

FEASIBILITY STUDY FOR PACKAGED DRINKING WATER DISTRIBUTION BUSINESS UD.N

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ABSTRAK

Feasibility analysis for a packaged drinking water (PDW) distributor business aims to know how feasible it is to develop the business, as well as its investment capability to make profits to the amount of capital that has been invested.

This researched is examined through all six aspects, which is the industrial environments aspect, the market and marketing aspect, the technical and technological aspect, the management and human resources aspect, the financial aspect, as well as the law aspect. From examining those six aspects, it is shown that the business development plan for UD.N is both acceptable and feasible to run.

To calculate the investment feasibility analysis, three analysis methods are used, which are the NPV, IRR, and PP method. The overall results show that UD.N is feasible to run.

Keywords: Feasibility Study, marketing, Family Business, Analysis

INTRODUCTION

The need for clean water is a basic, fundamental need for all layers of society. This is balanced by society's increasing level of awareness for the consumption pattern of drinking water that is healthy and of good standard and quality. In order to fulfill society's need for clean and healthy drinking water, it follows that said healthy and clean drinking water must be made available to society.

The business of Packaged Drinking Water (PDW) is an increasingly challenging one, because the need for clean drinking water is increasing with higher population growth. The number of companies involved in Packaged Drinking Water (PDW) business is also growing, and they are constantly developing in order to increase the market share of their products. Therefore, despite society's very high need of clean drinking water, the supply of those high quality, guaranteed in terms of health drinking water will be very difficult to obtain for them. In the face of such problems, there needs to be a company selling packaged drinking water that is able to answer society's daily needs.

In an online article of Metrotvnews.com, it is said that when seeing the condition of the drinking water demand in Indonesia that is increasing by an average of 10-12% per year, it follows that the market for drinking water in Indonesia will also increase. This is caused by the increase in drinking water demand that in 2013 was 21.34 billion liters, which increases to 23.9 billion

litres in 2014, and is predicted to increase by 11% to 26.6 billion litres in 2015. (“Researcher: Packaged Drinking water demand is increasing, 2015, April).

Production and consumption of packaged drinking water in Indonesia itself increases every year. This is predicted from the annual growth of general consumption every year. As a result, this shows that society are becoming more aware of the importance of consuming drinking water in a clean and healthy package. This is also supported from the result of a survey, which states that packaged drinking water is still the highest need for Indonesian people. In the survey, packaged drinking water have a percentage of 68.07%, which is the highest percentage of all beverages, making it the most demanded and needed drink for society.

Seeing those high level of demand for clean water by society, this challenges the drinking water companies to be able those demand. As a result, there are plenty national drinking water company that utilizes the agent system of distribution in order to be able to reach society’s needs, all the way to the remote parts of the country. This is revealed by the online site ahlimanajemenpemasaran.com, which states that Aqua, the biggest packaged drinking water company in Indonesia, has an excellent distribution system in the cities and even in the remote areas – almost all areas in Indonesia has been reached by Aqua’s agent system (“Inilah strategi pemasaran aqua yang brilian, 2013 Juni”). In order to be able reach all regions of Indonesia, many drinking water companies have a partnership with distributors in every regions.

One of the products sold by UD. N itself is a product from Aqua. UD.N have a partnership with Aqua by being an official distributor in the city of Nganjuk. Before working in the business of packaged drinking water, this family business started out in the lemon drink business, where the company produces its own lemon drinks and market it in the area of Nganjuk city. As time goes by, people starts to lose interest in lemon drinks, which means demand keeps on decreasing every year. Because of this, since August 2014, UD.N tries to work in the area of packaged drinking water. UD.N itself is made in order to answer society’s growing awareness and unavoidable need for the packaged drinking water product.

Based on the data of the growing population and the increasingly higher trend of packaged drinking water demand, this means that it fits in perfectly with UD.N’s aim of being able to answer the need of the people. This means that UD.N also have a great opportunity to develop the packaged drinking water business in the city of Nganjuk. The thesis question of this paper is, “Is the packaged drinking water distribution system that UD.N has feasible to run when analyzed from the industrial environments aspect, the market and marketing aspect, the technical and technological aspect, the management and human resources aspect, the financial aspect, and the law aspect?”

RESEARCH METHODS

The research approach that is used in this business feasibility study is a applied research method, where this applied research is a research that applies a theory in order to solve a particular case study (Kuncoro, 2009:7). The applied research method is divided in three parts, which are evaluation research, developmental research, as well as the action research. In this research, UD. N will use the evaluation research part in order to determine whether or not this business is feasible to continue.

Data Gathering Methods

The research is done by reading and studying the library books and other source of data that is theoretical in nature, as well as being factual and closely related to the problem that is being examined. In addition, the research is done by directly visiting the places that is the objects of research. When doing so, close observation is conducted.

Result and Discussion

UD. N is an industry that provides sales of packaged drinking water, either in mineral water product or in drinking water with various tastes, coming in different product and sizes. Those buying from UD.N can be from agents who buy the products in bulk, as well as retailers who buy in fewer amounts of products. In addition of providing service for agents and retail marketers, UD.N also provides service to purchases to houses, offices or the government by delivery. UD.N is located on the main city street, which makes it easy to access by customers as well as making it easier for vehicles transporting packaged drinking water to come in and out. Furthermore, the lack of any other packaged drinking water distributor in the area means in the neighborhood means that it can be the place of choice in buying packaged drinking water with guaranteed quality, trusted by the people in the area. Based on those conditions, there will be a feasibility study for UD.N as a distributor of packaged drinking water, which will be analyzed from the industrial environments aspect, the market and marketing aspect, the technical and technological aspect, the management and human resources aspect, the financial aspect, and the law aspect

Industrial Environment Aspect

The industrial environmental aspect can be observed through the PEST analysis (*Politic, Economy, Social, Technology*), *Five Forces Analysis* dan SWOT analysis. In the *Five Forces Analysis*, it shows the threat of a new competition in refill drinking water business. They can be a close competition as the refill drinking water can be a substitute for packaged drinking water. Also, suppliers can have a high bargaining power when determining the cost of the product, since they have already determined a fixed price for every distributor. The ability of the buyer, or in this case the customer, to negotiate the price is considered to be in the low category. This is because in the area around UD.N there aren't any packaged drinking water distributors that can be a competition to UD.N. In addition, there is the possibility of development for a substitute product which is a refill drinking water, which starts to develop in society. The competition in the drinking water industry has already happened between UD.N, UD.SamiMulyo, UD.Joss, and TokoTirta Jaya.

Meanwhile, the SWOT analysis involves internal factors which is strength and weakness, as well external factors in opportunity and threat. The strength of UD.N is the having an official license as a distributor, an excellent service, a good location that is easily accessed by customers, an established network, as well as vast experience in marketing drinking products. On the other hand, its weakness is that UD.N is a new distributor that has limited capital. The opportunity is the growing level of awareness in society for clean drinking water, the presence of retailers around UD.N, and its partnerships with certain institutions. The threat, however, is that some people opts for a substitute product, as well as the presence of other distributors that can develop themselves, and the habit of people to buy products from the store they have always go to. In the SWOT analysis, UD.N has the S-O strategy. This position is a very advantageous one, which is a position where the company is able to use all of its resources and capability to take advantage of the available opportunities.

The Market and Marketing Aspect

The segment that UD.N aims for is the population of Nganjuk city that is of economic level of middle class or higher, which have a high awareness of the importance of health. They target the choice of market from a group of customers with similar needs or characteristics that needs their service. The target market of UD.N is the institutions or corporations and companies in Nganjuk and the area around it. The position that UD.N wants to establish is “*One stop service for your daily water*”.

When doing the product marketing activity, UD.N faced competition with other packaged drinking water distributors that is also marketing their product in the area of Nganjuk and its surroundings. There's a strategy analysis called *marketing mix*, or in marketing is more well known as *4P's analysis*, which is: Product is something you can offer to market in order to get the attention, purchase, use, or consumption that can fill a need or want of the customers. The packaged drinking water product that UD.N distributes the most is Aqua. The chosen location is in Yos Sudarso Street, as it has the advantage of being in the center of the city and is thus easily accessible. The price that UD.N has is different between shops that is going to sell again and the end user. An example of the pricing strategy can be seen in the picture below:

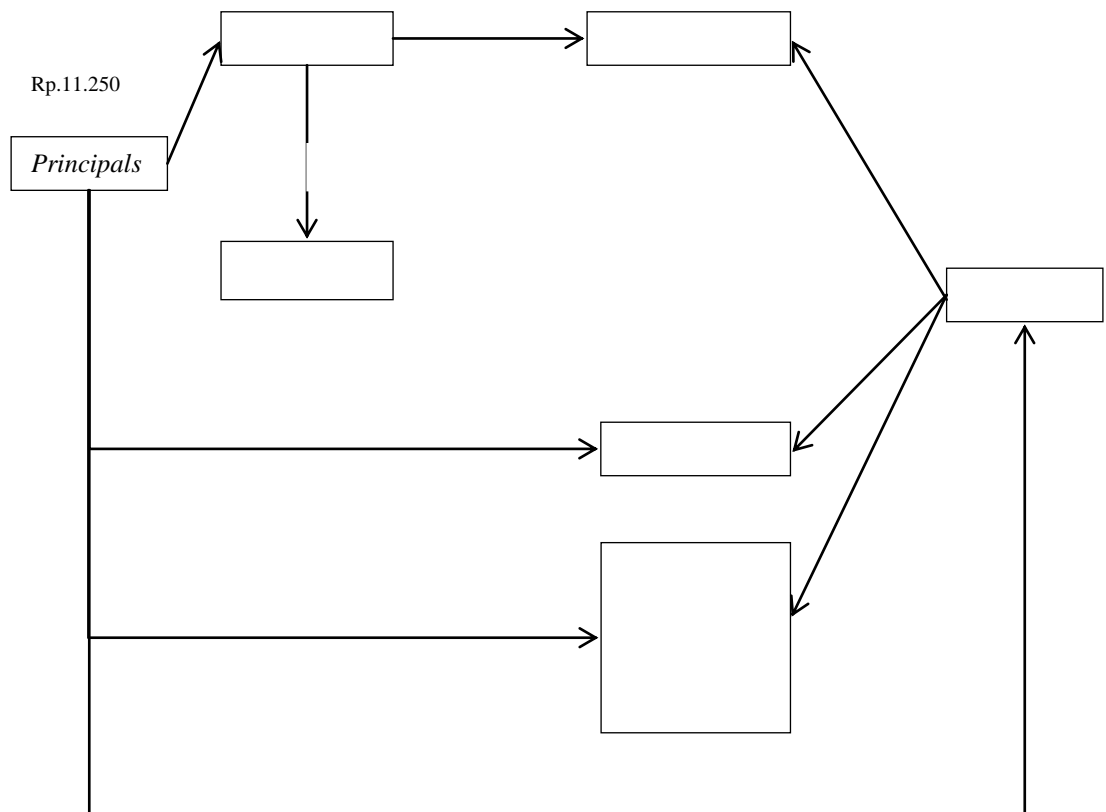


Figure 1. Example of the Pricing Strategy

The promotion that UD.N use is by doing mouth to mout promotion, as well as having selected drinks available for free after a certain amount of purchase.

Technical and Technological Aspect

The technical and technological aspect needs to be analyzed in order to make sure that the development of the packaged drinking water distributor can be properly planned and realized.

UD. N is a drinking water distributor that is located in Yos Sudarso Street, Nganjuk with a building area of 440 m²(40 m in length dan 11 m wide). The location is a building that is previously rented as a warehouse. UD. N location has several advantages, such as being located in from of the main street that is passed through by both private vehicles and public transport, thus making it easily accessible for transport purposes. UD. N also provides parking ground for customers who come in their private vehicles,

In addition, the layout for UD.N distribution system for the region around the city of Nganjuk that is provided with UD.N drinking water product are the regions of Loceret, Baron, Guyangan, Ploso, dan Kertosono. UD. N also provides services for purchases in small and large quantity, delivery order, and sales canvas.

In providing service of selling drinking water in Nganjuk, UD.N makes sure that their suppliers are prepared to send the product to UD. N. This can be seen from the readiness of *supplierto* send the product directly to ke UD. N. Even though this supplier also provides goods for packaged drinking water distributor other than UD.N, but UD.N suppliers always give a higher proportion of goods sent to UD. N in comparison to other packaged drinking water distributor.

Management and Human Resources Aspect

The analysis for the management and human resources aspect need to be done in order to ensure that the development of the packaged drinking water distributor can be managed properly and that the human resources demand can be fulfilled. The company structure of UD. N itself is as follows:

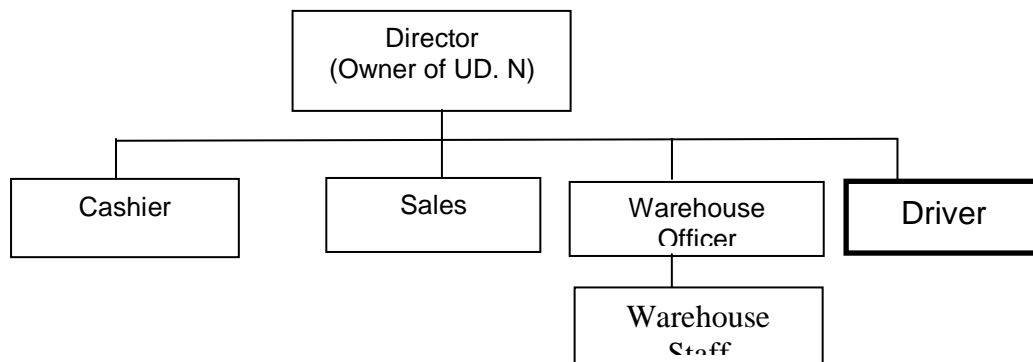


Figure 2. Company Structure of UD. N

The organizational structure shown in that picture is still a simple organizational structure, and there are still merging of functions in several. This is due to the current condition of UD. N, which is still very new.

On the side of compensation and allowances, in general, all the labor forces in UD. N will get compensations and allowances that is appropriate to the available level of work. The compensation and allowances plan is made by UD. N at the same time as the ongoing system of *reward* dan *punishment*. This system is enacted in order to increase working efficiency to be able to reach the target that is set beforehand. In addition, the second reward is the JAMSOSTEK benefit. This is line with the Laws of the Republic of Indonesia, number 3 year 1992, in regards to the social security of labor. UD. N will register all their labor to JAMSOSTEK to follow the four programs that have, which is the working accident insurance, death insurance, pension insurance as well as the health insurance.

Financial Aspect

Based on the result of discussion with respondents in regard to the target that investors want to reach, which in this case is the author's parents, it is decided that the financial aim and the financial strategy set by the company in order to reach that target is as follows:

- The time period of investment return is 2 years.
- To ensure that the investment that is done by UD. N has a NPV with a positive value (NPV>0).
- UD. N source of capital is from private shareholders.
- Annual Operational cost increase every year is 8%.

The number of tools needed to facilitate this line of work needs a funding of Rp 1.589.000, the tools shown in the table also shows the allocated funds of Rp 489.045.000. In addition, the company would have an available cash of Rp 350.000.000. All these add up to the initial investment total of UD. N being Rp 3.042.809.000. This initial investment of UD.N is the cost that the company expends before building the packaged drinking water distributor.

The report of UD. N cash flow on hand consisted of two things, which is the cash flow that is used for operation purposes, as well as the cash flow obtained from funding activity. In addition, there is also the cash flow pre-operation, which is the initial investment UD. N, which is Rp 3.040.759.000. At the year that UD. N starts to operate, the projected cash is Rp 1.393.619.762, and by the year 2020 it will go to Rp 14.607.263.861.

The financial aspect analysis of UD. N is determined to be feasible based on the following conditions:

Table 1. The financial aspect analysis of ud. N

Condition	Provision	Amount	Analisis
NPV	NPV > 0	Rp 3.875.564.514,04	Feasible
IRR	IRR >Determined interest	61%	Feasible
PP	<i>Payback Period</i> <maximum time	2 year 1 month	Feasible

Law Aspect

Several requirements that has to be completed in order to establish a business entity has been done by UD. N as shown in the following table 2:

Table 2

No	Documentthat has to be prepared	Document that has to be included to be submitted	Condition in UD. N	Analysis
1	Working Permit Deed of incorporation from notary Tax ID number (NPWP) Letter of Company Registration(TDP)	Identity Card (KTP) PBB proof of payment Kartu Tanda Penduduk (KTP) Family Card(KK) Copy of KTP Place of business information (lurah knows camat) Deed of Corporation	Complete	Feasible

	Working location permit done by local government Permit for trade business (SIUP)	Copy of NPWP Application letter Copy of KTP Certificate of Land for place or business or Certificate of deed for place of business Deed of Corporation Two copies of the newest photo, size Recommendation letter from the local government Two copies of Rp.6.000 Stamp Proof of full payment for last year's land taxes Copy of KTP Place of business information (lurah knows camat) Copy of NPWP Photo of owner/caretaker/person of responsibility		
2	Location Permit	Operational permit (SIB) Recommendation from RT/RW Recommendation from kecamatan Identity card of (KTP) founder	Complete	Feasible

CONCLUSION AND SUGGESTIONS

Based on the result of the research and feasibility study discussing the “Feasibility study of developing the packaged drinking water distributor (AMDK) UD. N”, it can be concluded that such action is feasible, based on the industrial environments aspect, the market and marketing aspect, the technical and technological aspect, the management and human resources aspect, the financial aspect, as well as the law aspect. A suggestion for UD.N is to increase promotion, fix the distribution system, and to increase monitoring within the company.

REFERENCES

- Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik. (Edisi Revisi)*. Jakarta: Rineka Cipta.
- Delaney, Patrick R, and Whittington, O.Ray. (2010). *Business Environment and Concepts*. New Jersey: John & Sons, Inc.
- Greer, Charles R. (2011). *Strategic Human Resource Management*. Pennsylvania: Prentice Hall.
- “Inilah Strategi Pemasaran Aqua yang Brilian”, *ahlimanajemenpemasaran.com*, 28 Juni 2013.
- Jackson, Schuler, & Werner. (2012). *Pengelolaan Sumber Daya Manusia*. Jakarta: Salemba.

- Juniar. (2010). *Studi Kelayakan Pendirian Pabrik Air Minum Dalam Kemasan PDAM Kabupaten Hulu Sungai Utara Ditinjau dari Aspek Keuangan, Jurnal Ekonomi Universitas Lambung Mangkurat*, vol 11 no 1.
- Kodrat, David Sukardi. (2010). *Manajemen Eksekusi Bisnis*. Yogyakarta: Graha Ilmu
- Kuncoro, Mudrajad. (2009). *Metode Riset untuk Bisnis & Ekonomi: Bagaimana Meneliti & Menulis Tesis*. Edisi 3. Jakarta: Erlangga.
- Mainnang. (2012). *Studi Kelayakan Bisnis Air Minum Dalam Kemasan (Amdk) Puroxa Untuk Pembukaan Cabang Baru Di Biak Dan Manokwari Pada Cv. Dilatama Karya, Jurnal Ekonomi Universitas Binus*, pp. 49-56.
- “Peneliti: Kebutuhan Air Minum Kemasan Semakin Meningkat” , *Metrotvnews.com*, 15 April 2015.
- Purnamasari, Devina. (2010). *Panduan Lengkap Hukum Praktis Populer Kiat-Kiat Cerdas, Mudah dan Bijak Mendirikan Badan Usaha*. Bandung: PT Mizan.
- Purwadi, Soekarto, Sailah. (2010). *Analisis Kelayakan Teknis dan Finansial Usaha Air Minum Depot Isi Ulang dengan sistem Reverse Osmosis (Studi Kasus: CV. Candrabali, Tangerang), Jurnal Industri Kecil Menengah*. Vol 1 no 1.
- Rangkuti, Freddy. (2011). *Analisis SWOT: Teknik Membedah Kasus Bisnis*. Jakarta: PT Gramedia Pustaka Utama.
- Rangkuti, Freddy. (2012). *Studi Kelayakan Bisnis & Investasi: Studi Kasus*. Jakarta: PT Gramedia Pustaka Utama.
- Rivai, Veithzal. (2009). *Manajemen Sumber Daya Manusia untuk Perusahaan. Edisi Kedua*. Jakarta: Raja Grafindo Persada.
- Spender, J.C. (2014). *Business Strategy: Managing Uncertainty, Opportunity, & Enterprise*. United Kingdom: Oxford University Press.
- Subagyo, Ahmad. (2011). *Marketing in Business*. Jakarta: Mitra Wacana Media.
- Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Suliyanto. (2010). *Studi Kelayakan Bisnis Pendekatan Praktis*. Yogyakarta: ANDI.
- Umar, Husein. (2010). *Studi Kelayakan Bisnis Edisi – 2*. Jakarta: PT Gramedia Pustaka Utama.
- Wibowo, Singgih (2012). *Petunjuk Mendirikan Perusahaan Kecil*. Jakarta: Penebar Swadaya.