Study Research - Procurement Operation Vehicles in Polytechnic State's of Padang

Elfitri Santi¹, Afridian Wirahadi Ahmad², Zahara³, Arif Wahyu Saputra⁴ {elfitrisanti.pnp@gmail.com¹, afridianpadang@gmail.com², zahara@pnp.ac.id³, ariefwahyusaputra8@gmail.com}

1,2,3,4 Polytechnic State's of Padang, 0751-72590

Abstract. The official goverment vehicles supply demand the goverment allocate fund in carefully and precise based on the needs. The value of money analysis between buy, rent, and leasing to supplying the official vehicles in Polytechnic State's of Padang. intent on calculating, analyze, and comparing which alternative that make more value of money between the provisions system of buying, renting and leasing. Methods this Research is Qualitative and The analysis instrument that use in this research is Net Present Value Method also calculating the cost benefit analysis. The result of this research indicated that officeholder vehicles supplying system through the buying system is has more benefit that follow by the leasing system and the renting system. This research result could be a reference for Goverment in choosing supplying system of officeholder vehicles in Padang State's Polytechnic.

Keywords: Officeholder Vehicles, Net Present Value, Buying, Leasing, Renting.

1 Introduction

The problem that is often faced and experienced by the government in the process of procuring official vehicles is the potential for fraud by the government officials or providers of goods/services, which can cause the state financial losses. The potential for fraud of government vehicles can be minimized by selecting alternatives in the procurement of official vehicles, which are by purchasing, renting, and leasing these official vehicles. Some of the reasons that form the basis for making policies to carry out official vehicle renting systems by government agencies are as follows: (1) Local governments are no longer need to take care of technical matters related to vehicle servicing, replacement of spare parts, repairs due to accidents and Vehicle Registration Certificate (STNK) renewals. (2) reducing the burden on the Regional Government Budget (APBD) because the government is no longer budgeting funds for vehicle maintenance costs, replacement of spare parts, and repairs (3) can save the government budget in the procurement of vehicles. (4) reduce fraud in the procurement. (5) Increase employee effectiveness. This study will obtain the right results and recommendations related to the policy whether to purchase or rent official vehicles.

2 Research Methods

A. Legal Basis for Procurement of Governmental Good/Services

The main legal bases used as the bases for implementing procurement of governmental goods/services were:

1. Article 4 section (1) of the 1945 Constitution of the Republic of Indonesia [1];

- 2. Presidential Regulation of the Republic of Indonesia Number 54 of 2010 concerning Procurement of Governmental Goods/Services [2];
- 3. Presidential Regulation of the Republic of Indonesia Number 04 of 2015 concerning Procurement of Governmental Goods/Services [3];
- 4. Presidential Regulation of the Republic of Indonesia Number 16 of 2018 concerning Procurement of Governmental Goods/Services [4];
- 5. Law of Republic of Indonesia Number 17 of 2013 concerning State Financial [5].

B. The Concept of Relevant Costs

According to Hansen and Mowen, relevant costs represent different future costs for each alternative [6]. All decisions are related to the future, therefore only future costs can be relevant to the decision. However, to be relevant, a cost must not only be a future cost, but must also be different from an alternative.

C. Research Type

This study was a policy-oriented study that aims to examine and evaluate government policies in Higher Education Government Institutions in terms of budget management. This research used a quantitative method with a descriptive analysis approach. The research approach was carried out by analyzing and comparing the procurement of governmental goods/services at the Padang State Polytechnic with the principles of vehicle procurement as stated in Presidential Regulation Number 16 of 2018 concerning Procurement of Governmental Good/Services [4].

D. Data Collection Technique

This research was conducted through direct and indirect surveys. The direct survey was conducted to obtain primary data of vehicle prices and component prices of vehicle operating costs. The indirect survey was conducted to obtain additional information through various publication media.

E. Data Analysis Method

Data analysis used the Net Present Value (NPV) Method by also calculating the value of benefit costs.

3 Results and Discussion

A. Number of Official Vehicles at the Padang State Polytechnic

The number of operational official vehicles available at the Padang State Polytechnic was 22 units. The types and ages of the official vehicles can be presented in table 1 as follows:

Years	Age	Deluxe	Standard	Operation	Total
2003	16	1	0	0	1
2004	15	0	1	0	1
2005	14	0	0	1	1
2006	13	1	0	3	4
2007	12	0	0	2	2

Table 1. Types and Number of Official Vehicles

2009	10	1	0	2	3
2011	8	3	0	0	3
2012	7	1	0	0	1
2014	5	1	0	2	3
2015	4	0	1	0	1
2017	2	1	0	0	1
2018	1	1	0	0	1
То	tal	10	2	10	22

Based on the table above, it can be seen that the total number of official vehicles was 22 units divided into three groups, which were (1) deluxe that has a cc capacity of vehicles above 2000, (2) standard that has a cc capacity between 1800-2000, and (3) operational that has a cc capacity below 1800.

Based on the Decree of Minister of Finance Number 59/KMK.06/2013 concerning Table of Life Span in the Context of Depreciation of State Property in the Form of Fixed Assets in Government Entities, the life span of official vehicles is 7 years [7]. If seen from the table above, vehicles with the age of 7 years-old from 2012 were 7 units consisting of 4 units of deluxe vehicles, 1 unit of standard vehicles and 2 units of operational vehicles.

B. Official Vehicle Representation

Representation of official vehicles was carried out based on an analysis of costs and characteristics of the official vehicles according to the types and categories of the official vehicles. The official vehicles that were represented in this study were based on the division of cylinder capacity (cc) and the acquisition cost of the vehicles. Toyota Hi Ace Commuter was the representation of a Deluxe official vehicle that had cc capacity above 2000. Kijang VA/T was the representation of a standard official vehicle that had cc capacity between 1800-2000 and Avanza 1.5 Veloz A/T was the representation of an operational official vehicle that had a cc of less than 1800.

The following is a table of representation of official vehicles at the Padang State Polytechnic:

Vehicle Type	Representation Vehicle	Cylinder Capacity	Fuel Type
Deluxe	Toyota Hiace Commuter	2494 cc	Solar
Standard	Kijang Innova V A/T	1998 cc	Premium
Operation	Toyota Avanza 1,5 Veloz A/T	1495 cc	Premium

Table 2. Representation of Office Vehicles

4 Analysis Conclusion

A. Net Present Value Comparison of 1 Vehicle Unit

Table of comparison of official vehicle procurement at the Padang State Polytechnic:

Table 3. Comparison of NPV of 1 Vehicle Unit

Procurement System	Deluxe	Standard	Operation
Buying	(574.299.253)	(474.791.190)	(304.851.166)
Leasing	(626.182.238)	(518.659.004)	(357.912.132)
Renting	(1.026.028.811)	(661.382.884)	(456.077.806)

Based on the table above, it can be seen that the procurement of official vehicles using a cash purchase system was more economical compared to the other two procurement systems.

B. Comparison between Puchasing and Leasing Systems

The following is a comparison of NPV of purchasing and leasing systems for 1 official vehicle unit based on the vehicle group:

Procurement System	Deluxe	Standard	Operation
Buying	(574.299.253)	(474.791.190)	(304.851.166)
Leasing	(626.182.238)	(518.659.004)	(357.912.132)
Difference	(51.882.985)	(43.867.814)	(53.060.966)

Table 4. Comparison of NPV of Purchasing and Leasing Systems

For an economic life span of 7 years, comparing the vehicle procurement system by purchasing and the vehicle procurement system by leasing each type of vehicle, the purchasing system for deluxe group vehicles will provide a cost savings equivalent to Rp. 51,882,985 per deluxe vehicle unit. Whereas for the standard group vehicles, by purchasing system will provide a cost savings equivalent to Rp. 43,867,814 compared to the leasing system. While the procurement of vehicles for operational groups will earn procurement cost savings of Rp. 53,060,966. These results of comparison show that the vehicle procurement system by way of purchasing will be more profitable than the leasing system.

C. Comparison between Purchasing and Renting Systems

Table of comparison of official vehicle procurement between purchasing and renting system:

Procurement System	Deluxe	Standard	Operation
Buying	(574.299.253)	(474.791.190)	(304.851.166)
Leasing	(1.026.028.811)	(661.382.884)	(456.077.806)
Difference	(451.729.558)	(186.591.694)	(151.226.640)

Table 5. Comparison of NPV of Purchasing and Renting Systems

Based on the comparison table between the procurement of purchasing system and leasing system, the purchasing system is a step that should be taken by the Padang State Polytechnic

because there are cost savings made. Procurement for deluxe group vehicles will provide cost savings of Rp. 451,729,558 per deluxe vehicle unit. As for the standard group vehicles, the vehicle procurement by purchasing will provide a cost savings of Rp. 186,591,694. While for operational group vehicles, there are cost savings with a purchasing system of Rp.151,226,640. Thus, the comparison of the cost of the procurement between purchasing and renting systems shows that the procurement of purchasing system is a good alternative.

5 Conclusion

It can be concluded that there are three systems of the procurement systems of operational official vehicles in this study, including purchasing system, renting system and leasing system. Then, the official vehicles are divided into 3 vehicle groups in this study, which are deluxe vehicle group, vehicles with cylinder capacity (cc) engines above 2000 cc and the price is more than 400 million rupiah, for example Toyota Hiace Commuter, Microbus, AC Bus and so on. The standard type of vehicle group is a vehicle with a cylinder capacity (cc) engine between 1800-2000 cc and the price is above 300 million rupiah, for example Kijang Innova V A/T. The third vehicle group is operational vehicles, those are vehicles with cylinde capacity (cc) engine under 1800 cc and the vehicle price is below 300 million rupiah, for example Avanza Veloz and Avanza 1.3 G M/T.

The procurement for deluxe vehicles from the calculation of the net present value (npv), for the purchasing system, the result is minus 574,299,253. While the renting system obtained a result of minus 1,026,028,811 and the results of the procurement of leasing system obtained a result of minus 626,182,238. Thus, the best procurement system carried out by the Padang State Polytechnic is the procurement of purchasing system. For standard vehicle types, it obtained npv calculation results for the purchasing system, the result is minus 474,791,190. While the renting system obtained a result of minus 518,659,004. Thus, the best procurement system implemented by the Padang State Polytechnic is the procurement system. For the type of operational vehicle, the npv calculation results are obtained, which is for the purchasing system, the results are obtained a result of minus 456,077,806. And the results of the leasing system obtained minus 304,851,166. While the renting system obtained a result of minus 456,077,806. And the results of the leasing system obtained minus 357,912,132. Thus, the best procurement of purchasing system.

References

- [1] Pemerintah Republik Indonesia, "Undang-undang Dasar Negara Republik Indonesia Tahun 1945." 1945.
- [2] Pemerintah Republik Indonesia, "Peraturan Presiden Republik Indonesia Nomor 54 Tahun 2010 tentang Pengadaan Barang/Jasa Pemerintah." 2010.
- [3] Pemerintah Republik Indonesia, "Peraturan Presiden Republik Indonesia Nomor 4 Tahun 2015 tentang Perubahan Keempat atas Peraturan Presiden Nomor 54 Tahun 2010 tentang Pengadaan Barang/Jasa Pemerintah." 2015.
- [4] Pemerintah Republik Indonesia, "Peraturan Presiden Republik Indonesia Nomor 16 Tahun 2018 tentang Pengadaan Barang/Jasa Pemerintah." 2018.
- [5] Pemerintah Republik Indonesia, "Undang-undang Republik Indonesia Nomor 17 Tahun

2003 tentang Keuangan Negara." 2003.

- [6] Don R. Hansen and M. M. Mowen, *Akuntansi Manajerial*, 8th ed. Jakarta: Salemba Empat, 2009.
- [7] Pemerintah Republik Indonesia, "Keputusan Menteri Keuangan Nomor: 59/KMK.06/2013 tentang Tabel Masa Manfaat dalam Rangka Penyusutan Barang Milik Negara Berupa Aset Tetap pada Entitas Pemerintah Pusat." 2013.