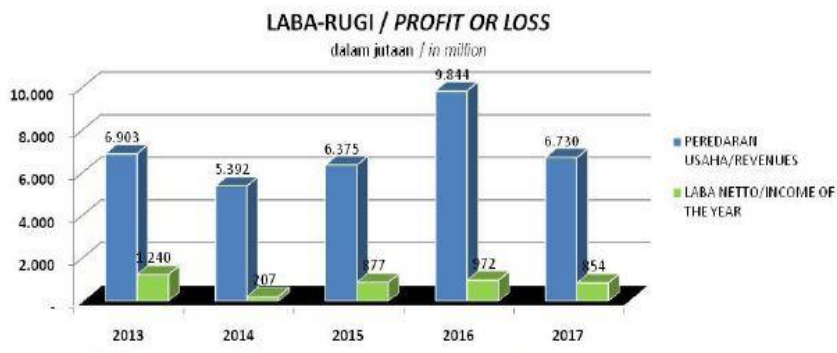


Exhibit 4: CV Tirta Buana’s Profit and Loss Performance
Source: CV Tirta Buana

a. Balance Sheet

From 2013 to 2015 CVTB experienced decreasing total assets. The total assets of the firm went from Rp. 1.945.668.233 (Approx. USD 138,976) in 2013 to Rp. 1.114.065.155 (Approx. USD 79,576) in 2015, a 42.7% decrease. The decreasing total assets were caused by sharp decrease of cash and cash at bank, which decrease from Rp. 1.334.903.414 (Approx. USD 95,350) in 2013 to Rp. 582.861.727 (Approx. USD 41,632.98) in 2015.

LAPORAN POSISI KEUANGAN CV. TIRTA BUANA		STATEMENTS OF FINANCIAL POSITION CV. TIRTA BUANA				
	2013 Rp	2014 Rp	2015 Rp	2016 Rp	2017 Rp	
ASET						ASSETS
ASET LANCAR						CURRENT ASSETS
Kas dan Bank	1.334.903.414	885.211.879	582.861.727	520.267.035	1.550.764.812	Cash and Bank
Piutang Usaha	119.271.819	-	-	1.076.878.290	119.271.819	Accounts Receivable
Biaya Di Bayar Di Muka	-	-	-	-	-	Prepaid Expenses
TOTAL ASET LANCAR	1.454.175.233	885.211.879	582.861.727	1.597.145.325	1.670.036.631	TOTAL CURRENT ASSETS
ASET TETAP						FIXED ASSETS
Inventarisasi	491.493.000	591.493.000	531.203.428	281.976.320	186.472.546	Investments
(setelah dikurangi biaya penyusutan)						(net of accumulated depreciation)
TOTAL ASET TETAP	491.493.000	591.493.000	531.203.428	281.976.320	186.472.546	TOTAL FIXED ASSETS
TOTAL ASET	1.945.668.233	1.476.704.879	1.114.065.155	1.879.121.645	1.856.509.177	TOTAL ASSETS
LIABILITAS DAN EKUITAS						LIABILITIES AND EQUITY
LIABILITAS						LIABILITIES
Utang Usaha	0	0	0	0	0	Accounts Payable
Utang Bank (Jangka Pendek)	0	0	0	0	0	Loan From Bank (Short Term Liabilities)
Utang Muka Proyek	0	0	0	0	0	Advance from Projects
Utang Lainnya	0	0	0	0	0	Other Liabilities
TOTAL LIABILITAS	0	0	0	0	0	TOTAL CURRENT LIABILITIES
EKUITAS						EQUITY
Modal Disetor	30.000.000	30.000.000	30.000.000	30.000.000	30.000.000	Capital Stock
Labo ditahan tahun sebelumnya	675.992.823	1.239.675.410	207.029.469	877.035.686	972.085.959	Currents Retained Earnings
Labo ditahan tahun ini	1.239.675.410	207.029.469	877.035.686	972.035.686	854.423.218	Retained Earnings This Year
TOTAL EKUITAS	1.945.668.233	1.476.704.879	1.114.065.155	1.879.121.645	1.856.509.177	TOTAL EQUITY
TOTAL LIABILITAS DAN EKUITAS	1.945.668.233	1.476.704.879	1.114.065.155	1.879.121.645	1.856.509.177	TOTAL LIABILITIES AND EQUITY

Exhibit 5: CV Tirta Buana’s Balance Sheet

Source: CV Tirta Buana

The total assets of the company showed a recovery in 2016 and 2017. In 2017, the firm has total assets of Rp. 1.856.509.177 (Approx. USD 132,607.80). Again the cause of the rising total assets was due to the increase in cash and cash at bank.

What was interesting to see is over the same period of 2013 to 2017 the firm showed zero liabilities (current and long-term) in its financial statements. It is a highly unusually position for any business firm to have no liabilities. However, this can be attributed to the cultural belief in Indonesia where most people view borrowing as an unfavourable and an unnecessary burden.

VI. MANAGEMENT, WORKFORCE, AND RECRUITMENT

Another important aspect of international business operations is the human resource. The firm has a total of 41 workforces working for the company, including 3 in the leadership capacity. 20 of the workforce are technical professionals, 12 supporting staffs, and 6 administration staffs make up the rest of the organisation. 14 of those workforce are ‘permanent employees’ while the rest are hired by the firm on contractual basis. Furthermore, the firm also works with subcontractors when it is required.

The workforce consists of highly experienced and highly qualified people. The leadership of the firm has 17 years of experience in the firm while the technical professionals have close to 11 years of experience in the firm on average. The support staffs and the administration staffs have average experience of 7.6 and 7.7 years respectively.

The hiring and recruitment decisions are made by the Director with the help of the concern department. Remuneration of the employees is decided on the basis of the following factors:

- Relevant working experience (in years)
- Highest education qualification
- Number of years in the firm

Recruitment requirements are made by the concerned division. The division then forwards their requirements to the Director who then starts the process of analyzing the qualifications and skills requirements. The next step is starting the recruitment process. Currently the firm recruits employees from Narotama University in Surabaya and through INTAKINDO, association for construction consultancy firms in Surabaya.

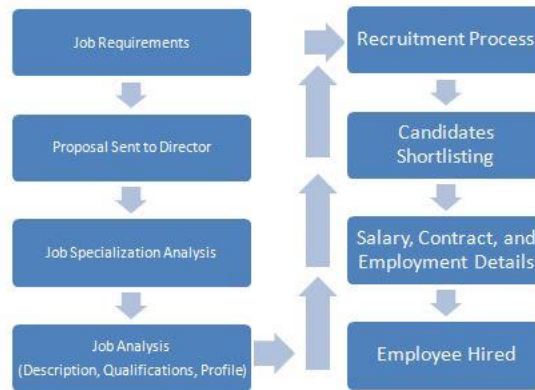


Exhibit 6: CV Tirta Buana’s Hiring Process

Source: CV Tirta Buana

The recruitment process is applicable for both permanent employees and subcontractors.

The major challenge face by the firm is its inability to find qualified and certified employees. “We want to expand our operations but in Surabaya less than 1% certified civil engineers out of 7.5 million. There is a severe shortage of workforce supply here.”

VII. CONCLUSIONS & RECOMMENDATIONS

Keeping in mind the firm’s internal capacity and the current and forecasted construction market in Indonesia, we came to the following conclusions.

A. Conclusions

- The firm greatest strength is in its leadership, technical, and supporting staffs. The leadership and technical staffs are hugely experienced. Having such highly experience people at the core firm is very important to the strategic decision makings of the firm.
- Clear direction and scope of business. The firm understands its own core competencies.
- Unambiguous hierarchy and chain of command
- Very strong financial position. Able to internally financed global expansion

- Extensive local experience in civil engineering operations with over 100 projects under its belt within 7 years of its starting of operation.

B. Recommendations

The firm is well-positioned for expansion. They have sound financial positions and the required skilled staffs to do so. It is important, however, to have a clear plan when and where the firm should expand. The first step should be to cultivate culture of international business in the industry and conduct market research.

AECOM, American multinational engineering firm, in its Asia Construction Outlook 2014, rated Indonesia as the number 1 country in terms of potential construction spending growth. (Global Business Guide Indonesia, 2015)



Exhibit 6: Indonesia’s growing per capita income over the years.

Source: tradingeconomics.com (Tradingeconomics, 2017)

Indonesia construction industry is also experiencing healthy growth in the last 5 years and this trend is forecasted to continue in the future. Furthermore, the One Belt One Road Initiative between Indonesia and China looks likely to occur with negotiations on advance stage. (Aisyah, 2018)



Exhibit 7: Indonesia’s growing construction industry

Source: tradingeconomics.com (Tradingeconomics, 2017)

The firm should focus on taking advantage of the booming market conditions in Indonesia. Business opportunities in Indonesia likely to increase greatly as Government fully support massive infrastructure development. It is advisable to stay and expand the firm’s operations within Indonesia for a few years. During the same period the firm can prepare itself for global expansion using the following step actions:

1. Create a Separate International Business Division.

A separate division should be created specifically for international business dealings.

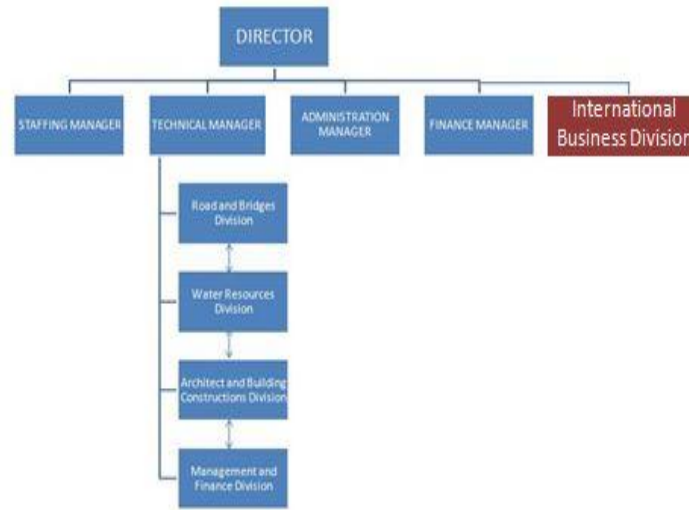


Exhibit 7: Proposed New Hierarchy

The department can report direct to the Director and have the following tasks:

- a. Evaluate business opportunities in foreign countries and make a shortlist of all the possible and profitable countries the firm can expand to.
- b. Research the market shortlisted in terms of its political, economic, social and judicial aspects.
- c. Create possible partnerships with foreign engineering consultancies and engineering firms to enable access to foreign market and share knowledge. At the moment the firm has little knowledge about business environment in engineering in other countries. Partnership is the safest and cheapest option to obtain information about international business environment.
- d. Market the firm to foreign countries to generate awareness and attract customers.

2. Hire Internationally

One of the main concern of the firm is the shortage of qualified engineers in Indonesia. The firm should look at the possibility of hiring qualified engineers from other countries who possess good spoken English. For example, India has a large pool of qualified engineers but the lack of jobs in the country lead to 48% of engineers in the country to be unemployed. ^(United Nations Development Programme, 2018) The firm should look into hiring from India for skilled and affordable engineers.

3. Understand Market Position

Although the firm has a very clear market position domestically, it should make conscious steps to determine its market position on the global level. Most international firms failed because they assume that the same market position that works well domestically would also work equally well in foreign countries without taking into account the difference in the cultural, business, and political environments.

Furthermore, management need to set aside budget specifically for international expansion and have a make a clear plan as to the allocation of the fund. Management teams need to determine their position in the international market, and specifically whether they have the ability and size e needed to keep their costs down and remain competitive.

4. Use of Financial Leverage

While solvency is important for all business firms there are benefits a firm can obtained by using short term and long term borrowings. The firm should look into using financial leverage to finance its operations. There is a lot of scope in this regard as currently the firm has zero liability.

Borrowings such as fixed income debt can be a good source of funds and capital which the firm can use to finance its global expansion.

REFERENCES

Aisyah, R. (2018, May 2). *Chinese investments trending in Indonesia*. Retrieved May 20, 2018, from The Jakarta Post: <http://www.thejakartapost.com/news/2018/05/02/chinese-investments-trending-in-indonesia.html>

CV. Tirta Buana. (2018). *Company Profile*. Surabaya: CV. Tirta Buana.

DMG EVENTS . (2017, May 29). *Indonesia's construction market to grow 8% in 2017*.

Retrieved May 20, 2018, from dmgeventsme.com:

<https://www.dmgeventsme.com/media/events-in-the-press/2017/may/indonesias-construction-market-to-grow-8-in-2017/>

Global Business Guide Indonesia. (2015). *Construction Firms Find Strong Growth in Indonesia*. Retrieved 20 May, 2018, from Global Business Guide Indonesia:

http://www.gbgingonesia.com/en/property/article/2015/construction_firms_find_strong_growth_in_indonesia_11124.php

Nasori, & Lumanauw, N. (2017, August 18). *Infrastructure budget rises to Rp 409 trillion*.

Retrieved 20 May, 2018, from Pwc.com: <https://www.pwc.com/id/en/media-centre/infrastructure-news/august--2017/infrastructure-budget-rises-to-rp-409-trillion.html>

Serafin, T. (2012, July 2). *forbes.com*. Retrieved May 20, 2018, from Risky Business: Managing Risk in a Volatile World: <https://www.forbes.com/sites/tatianaserafin/2012/07/02/risky-business-managing-risk-in-a-volatile-world/#78ae5d783875>

Timetric. (2017, July 3). *Construction growth in Indonesia to remain high over the next five years*. Retrieved April 25, 2018, from Construction Intelligence Center:

<https://www.construction-ic.com/pressrelease/construction-growth-in-indonesia-to-remain-high-over-the-next-five-years-5859683>

Trading Economics. (2017). *Indonesia GDP per capita 1960-2018*. Retrieved May 20, 2018, from tradingeconomics.com: <https://tradingeconomics.com/indonesia/gdp-per-capita>

Tradingeconomics. (2017). *Indonesia GDP From Construction*. Retrieved May 20, 2018, from Tradingeconomics.com: <https://tradingeconomics.com/indonesia/gdp-from-construction>

United Nations Development Programme. (2018). *India Skills Report 2018*. United Nations Development Programme.