Analysis Effectiveness and Efficiency Depot Distribution of Bandung to Increase Sales

Louis Apriell¹, Sahara², Dan Kirbrandoko³

¹Business School, Bogor Agricultural University, Jalan Raya Padjajaran, Bogor 16151, Indonesia

²Bogor Agricultural University, Faculty of Economics and Management, Jalan Raya Darmaga, Bogor 16680, Indonesia

Abstract: Area sales management is a discipline that pertains the area of sales, area management, customer type, journey plan management, time consumed for sales to managing area, and the quantity of human resources needed to achieve sales target with minimum cost. This research aims to measure how effective and efficient the distribution in Bandung Depot. The analysis will delve extensively on the sales representatives' discipline and effectivity in managing and following the journey plan to visit the car workshop, maximizing potential distribution within an area, and maximizing sales target with consideration of working experience in lubricant industry and the tightness of market competition within January – December 2016 period. The result of this research boils down to the conclusion that there is a correlation between the sales representatives' discipline of following the journey plan with the sales volume— when decreasing number of visit is followed by decreasing number of sales volume. However, apparently it does not work the other way around. When the number of visit is increasing, the sales volume does not always follow. Lastly, setting the right sales volume target is crucial in determining whether the target will be achieved or not.

Keywords: Distribution, area management, effectivity, efficiency, lubricants, depot Bandung.

1. Introduction

Sales area management is a science that deals with the territory of the sales force, the regional management system, the type of customer, the travel path, the time it takes the salesperson to manage the region, and the abundance of human resources needed to achieve the maximum sales target possible at a minimal cost. The goods distribution activity is defined as the activity of moving goods from the company to the place of the consumer appropriately, not only even covering the physical transfer of the products, but also the transfer of the producer's property from company to consumer. PTA is one of the distributors that distribute XYZ lubricants and has a distribution area in West Java which is headquartered in Bandung city. Population density, people's purchasing power and geographical location adjacent to the capital make many lubricant business companies want to win the market in West Java. To conduct distribution to all areas, PTA also has four (4) depots spread in several cities, namely Bandung, Sukabumi, Tasikmalaya and Cirebon. Depo Bandung is the largest contributing which is 58% to the company. Depo Bandung has a distribution area of Bandung like Cimahi, Purwakarta, Sumedang and Subang regencies. In Figure 1, the market potential of lubricants and sales in Bandung depot (in liters) in 2016.



Figure 1: Potential of motor vehicle lubricants (cars) compared to the market share of XZY lubricants at Bandung depot in 2016 Based on SWA magazine, in 2016 there are ten (7) large companies in the lubricant business that distributes in West Java. In Table 1, almost all lubricant manufacturers have a product distribution in West Java. The position or sequence in Table 1 shows companies that have an aggressive level of promotion in the distribution area of Bandung depot.

 Table 1: Production of Lubricant Market in West Java, Year

2016						
No	Nama Perusahaan	Merek Pelumas				
1	PT Pertamina Lubricant	Prima XP, Mediteran, Fastron				
2	PT Shell Indonesia	Shell Helix				
3	PT Castrol Indonesia	Castrol				
4	PT Toyota Indonesia	Toyota Motor Oil (TMO)				
5	PT Citra Makmur Sekata	Motul				

Based on previous research conducted by Mahardika (2007), that salesman's arrangement influence to sales effectiveness, while research conducted by Baldauf (2001) shows strong relationship between company sales performance result and also seller effectiveness to control of sales management strategy, area design Sales and performance behavior of salespeople.

PTA as a distribution company does not want to lose the huge market potential in West Java, especially in Bandung depot which has a big enough lubricant market potential of 4.2 million liters or 35% of the total market potential in West Java. One of the company's strategies is to increase sales with CPT strategy and perform efficiency to increase profit in the company. However further analysis is needed because of the potential of different areas, market competition and work experience of salespeople impacting the effectiveness and attainment of different salespeople.

Based on the background that has been described, the purpose of this study are:

- 1) Analyze the performance of Bandung distribution depot based on the distribution area of sales force to increase sales
- Analyzing and knowing the efficiency of sales force compared with sales contribution in PTA depo Bandung based on distribution area of sales force
- 3) Provide recommendations on strategies to increase sales in Bandung depot

While the scope of this study is limited some things, namely: (1) The assessment is limited to distribution channels in Bandung depot in the period 2016 (2) The study in this study only to the stage of performing analysis and provide strategic recommendations on the efficiency and effectiveness of depo Bandung.

2. Literature Review

Data analysis method used in doing this research is descriptive analysis using tool of information system of Sadix and DPMS while to see efficiency of distribution area using data of sales achievement in year 2016 compared with total cost incurred by company for one salesperson. In Table 1 can be seen input on PTA 2016 where the cost is a mandatory fee issued by the company each year and in Table 2 is the distribution output at the depot Bandung in 2016.

Table 2: Input Data Depo Bandung distribution area in 2016

able 2. Input Data Depo Dandung distribution area in 2010						
Information	Day	Month	frequency	Year		
Salary		3.000.000	12 Month	36.000.000		
Meal allowance	50.000		288 Day	14.400.000		
Transportation	20.000		288 Day	5.760.000		
Incentive		1.000.000	12 Month	12.000.000		
Telephone		200.000	12 Month	2.400.000		
Visit	150.000		24 /Year	3.600.000		
Cost training		4.000.000	2 /Year	8.000.000		
Bonus		3.000.000	1 /Year	3.000.000		
THR		3.000.000	1 /year	3.000.000		
Leave allowance		3.000.000	1 /Year	3.000.000		
Rent motorcycle		300.000	12 Month	3.600.000		
BPJS		140.000	12 Month	1.680.000		

In Table 2, all salespeople have achievements above the target set by the company and each salesperson has the same number of workshops visited, but not all salespeople contribute the same profits.

	Table 5: Output Data Depo Bandung distribution area in 2016						
Salesman	Target 2016	Achievement 2016	Visit/month	In Rupiah	Margin in rupiah		
А	170.316	172.026	298	8.132.688.914	650.615.113		
В	100.946	102.505	280	4.846.019.074	387.681.526		
С	121.500	135.612	304	6.411.183.246	512.894.660		
D	128.035	130.472	280	6.168.184.972	493.454.798		

Table 3: Output Data Depo Bandung distribution area in 2016

Hipoteis

Based on the background and previous studies that have been presented in the introduction shows a strong relationship between the results of sales performance and also the effectiveness of salespeople to the design of sales areas and research methods used, it can be formulated several hypotheses in this study.The hypothesis of the effect of effectiveness on sales is as follows:

 H^1 = Regular salesperson's visit has a positive effect on sales H^2 = Potential distribution area, work experience and competition in the area have a positive effect on sales

 H^3 = Achievement of sales targets positively affects the company's expected income level.

3. Results

Analysis of selling ability

Analysis of selling ability aims to determine the performance of each salesperson by identifying the ability of the distribution channel in selling the company's products. Salespeople who sell the most are the best salespeople compared to other salespeople. In Table 5, you can see the names of salespeople, distribution areas, potential area, number of competitors and sales achievement in the area of each salesperson.

 Table 4: Distribution area data and potential depot Bandung in 2016

Salesman	Area distribution	competitor	Experience	Number			
			(year)	outlet			
Α	Kota bandung, Kota	5	1,5	149			
	Cimahi, Kab.						
	Bandung Barat,						
	Kab. Purwakarta						
В	Kota Bandung,	4	1	140			
	Kabupaten						
	Sumedang						
С	Kota Bandung,	6	3	152			
	Kabupaten Bandung						
D	Kota Bandung,	4	2	140			
	Kabupaten subang						

The analysis in Table 4 that is done is to see the compliance of salespeople to the visit to the workshops that have been on the map of the company to every salesperson. In Figure 5 can be seen the number of visits per salesperson above 300 workshops per month. The number is obtained from:

- Schedule of visits per day = 15 workshops.
- 1 week visit schedule = 15 workshops x 5 working days = 75 workshops / week
- 2 week visit schedule = 75 workshops x 2 weeks = 150 workshops

Each workshop is visited twice (2) times a month, so the total workshop visited by one salesperson is 150 workshops x 2 (visits 2 times a month)

Salespeople at PTA spend an average of 14 minutes in one workshop. The time is used by the salesperson to perform stock checks, product percentage and recording of product

Volume 6 Issue 6, June 2017

Licensed Under Creative Commons Attribution CC BY

ordering from workshop to distributor. In Figure 4 it provides information that each PTA salesperson has made a standard visit time in the workshop. The time standard is obtained from the calculations in Table 5

Information	hours	minute	Total
Working hour	8	60	480minute
On road	3	60	180minute
Break	1	60	60minute
At workshop	4	60	240minute
			16minute
Workshop visited / day	15workshop		/workshop

Table 5: Calculation of work time of salespeople per day



Figure 4: Graph the number of workshops visited by salespeople compared with sales in Bandung depot in 2016

Figure 4 shows the number of workshops visited by each salesperson and the volume of sales generated in 2016. From the analysis of the data shown, it can be seen that salesperson visit factors can increase sales. The number of workshops that must be visited by salespeople each month is 150 workshops and each workshop visited twice in one month. In Figure 5 to 8 will be explained the performance of salesperson's visits to sales achievements made in 2016.



Figure 5: Graph the number of outlets visited by salesperson A compared with sales volume (liter) in 2016

In Figure 5, sales declined in February and July 2016, where the number of visits also decreased. From Figure 5 gives information, in the event of a decrease in traffic to the workshop, there is a decrease in sales while in March an increase in traffic, did not determine the increase in sales.



Figure 6: Graph of number of outlets visited by salesperson B compared to sales volume (liter) in 2016

The average monthly visit of salesperson of Visit B is 355 workshops, of which the highest visit occurs in March. In March the salesperson's visit was quite high due to in February not all workshops were visited and salespeople visited in March.





In Figure 7, a decrease in traffic in February resulted in lower sales compared to January. But an increase in traffic in March did not lead to an increase in sales. Increased sales from September to December due to a special program in the sales force C



Figure 8: Graph the number of outlets visited by DI salespeople compared to sales volume (liter) in Bandung in 2016

Salesperson D visits regularly and regularly every month in the distribution area and looks stable sales performance every month. The decline in sales in July was due to Eid and Christmas holidays. The result of data analysis shows that the relation of visitation route with sales performance is very positive where routine salesperson do visit in accordance with route and schedule, , competitor and c



Figure 9: Map of sales force target sales compared with market potential in 2016

The achievement of salespeople sales target A in Figure 9 Volume 6 Issue 6, June 2017

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

can be attributed to several factors, namely market potential, distribution area, number of competitors, and length of service. From the results of the analysis seen from some information and data obtained, salespeople D has the lowest performance in comparison with other salespeople. After more in-depth analysis, the factors of work experience in similar business and long working are one of the main factors of salesperson's difficulties in reaching the sales target in 2016.



Figure 10: Map of sales target compared to the achievement of sales target in 2016

Achievement of the highest sales target is obtained by salespeople C. This achievement is obtained by several factors: work experience in lubricant business, distribution area, and market potential that is still very big. However, volumes (liter) of sales force A contributed the highest sales of 172 kl. The achievement of this sales target is supported by the distribution area of sales force A ie city and district West Bandung, Cimahi city, and Purwakarta district.



Figure 11: The target sales map is compared with the number of competitors in the distribution area by 2016

Distribution of competitors in the distribution area depo Bandung relatively much the same, that there are more than 4 major competitors in each area. The four major competitors in this area are Castrol, Pertamina, Mobil, and Total. Some other competitors such as TMO, Repsol and Idumitsu do not have an aggressive marketing program. These competitors are very influential in the market because each competitor has programs offered to consumers who are quite interesting.



Figure 12: Sales targets compared to long work in 2016

Salesperson C is the salesperson who has the longest working experience in PTA, but the sales attainment of salesperson A contributes the highest sales where the work experience in the new company is 1.5 years. From the analysis conducted, this achievement can occur because the salesperson A has already mastered about the product, price and has a sufficient number of workshops in the distribution area. While the sales force B where the work experience is still 1 year and the potential area distributed by salespeople B away from the head office and the potential market is not too big to make the lowest achievement compared with other teams in depo Bandung.

Sales Efficiency Analysis

Evaluation of sales efficiency by salespeople can be seen from the amount of input (cost) incurred compared to the output (income) obtained. According to the company, the efficient input is if one rupiah of input that can generate five rupiah output. In Table 6, it can be seen the input costs of the PTA company for a single workforce by 2016. The expenses incurred by the company for one workforce are not only salaries, but include bonuses, training costs, incentives and others.

Table 0. Outputs generated for one workforce by 2010							
Salesman		achievement	achievement2016	margin (Rp)			
Salesman	2016	2016 (liter)	(Rp)	margin (k p)			
А	170.316	172.026	8.132.688.914	650.615.113			
В	100.946	102.505	4.846.019.074	387.681.526			
С	121.500	135.612	6.411.183.246	512.894.660			
D	128.035	130.472	6.168.184.972	493.454.798			

Table 6: Outputs generated for one workforce by 2016

Table 6 shows the achievements and contributions of salespeople in Depo Bandung. Average selling price of products in PTA is Rp. 47.276 / liter where the company targets an average of 8% gross margin (mix between sales to workshop and wholesale)

Information	Day	Month	frequency	Year
Salary		3.000.000	12 Month	36.000.000
Meal allowance	50.000		288 Day	14.400.000
Transportation	20.000		288 Day	5.760.000
Incentive		1.000.000	12 Month	12.000.000
Telephone		200.000	12 Month	2.400.000
Visit	150.000		24 /Year	3.600.000
Cost training		4.000.000	2 /Year	8.000.000
Bonus		3.000.000	1 /Year	3.000.000
THR		3.000.000	1 /year	3.000.000

Volume 6 Issue 6, June 2017 <u>www.ijsr.net</u> Licensed Under Creative Commons Attribution CC BY

International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064 Index Copernicus Value (2015): 78.96 | Impact Factor (2015): 6.391

Leave allowance	3.000.000	1 /Year	3.000.000
Rent motorcycle	300.000	12 Month	3.600.000
BPJS	140.000	12 Month	1.680.000

One salesperson in the PTA requires 96 million rupiah in one year. The company targets one input issued to generate five outputs. From the achievement of 2016, researchers want to see if all salespeople generate a profit (Yield) in the target company. If the yield generated by one salesperson is large or equal to five times the input cost then the salesperson is effective and efficient in doing the distribution in the area. To calculate the Yield of each salesperson, the researcher performs a simple calculation, i.e. output / input, then the yield of Yield of each salesperson can be seen in Table 8.

Table 8: Yield sales force at PTA in 2016

Salesman	Margin (Rp)	Cost (Rp)	Yield				
А	650.615.113	96.440.000	6,75				
В	387.681.526	96.440.000	4,02				
C	512.894.660	96.440.000	5,32				
D	493.454.798	96.440.000	5,12				

From the data of sales achievement in 2016, only Salesperson B does not reach the target Yield targeted company. PTA targets 1 rupiah invested, will give a rate of return of 5 rupiah. The rate of return is 5 times the cost incurred because the PTA must bear costs such as operating costs, returns to investors and expenses for area expansion. Sales achievement Salesperson B in 2017 is expected to provide a rate of return of five times the investment cost that has been issued by the company.

Managerial Implications

Salesperson performance affects sales performance. Regular and scheduled visits will make it easier for workshops to remember and have a good relationship with salespeople. The results of the analysis of the effectiveness, when salespeople do not make visits to the workshop on a regular basis it will lead to a decrease in sales. In addition supervision must be able to monitor, mapping the area and calculate the competition in the distribution area to achieve the sales target set by company.

4. Conclusion

Performance depo Bandung has effectively seen the achievement of salespeople on targets set company can be achieved. One of the factors supporting the achievement of this target is the falls and regular visits of salespeople to the visit to the workshop that has been set company. Salespeople who have the greatest potential area and work experience in the field of lubricant distribution determine the achievement of sales targets.

The achievement of the sales target set by the company to the salesperson does not always have a positive impact on the company's targeted return. From the results of the analysis, the determination factor target sales, length of work and potential distribution area is one of the factors not achieving the target results in the set PTA. The role of supervision in evaluating and monitoring the performance of salespeople every day has a positive impact on the company's sales performance.

5. Suggestion

For further research can be done analysis of the distribution of products that provide greater benefits (premium products) compared with other products. For the company can do mapping of potential areas, competitors and the ability of salespeople to facilitate the market penetration and supervision began to try to calculate the efficiency of distribution costs and profits earned by the company.

References

- Arafat. R. 2013. Pengaruh Dimensi Sales Skill Terhadap Kinerja Penjualan. *Management Analysis Journal* vol 2 (1)
- [2] Arthur Baldauf, David W Cravens, and Nigel F. Piercy, 2001" Examining Business Strategy, Sales Management and Salesperson Antecedents of Sales Organization Effectiveness", *Journal of Personal Selling & SalesManagement* (JPN). Vol:21
- [3] Aqmala D. (2007) Analisis Faktor-Faktor Yang Mempengaruhi Efektivitas Pelatihan Penjualan Dan Kompetensi Relasional Untuk Meningkatkan Kinerja Tenaga Penjualan [tesis]. Jawa Tengah (ID). Universitas Dipenogoro
- [4] Effendy, Onong Uchjana. (2003). Ilmu, Teori dan Filsafat Komunikasi. Bandung: Citra Aditya Bakti
- [5] Handoko T. 2002. Formulasi Strategi Pemasaran Pelumas Repsol pada PT SUkabumi Trading Coy Jawa Tengah [tesis]. Jawa Tengah (ID). Universitas Dipenogoro
- [6] Ken Grant and David W. Cravens, 1998 "Examining TheAntecedents of Sales Organization Effectiveness: An Australian Study" *European Journal ofMarketing* Vol:33
- [7] Kodrat, David Sukardi. 2009. Manajemen Distribusi: Old Distribution Channel and Postmo Distribution Channel Approach Berbasis Teori dan Praktik. Edisi Pertama: Graha Ilmu, Yogyakarta.
- [8] Koilam Anastasia, R. 2015. Pemetaan Strategis Distributor Pelumas Dengan Balance Scorecard PT. XYZ Tahun 2010-2015. Jurnal Penelitian tehnologi informasi.
- [9] Kotler, Philip. 1997. Manajemen Pemasaran, Analisis Perencanaan, Implementasi dan Pengendalian, Alih Bahasa Adi Zakaria Afiff, Edisi ke7, Volume 11, Lembaga Penerbit FE-UI, Jakarta.
- [10] Radian Mahardika. (2007). Analisis Faktor-Faktor Yang Mempengaruhi Efektivitas Penjualan Terhadap Kinerja Pemasaran. [tesis]. Semarang (ID): Universitas Dipenegoro
- [11] Prasetyo B.S. 2008. Analisis Efisiensi Distribusi Pemasaran Produk Dengan Metode Data Envelopment Analysis (DEA). *Jurnal Penelitian Ilmu Teknik*. 8(2)
- [12] Pratiwi, et al. 2009. Analisis Efisiensi Distribusi Pemasaran Dengan Pendekatan Metode Data Envelopment Analysis (DEA). Simposium Nasional RAPI. ISSN: 1412-9612

Volume 6 Issue 6, June 2017

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

- [13] [PPID] Pejabat Pengelola Informasi dan Dokumentasi kota Bandung. 2016. Kota Bandung dalam Angka [internet]. [diunduh 2016 Desember 10]
- [14] Nugroho . Sales teritory management [internet]. [diunduh 2016 Desember 10].
- [15] Suwarno H.Lisan, 2006. Sembilan fungsi saluran distribusi: Kunci pelaksanaan kegiatan distribusi yang efektif . *Jurnal Manajemen*. 6(1)
- [16] Salindeho H. A (2014). pengaruh saluran distribusi dan harga terhadap peningkatan volume penjualan pada PT Fastrata Buana, Tbk. *Jurnal Ilmu & Riset Manajemen*. 3(9)
- [17] Shell. Jaringan distributor shell Indonesia disetiap provinsi. [internet].[diunduh 2017 februari 16] Tersedia pada: <u>http://www.shell.co.id/en_id/motorists/oils-</u> <u>lubricants/consumer-distributor-network.html</u>
- [18] Utami A. 2009. Analisa saluran distribusi aspal emulsi pada PT Hutama Prima Jakarta [tesis]. Bogor (ID): Institut Pertanian Bogor.
- [19] Wiedjarnarkno S. 2015. Analisis strategi distribusi produk teh siap saji. *Jurnal manajemen*. 1 (68)
- [20] Yuniarti R. 2013. Penerapan Metode Saving Matrix Dalam Penjadwalan Dan Penentuan Rute Distribusi Premium Di SPBU Kota Malang. Jurnal Rekayasa Mesin. 4(1)
- [21] Yudith N.F. (2005) Analisis Distribusi Selling-In untuk meningkatkan kinerja pemasaran. [tesis]. Semarang (ID): Universitas Dipenegoro
- [22] Wardani D. S, 2002. Analisis faktor-faktor yang mempengaruhi kinerja tenaga penjual dan relevansinya terhadap peningkatan penjualan. *Jurnal sains pemasaran Indonesia* Vol 1 (3)
- [23] Wikipedia. 2017. Pengertian pemasaran Dari Wikipedia Bahasa Indonesia, ensiklopedia bebas [internet].].[diunduh 2017 februari 16] Tersedia pada: <u>https://id.wikipedia.org/wiki/Pemasaran</u>

Volume 6 Issue 6, June 2017 <u>www.ijsr.net</u> Licensed Under Creative Commons Attribution CC BY