

C3_Jaka Sunardi_VISIT SALES MODEL AS EFFORTS TRANSPORTATION EFFICIENCY COMPETITION FOOTBALL

by Jaka Sunardi

Submission date: 06-Sep-2019 08:13PM (UTC+0700)

Submission ID: 1168171629

File name: EL_AS_EFFORTS_TRANSPORTATION_EFFICIENCY_COMPETITION_FOOTBALL.doc (114K)

Word count: 2770

Character count: 13034

VISIT SALES MODEL AS EFFORTS TRANSPORTATION EFFICIENCY COMPETITION FOOTBALL

By
Amat Komari and Jaka Sunardi
Yogyakarta State University

ABSTRACT

Football as a sport community pride always get very serious attention from the Indonesian government to training centre football teams in the country of Uruguay football championship. A very big concern that will contribute as a national player who entered the arena of competition of National Football League. Football competition is the public interest is sometimes there are some constraints such as A Cross the club's training sessions with training club but a very troubling is the obstacle that most club owners are weight competition in terms of financing transportation. This can occur that remember Indonesia as an archipelagic country that involves so many club members spread across many remote islands, of course this is a burden that threatened the survival itself wheel competition. Businesses that need to be taken by the management is doing in the field of efficiency in transport through Model "Visit Sales" which can provide significant efficiencies. Here club participants can league game with the shortest distance

Keywords: *Visit Sales Model, Efforts Transportation, Efficiency, Competition Football*

INTRODUCTION

The Football Association of Indonesia or PSSI is one example of a consistent sports organizations to run training program accomplishments. This was evident in each city district is always running or playing competition from division III to Division II and Division I for the escape I can follow the division Main division. If in each division there are 10 football clubs so you can imagine how many football clubs are involved in both competitions division III, Division II, Division I and the main divisions. With so many competition participants have an impact on the number of games made. Given the competition in one season as the large number of matches that were held, of, course, affects the audience involved as football fans.

The audience was very much a potential market for business people involved to obtain employment by using competition spread game. As the general population around the stadium this game would bring much advantages. Through an effort to provide some form of food and beverage needs and emotional needs lovers club that competed. As a fan of the club would like to have the attributes of his beloved club as Head Tie, Shirt and a symbol of greatness club.

The existence of football club is supported by several parties such as the firm han financially able to support so the club can finance operations including the payment to sponsor the players, coaches, trainers, and assistant general masseur. Sustainability club competition can not be separated from the role of local authorities to do with financing the budget of course riding his consent to involve members of the council, on a large injection of funds how much can be given. For officials to be able to manage or to sit as a builder of course will have the prestige of the society as many football fans.

If the football club capable of achievement in the competition can be utilized to add the icon for the region that automatically become more popular. For example, the club team nickname, Macan Kemayoran fix adds more city Jakarta as well if the team wins Maung Bandung indicating PERSIB able to beat opponent. National competitions include football clubs in the league has experienced Home ebb in the number of participants, there is a degradation of the club and there are clubs just promotion. Concern over the smooth ongoing competition is the stopping of one dub from the competition due to lack of financial support. Allegedly one of the biggest costs following the implementation of the club competition is the transportation cost as Indonesia is an archipelago

that lies between the islands with other islands so far apart. Departure from these permasalahan would need to find a breakthrough in how to suppress the financing or the efficiency.

CONTRIBUTE A BETTER TRANSLATION

The strategic business manager is implemented using the method "of determining the assignment" is often called "Hits Sales" where it will give direction to the organization in the pressing costs by determining the shortest distance traveled by all the participants of the competition when visiting other places to compete. So there are similarities between sales visits to the site with the club's visit to the location or the opponent's home base city. Sports organization in the scope of the assignment problems sometimes arise in a variety of diverse situations. According Darmestha (1988) assignment problem can arise in various situations such as assigning decision-making machinery to produce, to assign employees to handle specific projects, assigning personnel to the sale to the sales area. In this assignment sports organizations can be applied to the activities of the following.

1. Attempted football coach candidates stake out your opponent with a visit to the opponent's homebase.
2. Several researchers collectively as visiting a different area at the same time to retrieve data.
3. KKN PPL Lecturer supervisor visited various places require the shortest distance.
4. Scheduling equalize competition that clubs have to compete in the same time in order

As a manager in the competition must meet the demands of a request to use the best way so that the existence of the organization can take place all time. One way is considered effective is "Model Hits Sales" which can optimize the efficiency of organizational goals such as time, minimize the cost or the cost and maximize profits or profit. According to Ivan Cevich (1997) almost all the routine decisions that repeated use of quantitative data and have procedures that would have made the program. In this assignment there are conditions agreed upon are; (1) Each person is only served on one visit the region only, was the task to another area by other officers. So one person may not perform two tasks simultaneously; (2) Distance from town to town between travel and the journey home is not the same because of the one-way path that can not be taken back and forth.

Given the human resource capacity is extremely limited, in that according Sudarmo (1999) labor required to meet the customer request. One of them is a football competition order According to Taylor (2001:181) Visits sales model are model of a linear program in which supply demand for limited places at each of one unit of anything. This means the number of supply and demand of as much, in other words a bid to meet the demand. In football competition each club compete only one time with the club opponents at the same time.

Assignment of Application Method on organizations sport Various problems arise in the sports organizations would have different shades of different solutions depending on whether complex problems, some quantitative methods can use mathematical language to easy a problem, for presentation, understood, analyzed and solved (Dumairy, 1991). So with the method of our Sales Visits find ways to make efficiency in accomplishing tasks.

For example, mileage efficiency to be carried out by the manager to assign teams of three assistants each city's assistant soccer coach A, City B and City C. Towards the goal of the City P, Q and City R. Mileage will run for a peek at the potential power of opponents as follows: (1) Assistant Coach of the city A named Amir if towards the City as far as 10 Km Panti, if the city Quinta far as 15 km and if the city so far Ruinea 19 km; (2) Assistant Coach of the city of B named Bambang if towards the City orphanage 9 km far, if the city Quinta far as 18 km and if the city as far as 5 Km Ruinea; and (3) Assistant Coach of the city named Candra if to City Panti 6 km far, if the city Quinta far as 14 km and if the city Ruinea extent 3 km. These problems can be simplified in a matrix of distance estimates as follows

Table 1. Estimated distance coach trip to three cities in the destination Km

| Coaches who visit | City Panti | City Quinta | City Ruinea |
|-------------------|------------|-------------|-------------|
| Amir | 10 | 15 | 9 |
| Bambang | 9 | 18 | 5 |
| Candra | 6 | 14 | 3 |

Table 1. Based on that information managers find it difficult to determine anyone the right coach for the orphanage, Quinta and Ruinea to obtain the shortest turnaround time. Prior to determining the assignment managers need to consider some of the possible number of combinations of three visits and three assistant coaches. Agreed rules

1. If Amir's assistant coach assigned to duty in the town orphanage assistant coach and assistant coach B C had to go to different places. Implication job done quickly because the work of one officer.
2. Shortest mileage as the most efficient way Because there are three areas the goal is a combination of the three as much as $3 \times 2 \times 1 = 6$ combinations that can be seen below

Table 2.

| Coaches who visit | Assignment completion | | | | | |
|-------------------|-----------------------|--------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Amir | P (10) | Q (15) | R (9) | P (10) | Q (15) | R (9) |
| Bambang | Q (18) | P (9) | P (9) | R (5) | R (5) | Q (18) |
| Candra | R (3) | R (3) | Q (14) | Q (14) | P (6) | P (6) |
| Sum Km | 31 | 27 | 32 | 29 | 26 | 33 |

According to the six combinations of these, is the penyelesaian optimal combination of Amir to the Quinta 5, Bambang to Ruinea and Candra to Panti, If you add up the long distance to 26 km it is the shortest distance than any other combination. Such combinations Settlement like this for too long especially if the combination was more like a city of 5 goals and 5 assistant coaches assigned to it, the combination becomes $5 \times 4 \times 3 \times 2 \times 1 = 120$ combinations. Therefore, use a shortef way but can accommodate the number of cities with more purpose. One appropriate method for determining such decision is the Hungarian method (Dharmestha 1988) using the following table

Table 3.

| Coaches who visit | Panti | Quinta | Ruinea |
|-------------------|-------|--------|--------|
| Amir | 10 | 15 | 9 |
| Bambang | 9 | 18 | 5 |
| Candra | 6 | 14 | 3 |

After the table is the first phase. Reduce the matrix by using the smallest element in each row of each element in that row. Be like the table below

Table 4

| Coaches who visit | Panti | Quinta | Ruinea |
|-------------------|-------|--------|--------|
| Amir | 1 | 6 | 0 |
| Bambang | 4 | 13 | 0 |
| Candra | 3 | 11 | 0 |

Then subtract the smallest element in each column result become

Table 5

| Coaches who visit | Panti | Quinta | Ruinea |
|-------------------|-------|--------|--------|
| Amir | 0 | 0 | 0 |
| Bambang | 3 | 7 | 0 |
| Candra | 2 | 5 | 0 |

Phase II

Get the minimum number of straight-line rows and columns that need to close all zeros. (linking number zero with a line).

Table 6

| Coaches who visit | Panti | Quinta | Ruinea |
|-------------------|-------|--------|--------|
| Amir | 0 | 0 | 0 |
| Bambang | 3 | 7 | 0 |
| Candra | 2 | 5 | 0 |

If the minimum number of lines equal to the number of rows or columns, then an optimal assignment with a value of zero can be achieved

If the number of lines is less than the number of lines to continue to stage III. After all the numbers above zero are connected, it turns out there are only two lines then proceed to the third stage Subtract the smallest value that is not striped elements of each element is not striped and add this value to each element of the encounter (intersection) of two lines, all other elements remain unchanged, and the results are as below

Table 7

| Coaches who visit | Panti | Quinta | Ruinea |
|-------------------|-------|--------|--------|
| Amir | 0 | 0 | 2 |
| Bambang | 1 | 5 | 0 |
| Candra | 0 | 3 | 0 |

Back to phase II and continue until the minimum number of lines that need to cover all zeros in the matrix equal to the number of rows, the result as below.

Table 8

| Coaches who visit | Panti | Quinta | Ruinea |
|-------------------|-------|--------|--------|
| Amir | 0 | 0 | 3 |
| Bambang | 0 | 4 | 0 |
| Candra | 0 | 2 | 0 |

Connect each zero with a straight line, here has formed a straight line of the line so that the optimal solution has been reached that is: AmirtoQuinta5, BambangtoRuinea5, CandratoPanti6, and all add up to 26 Km

Another example Manager football competition has four football games on the same day. KONI management will monitor the sending of four experts to monitor the game. Of course KONI management needs to determine the shortest distance transportation to a minimum. Mileage of each expert to match the following locations

Table 11

| Pemantau | Rale DKI | Atlan JATENG | Durh DIY | Clem JaTIm |
|----------|----------|--------------|----------|------------|
| Abas | 210 | 90 | 180 | 160 |
| Badrun | 100 | 70 | 130 | 200 |
| Carli | 175 | 105 | 140 | 170 |
| Dendy | 80 | 65 | 105 | 120 |

Settlement as follows:

The first step in the assignment model is to create a table costs by: "Reduce the lowest score on each line of each value that is on that line. This calculation is called the reduction of the line. Thus becomes

Table 12

| Pemantau | Rale DKI | Atlan JATENG | Durh DIY | Clem JaTIm |
|----------|----------|--------------|----------|------------|
| Abas | 120 | 0 | 90 | 70 |
| Badrun | 30 | 0 | 60 | 130 |
| Carli | 70 | 0 | 35 | 65 |
| Dendy | 15 | 0 | 40 | 55 |

The same steps for the reduction of the column so that the

Table 13

| Pemantau | Rale DKI | Atlan JATENG | Durh DIY | Clem JaTIm |
|----------|----------|--------------|----------|------------|
| Abas | 105 | 0 | 55 | 15 |
| Badrun | 15 | 0 | 25 | 75 |
| Carli | 55 | 0 | 0 | 10 |
| Dendy | 0 | 0 | 5 | 0 |

Table 13. This complete assignments for example. In this table the assignment can be done if a zero is found Example If A was assigned to Jakarta. Optimal solution is achieved when each monitor assigned to the different venues

Table 13. This complete assignments for example. In this table the assignment can if a zero is found Example If A was assigned to Jakarta. At table 13. if A was assigned to Jakarta means other monitors can not assigned to Jakarta. Once the assignment is given a zero on the line B becomes invalid. This indicates that there is no optimal assignment kusus to monitor B. Table 13. not contain the optimal solution. Table 13. made four kusus assignment is to draw a number of horizontal and vertical lines are required to cross out all zeros in the rows and columns. On the table there are 3 lines of 13 needed to strike zero.

Table 14

| Pemantau | Rale DKI | Atlan JATENG | Durh DIY | Clem JaTIm |
|----------|----------|--------------|----------|------------|
| Abas | 105 | 0 | 55 | 15 |
| Badrun | 15 | 0 | 25 | 75 |
| Carli | 55 | 0 | 0 | 10 |
| Dendy | 0 | 0 | 5 | 0 |

Table 14. There are 3 lines indicate three assignments while necessary for the optimal solution is a four assignments. The next step subtract the lowest value that does not pass line tire last lines of all other values are also not pass line Add than the lowest value at which cell pass by two intersecting lines in Table 4 is not the lowestvalue is pass line

Table 15

| Pemantau | Rale DKI | Atlan JATENG | Durh DIY | Clem JaTIm |
|----------|----------|--------------|----------|------------|
| Abas | 90 | 0 | 40 | 0 |
| Badrun | 0 | 0 | 10 | 60 |
| Carli | 55 | 15 | 0 | 10 |
| Dendy | 0 | 15 | 5 | 0 |

Table 15 required four lines to cross zero indicates that this can be given four special assignments that he optimal solution has been reached. New now we make four assignments. First:

Abas could be assigned in JATENG or in JATIM. We chose first JATENG Abas (this means that Abas can not be assigned to another place). Into two: Badrun assigned to the DKI (Badrun not be assigned to JATENG Assignment to three: HUFF assigned to DIY while assigned to monitor Dendy JATIM. From the assignment distance traveled is as follows:

Table 16

| Pemantau | Tugas ke | Jarak |
|----------|----------|-------|
| Abas | JATENG | 90 |
| Badrun | DKI | 100 |
| Carli | DIY | 140 |
| Dendy | JATIM | 120 |
| | Jumlah | 450 |

Based on table 16. and table 17.90 KM can be shortened, of course this is a significant savings because the model Seles visit here could save 20%.

CONCLUSION

By using the model of sales visits can be to determine the exact assignment decisions in accordance with the expectations of mileage efficiency to be completed by the designated observers that football management can save time and energy costs, there is no longer hope that the club was heavily in transportation costs.

REFERENCE

- Ivancevich M John at al. 1997. *Organisasi: Perilaku, Struktur Proses*. Jakarta Binarupa Aksara. Jakarta Barat.
- Dharmestha Basu Swastha. 1988. *Metode Kuantitatif Untuk Manajemen*. Yogyakarta Penerbit Liberty
- Indriyo Gito Sudarmo. 1999. *Manajemen Operasi*. Yogyakarta Badan Penerbit Fakultas Ekonomi Universitas Gadjah Mada.
- Sri Andrini, Amat Komari. 2008. *Model Matematis Penentuan Penugasan Sebagai Upaya Membentuk Efisiensi Organisasi Keolahragaan*. Proceeding Seminar Olahraga Nasional Ke II: Yogyakarta Fakultas Ilmu Keolahragaan UNY.
- Taylor Bernard W. 2001. *Sain Manajemen: Pendekatan Matematika untuk Bisnis*: Jakarta Salemba embank Patria Grand Wijaya Center Blok D7.

C3_Jaka Sunardi_VISIT SALES MODEL AS EFFORTS TRANSPORTATION EFFICIENCY COMPETITION FOOTBALL

ORIGINALITY REPORT

2%

SIMILARITY INDEX

0%

INTERNET SOURCES

0%

PUBLICATIONS

2%

STUDENT PAPERS

PRIMARY SOURCES

1

Submitted to Queen's University of Belfast

Student Paper

2%

Exclude quotes On

Exclude matches < 2%

Exclude bibliography On

C3_Jaka Sunardi_VISIT SALES MODEL AS EFFORTS TRANSPORTATION EFFICIENCY COMPETITION FOOTBALL

GRADEMARK REPORT

FINAL GRADE

/100

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6
