Rural Economic Development through `Basuduai`: A Portrait of Business Model Canvas on Cattle Breeding Partnership in West Sumatera

Noveri Maulana¹, Angun Intan Pesona²
¹Lecturer and Researcher in Strategic Innovation at Sekolah Tinggi Manajemen PPM Jakarta – Indonesia
²Lecturer and Researcher in Social Entrepreneurship at Sekolah Tinggi Manajemen PPM Jakarta – Indonesia
*Corresponding author: noverippm@gmail.com

Abstract

The concept of `Basuduai` on cattle breeding investment has been popularly implemented in West Sumatra for decades. Currently, this partnership modelling is still implemented in several villages and rural areas. This study aims to describe `basuduai` as a socio-entrepreneurship approach in a simple descriptive method using the Business Model Canvas (BMC). Perhaps this model could also be implemented in other rural areas as an economic development approach. The data was collected through ten in-depth interviews and two focus group discussions (FGD) among the local partners in Payakumbuh, West Sumatra. Content and context analysis is conducted to describe the categorical theme for results analysis. The finding shows that cattle breeding investment as the `Basuduai` system is an indigenous approach in the local community in West Sumatra. However, based on the business model canvas, the role of community leader should be prioritized to balance the system. Hence, the need for a formal socio-entrepreneurship entity as the middleman should be developed. Perhaps, this study could contribute to the development of rural economic programs and could be replicated in other rural areas in Indonesia and also in other countries. Discussion and limitations are also stated in the study.

Keywords: Partnership Investment, Cattle Breeding, Business Model Canvas, Socio-Entrepreneurship, Economic Development, Economic Empowerment

JEL: Classification: L20, P32, R51,

A. INTRODUCTION

The increasing need for beef for local consumption in Indonesia is rapidly growing every year. Based on the data of the Provincial Government in West Sumatra, there is a high demand for around 2.5 million tons of beef every year in the province or equal to 100 cattle per day. However, cattle supply is limited (Sumbar Disnak, 2019). The challenge of balancing the supply and demand of cattle is increasing. The provincial government has initiated to implementation "One Farmer One Cattle" program to increase to cattle population and also to increase the economic impact on farmer's financial conditions (Tari, 2020). This governmental program has been following the success of the partnership model between the government and the farmer's community since a decade ago through several presidential programs in agricultural empowerment (Simatupang et al., 1992).
Rural Economic Development through ‘Basuduai’: A Portrait of Business Model Canvas on Cattle Breeding Partnership in West Sumatera

Besides the governmental program on cattle breeding, some breeder communities are also implementing their traditional method of cattle breeding. This traditional method is called 'basuduai', which implements peer-to-peer partnerships among the individuals within the community. One as an investor and the other as the breeder. This is what we call an investment partnership in cattle breeding, popularly known as 'basuduai' in the local language, which means "to manage it together between two parties.

Since 2016 there have been at least 300 communities of cattle breeders in West Sumatera, especially in the district of Tanah Datar, Payakumbuh, Limapuluh Kota, and Pariaman (Maulana, 2017). Most of the breeding location is in the uphill region, which is proven to effectively improve the production quality (Kalangi et al., 2014).

Cattle breeding activity in West Sumatra has a long history since several decades ago. The local community has been promoting the 'basuduai' method as their economic empowerment and also as participation in increasing the cattle supply to the market. Although the provincial government initiate a 'one farmer one cattle' program, this partnership method has a similarity with the 'basuduai' method, which has been earlier popular among the local communities without the involvement of government aid or investment.

The 'basuduai' method is a partnership model connecting investor and breeder in investment cooperation originally based on trust and cultural values among the actors. There is no legal agreement or written contract in this 'basuduai' model of investment. The traditional method of cattle breeding among the villagers is commonly based on the social and cultural values of the actors involved (Kalangi et al., 2014; Maulana, 2017; Rusdiana et al., 2016; Simatupang et al., 1992).

This method solves the lack of capital for the breeders to develop their cattle breeding system traditionally in their farms. Commonly, the investor and breeders are the people who are originally from the same village or even has a family connection with the villagers. This method is similar to 'Gaduhan', which is popularly known in the Java dan Bali region of Indonesia (Simatupang et al., 1992).

This 'basuduai' breeding investment method is a unique model as a traditional approach to what we call nowadays "Social Entrepreneurship". The concept of partnership in farming has been developed in many countries as one of the economic developments in some regions. Demishkevich et al. (2018) have proposed a model in the context of public-private partnerships in the agro-industrial complex. This model proposes attractiveness for both the public and private sectors, which results in a financial benefit for both parties (Demishkevich et al., 2018). However, in implementing the model, stakeholders should follow several requirements to ensure the completion of the target achievements during the program.

In the 'basuduai' partnership approach, the relations between investor and breeder are commonly based on the actors' social norms and cultural values. This investment partnership is believed as a social contribution to the economic empowerment of the farmers. Most of the farmers in rural areas work on their farms to produce paddy or other agricultural commodities in traditional ways. During their farming-producing process, farmers have
leisure time between the planting and producing seasons. Therefore, to increase the economic life and optimize their financial revenue, the integration between cattle breeding and agriculture farming is a potential opportunity (Elly et al., 2008; Rusdiana et al., 2016; Soedjana, 2011; Sofyan et al., 2019; Weller et al., 2013).

This phenomenon inspired the society in West Sumatra to implement their own model of social entrepreneurship system that gives the opportunity to farmer to optimize their leisure time by combining farming and cattle breeding in the same season. This breeding activity is invested by a generous investor within the society and intended to optimize the farmer’s economic life. Hence, several research proved that cattle breeding activity could improve the economic condition of the farmer (Ejlertsen et al., 2012; Elly et al., 2008).

Until now, after several decades in practice, this breeding investment system is still developing and becoming one of the economic empowerment models in the rural area of West Sumatra (Bamualim et al., 2015). This individual breeding model that has been implemented in the rural community of West Sumatra could be developed and replicated as a model of social entrepreneurship. In Social Entrepreneurship, the greater benefit to oneself should be impacting the greater impact to others (Fuller & Tian, 2006). However, to deeper understanding of ‘basuduai’ as a socio-entrepreneurship model, a business model analysis should be conducted.

This paper is aimed to analyse the ‘basuduai’ investment partnership in West Sumatra, and describe this model as a social entrepreneurship approach for economic development in another area in Indonesia. Through Business Model Canvas (BMC), the ‘basuduai’ cattle breeding will be analyzed to describe the relations among the stakeholders and predict their sustainability during the investment process.

Using Business Model Canvas (Osterwalder & Pigneur, 2010), this paper will describe the model of the ‘Basuduai’ partnership cattle breeding system as a model of social entrepreneurship. Business Model Canvas will capture and describe the model of ‘Basuduai’ cattle breeding through 9 (nine) building blocks which are value proposition, customer segment, channel, customer relationship, revenue stream, key activities, key resources, key partner, and cost structure of the business.

Therefore, the research question proposed in this research is; how does the business model is implemented in the ‘Basuduai’ cattle breeding partnership method? And how to implement this method as an approach in the social entrepreneurship model?

The analysis of business model of this partnership cattle breeding as a social entrepreneurship program has not yet been analyzed and published in any articles and journals. This is the conceptual and practical gap intended to be filled by this research. Perhaps this model could be another social entrepreneurship program and could be developed as one of the economic empowerment programs in other rural areas by a non-government organization (NGO), Government bodies, or local communities.
B. LITERATURE REVIEW

1. Cattle Breeding in West Sumatra

The cattle breeding activity in West Sumatra has been part of the daily life of local people in the region. The natural condition of West Sumatra supports cattle breeding activity regarding each kind of cattle. ‘Sapi Simmental,’ a foreign breed of cattle suitable in the hill and chill areas of West Sumatera such as Bukittinggi, Padang Panjang, and Payakumbuh. Meanwhile, local cattle such as ‘Sapi Bali’ and ‘Sapi Pesisir’ is suitable near the beach area such as in Pariaman, Pasaman, and Pesisir Selatan. The geographic characteristic and its natural resources promote West Sumatra as a potential location for various cattle breeding (Suresti et al., 2020).

This natural and geographical potential is also dominating the agricultural production in West Sumatra. However, the lack of technology adoption in agricultural process production is challenging the economic condition of the farmers. The dependency on the harvest season is highly influencing the financial condition of the farmers. This leads the farmers to improve their financial revenue by adopting the integration between agriculture plantation and livestock breeding in the same time period. The integration model between farming and cattle breeding has improved the economic condition of farmers in West Sumatra (Agustar et al., 2019).

Although ‘basuduai’ has not yet been discussed in many academic journals, the model of ‘basuduai’ partnership investment is believed to be similar with the ‘gaduhan’ system which is more popular in some regions in Indonesia. The concept of ‘gaduhan’ is promoted by the government with the method of “Public Private Partnership" by initiating the “Peternakan Inti Rakyat (PIR)” since 1990-ish. The PIR is the collaborative model between the government, farmers, and public investor in the spirit of economic empowerment of the farmers and to increase the supply of cattle livestock in Indonesia (Jamal et al., 1993).

In West Sumatra, the collaborative model of cattle breeding investment involves government and also the private sector, which increases the competitiveness of cattle production in the region (Suresti et al., 2020). However, besides the governmental program and public-private partnership, the traditional model of cattle breeding investment through ‘basuduai’ is still implemented in some communities in West Sumatra (Ediset & Madarisa, 2019).

How does the performance of cattle breeding partnerships in rural areas? Farhan & Firmansyah (2017) revealed that most farmer in government partnership cattle breeding program has low obedience in returning the initial cattle to the government when the program is completed. The case study in Jambi shows that some farmer who participates in the ‘gaduhan’ program has a low attitude toward the completion of the target in the governmental cattle breeding partnership (Farhan & Firmansyah, 2017). Therefore, the model of ‘basuduai’, where the investors are individual in the community, perhaps have an opportunity to be developed.

2. Social Entrepreneurship

The term social entrepreneurship is becoming popular in society in the past decade. In Indonesia, social entrepreneurship activity is one of the popular concerns among business practitioners lately. However, the principal value of social entrepreneurship was
developed in Indonesia long before the popularity of the recent socio-entrepreneurship entities. The concept of social entrepreneurship in Indonesia was recognized in early 1895 as the establishment of De Purwokertosche Hulp en Spaarbank der Inlandsche Hoofden by a nobleman in Purwokerto to improve native welfare by optimizing the local resources without government support (Idris & Hijrah Hati, 2013).

Meanwhile, the term social entrepreneurship in Indonesia was recognized more than thirty years ago when Ashoka Foundation launched its program in Indonesia in 1985 (Idris & Hijrah Hati, 2013; Leviner et al., 2007; Sen, 2007). But, the principal value of social entrepreneurship was developed in Indonesia integrated with the social movement that was known in the colonialism era (Idris & Hijrah Hati, 2013). The basic concept of social entrepreneurship, which is concerned with social impact, has been developed by Professor Gregory Dees, founder of Duke University's Center for the Advancement of Social Entrepreneurship. Dees explained that social entrepreneurship is an organization which aims to fulfill a social mission by implementing innovative problem-solving strategies and demonstrating high accountability to the public (Kim & Dees, 2018). Although the term social entrepreneurship is getting more popular, however the practical meaning of this term is sometimes different for every individual. The very basic understanding which can be understood and agreed upon among the practitioners is about the social benefit which is also resulted from the business processes. The benefit of the business is not only for the entrepreneur but also for the surrounding societies (Fuller & Tian, 2006).

3. Business Model Canvas

Business Model Canvas (BMC) is a tool to analyze the business model, which helps entrepreneurs in describing their business process in a single canvas with nine building blocks (Osterwalder & Pigneur, 2010). Those nine building blocks could explain the business process and the connection with other elements inside and outside the business entity. A business model canvas could be used in developing the business idea innovation (Sort & Nielsen, 2018). By using BMC, a business owner could describe their model of doing their businesses after assessing those nine interconnected blocks to portray the whole business process.

Understanding the business model will lead the entrepreneur to create a better business strategy. The innovation and network development could be implemented after analyzing several determinants which impact the business processes. In the cattle breeding businesses, external factors such as economic, social, institutional and internal factors such as farmer’s income and the knowledge of business sustainability are also influencing the decision on the business model (Sofyan et al., 2019). Therefore, before developing the business model, external and internal analysis is important to be evaluated.

Business model canvas has given us an alternative to implementing that internal and external evaluation through the nine interconnected blocks. The first block, which is located in the middle of the canvas model, is Value Proposition. Osterwalder & Pigneur (2010) enhanced that value proposition is vital for the entrepreneur to understand what the business they are working about is. Business is
an effort to fulfil people's needs. The need for the right people in the right segment, which is fulfilled by our business could be described as a value proposition. The more valued the business, the more sustainable the growth is (Osterwalder & Pigneur, 2010).

The second block is Customer Segment. An entrepreneur should understand who are their target segment they are willing to serve. Different groups of people have different needs therefore, the business should divide customers with segments. The third block is Channel, the bridge to deliver the value proposition to the right customer segment. This block could be including the communication channel, distribution channel, and also the after serviced channel. Different kinds of segments should need different approach (Sort & Nielsen, 2018).

The fourth building block is customer relationship. Unlike with channel, customer relationship is the effort which the business organization should do to maintain the existence of the customer. Besides improving service quality, customer relationship is aimed at increasing sales and persuading repeat orders or repurchasing by a current customer. The fifth component is the revenue stream. The revenue stream is talking about the source of revenue which is resulted from business activities. Revenue could be coming from the direct or indirect business profit margin. The more revenue streams a business could be implemented will give more opportunities to maximize the profit (Murray & Scuotto, 2015).

The sixth building block is a key activity. Key activity describes the business activity which is implemented by the firm or business organization. Talking about the key activity is talking about the main thing which must be done to deliver the value proposition itself. Therefore, the key activity is not also talking about a supplementary activity which may be supporting the business (Frick & Ali, 2013). In the seventh component, the Key Resources are doing the business and delivering the value proposition to its customer segment, which might need many resources. In this column, the business owner describes the main resource on which the business really rely on.

The eighth building block is the key partner. Osterwalder (2010) explains that a business cannot operate by itself. A good business must need a good collaboration with its supplier, employee, third party, and other supporting partners. Therefore, the key partner really matters in describing a business model. Relationships with the partners should be well-managed and give a beneficial impact on both parties. The last one is the cost structure. In this section, the business organization needs to assess their cost structure to run the business activities. Cost structure must be explained clearly and in detail on main objects. The cost structure will describe the wealth of the organization and the financial resource that might impact all the businesses (Vial, 2016).

C. RESEARCH METHODS

This qualitative research implements a phenomenology approach which aims to develop a model based on the research finding. Field research is urgently needed to develop the argumentation of the resources and to connect the data among the analysis (Maxwell & Reybold, 2015). The qualitative method is a research procedure that obtains descriptive data in written or spoken form from the people, and their behavior is being observed (Wahyuni, 2019). While quantitative research explains the
result of a study in statistical reports, qualitative data explains the result in narrative sentences. Hence, qualitative data answers the research question "Why" and "How", purposely different from quantitative data, which commonly answers the "What" and "When" of the research questions.

Furthermore, Miles & Huberman (2012) explained that qualitative data have richness and comprehensiveness in revealing complexity where the data would explain the research object. The result of qualitative data is seemed to be more of sensing the 'real life' and explain of the meaning of the real phenomenon in the context of the study (Huberman & Miles, 2012). This study is aimed to have a deeper understanding on the 'basuduai' partnership model of cattle breeding in the rural area of West Sumatra. The dept of understanding phenomenology must be enhanced through a qualitative study.

Phenomenology is the study which describes the structure of experience as they present themselves to consciousness, without recourse to theory, deduction, or assumption from other disciplines. Phenomenology is a school of thought that emphasize a focus on people's subjective experiences and interpretations of the world. Phenomenologist wants to understand how the world appears to others (Wahyuni, 2019). Several research techniques were implemented in this study. First is the process of literature review to give a deeper understanding of the research context and problems. A literature review is a process where researchers conduct the contrast and compare previous research studies to the research topic and problem statement, which a researcher is willing to explore.

This study needs good analytical thinking and a continuous process of contrasting and comparing the related researches. In this research, several conceptual papers and empirical studies have been analyzed and compared to build a deeper understanding of the topic of Business Model Canvas and Social Entrepreneurship in the Farming and Cattle Breeding context. After conducting the literature review, the field survey protocol is developed. Before conducting an interview and observation, the researcher should develop a field survey protocol to ensure the consistency and independency of the researcher. In qualitative research, the researcher's consistency and independency will determine the research's content validity and reliability.

An in-depth interview is a process of exploring the opinion and perspectives of other people in an explorative technique. An in-depth interview is often used in the qualitative method (Huberman & Miles, 2012). When conducting the in-depth interview, researchers usually implement face-to-face meetings with the respondent. With the support of technology, in-depth interviews will currently be also conducted by using online meeting technology. In this study, the in-depth interview will help the researcher to explore the phenomenon and to answer the research questions.

Besides conducting the interview, this study also implements the observation technique for collecting data. Observation is the selection and recording behaviors of people in their environment. This method is useful for generating in-depth descriptions of organizations or events, for obtaining information that is otherwise inaccessible and for conducting research when other methods are inadequate. In this research, observation was conducted for ten days, during which the researcher attended the farmer gathering, did
an activity in the breeding area, and observed the cattle trading transaction in the animal livestock market in Payakumbuh, West Sumatra.

There are two main informants in this study. First is a local Cattle Trader called Mr Masrefi. He is a well-known city cattle trader and has been in the field for more than 40 years. For our second informant, we asked Mr Masrefi to endorse a local farmer involved in this cattle breeding activity. We were then introduced to Mr Anto, a young farmer managing an orange farm in Payakumbuh. Besides managing his farm, Mr Anto is also traditionally breeding some cattle to have a side income and also to reduce the green waste in his farm. Hence, from both key informants, we use the snowball technique to gather other informants for our FGD and interviews.

Data collection in this research has been conducted with several techniques, which are In-depth interviews and Observation through field experience. That technique will be enhanced the data for understanding phenomena as needed in the phenomenology study. Several techniques in collecting data will also ensure the validity and reliability of the study. Therefore, researchers will have various approaches to data analysis and enhance the analysis result (Sekaran & Bougie, 2011).

**Figure 1. Data Collection Method and Analysis**

When validity and reliability have not yet been concluded, therefore follow-up interview was implemented. The respondent will be contacted through their personal message on their mobile phone or via their social media messenger. An additional interview is needed when the data collected is invalid or biased. This method is one of the approaches to ensuring validity. Construct validity is the degree to which inference can legitimately be made from operationalization in the research study to the theoretical constructs on which these operationalizations in the research were based (Miles & Huberman, 2012). Hence, in qualitative research, construct validity is needed to ensure that researchers are understood perfectly the research design and the variables which they are willing to analyze during the research process.

After conducting a field study, data will be categorized in several codes and patterns. Once code and pattern have been found, all the data will be analyzed using **Business Model Canvas** approach to develop the business model of the cattle breeding socio-entrepreneurship. First, all data will be used to describe the current model of individual cattle breeding in Payakumbuh. Once the business model has been described, the next step is to develop the model to become a proposed model of cattle breeding, which is based on social entrepreneurship approach.

Codes and patterns that were found during the interview, observation, and
literature review were analyzed its content validity by using the triangulation method. Triangulation is an attempt to check the truth of the data or information obtained by researchers from a different perspective as much as possible by reducing the bias that occurs during data collection and analysis (Maxwell & Reybold, 2015). Once the code and pattern that have been validated are founded, the pattern will be constructed to build a model to answer the research question.

D. RESULTS AND DISCUSSION

All the data and finding in the research have been reviewed and analyzed to build the model based on the phenomenology method. There are several codes as the result of the interview and FGD, which are categorized into the nine business model canvas elements. The table below summarises the code and category of analysis based on the content analysis approach.

**Table 1. Summary of Data Analysis**

<table>
<thead>
<tr>
<th>No</th>
<th>Informants</th>
<th>Role</th>
<th>Code</th>
<th>Category of Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>informant 1</td>
<td>Investor</td>
<td>Helping other</td>
<td>1. <em>Basuduai</em> as a social investment</td>
</tr>
<tr>
<td></td>
<td>(56 years</td>
<td></td>
<td>- Helping farmer</td>
<td>2. Expecting profit, even a small amount</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Villagers, Farmers</td>
<td>3. Value of trust and brotherhood</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- As a Culture</td>
<td>4. The cultural approach of what ancestor has been taught to social life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Investment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Trust</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>informant 2</td>
<td>Breeder</td>
<td>Helping each other</td>
<td>1. ‘Basuduai’ as a new revenue center, although not much money</td>
</tr>
<tr>
<td></td>
<td>(37 years</td>
<td></td>
<td>- New Income</td>
<td>2. Cattle breeding in the traditional way will boost their leisure time with profitable activity</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Leisure time</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>informant 3</td>
<td>Former</td>
<td>Helping farmer</td>
<td>1. Understood that ‘basuduai’ has a positive impact</td>
</tr>
<tr>
<td></td>
<td>(35 years</td>
<td>Investor</td>
<td>- Investment</td>
<td>2. Cattle breeding in the traditional way has low profit but high risk</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Small profit</td>
<td>3. Prefer to invest in other business</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- High Risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Not interested</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Informant 4</td>
<td>Investor</td>
<td>Investment</td>
<td>1. “Basuduai” a tradition to help the society (the farmer)</td>
</tr>
<tr>
<td></td>
<td>(70 years</td>
<td></td>
<td>- Success Standard</td>
<td>2. Investment motive</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Culture</td>
<td>3. Self-existence based on the wealth in the society</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Helping Other</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Informant 5</td>
<td>Breeder</td>
<td>New Income</td>
<td>1. Increasing revenue besides farming</td>
</tr>
<tr>
<td></td>
<td>(37 years</td>
<td></td>
<td>- Leisure time</td>
<td>2. Basic principles of helping each other</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Trust</td>
<td>3. Trust and cultural value in society</td>
</tr>
<tr>
<td>6</td>
<td>Informant 6</td>
<td>Breeder</td>
<td>Leisure Time</td>
<td>1. Optimizing leisure time</td>
</tr>
<tr>
<td></td>
<td>(50 years</td>
<td></td>
<td>- Alternative Income</td>
<td>2. Alternative revenue center</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Hobby/passion</td>
<td>3. Passion in farming &amp; Cattle breeding</td>
</tr>
<tr>
<td>7</td>
<td>informant 7</td>
<td>Sociopreneur</td>
<td>Investment System</td>
<td>1. ‘Basuduai’ as a concept is a good approach</td>
</tr>
<tr>
<td></td>
<td>(30 years</td>
<td></td>
<td>- Critic to model</td>
<td>2. Must have a clear investment system</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Problem-Solving</td>
<td>3. Could be problem-solving in society</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Profit &amp; benefit</td>
<td>4. Impact on a large number of societies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- to society</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Informant 8</td>
<td>Sociopreneur</td>
<td>Profit &amp; benefit</td>
<td>1. Have to be clear on the profit and benefit system</td>
</tr>
<tr>
<td></td>
<td>(31 years</td>
<td></td>
<td>- Impactful or not</td>
<td>2. Model business should be a review</td>
</tr>
<tr>
<td></td>
<td>old)</td>
<td></td>
<td>- Model business?</td>
<td>3. Focusing on impact and sustainability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Implementing the ‘Basuduai’ method in cattle breeding at Payakumbuh significantly impacts the breeder and investor. One impact is delivering positive value among society, specifically between the investor and breeder in traditional. Investors stated that their main reason to be involved in the ‘basuduai’ method is based on the trust and value of helping the farmer to optimizing their leisure time.

In the following analysis, the authors categorized the narrative interpretation into three categories, which are the value of a proposition, the front stage of the business model canvas (segment, channel, customer relationship, and revenue), and last one is the backstage of the business model canvas (key activity, key resource, key partner, and cost structure).

1. The Value of Helping people in need

The ‘Basuduai’ concept in cattle breeding in Payakumbuh is preferably intended to help farmer in society rather than profit reason. Investors argue that in the ‘basuduai’ method, they will help farmer at the same time, they are not losing the money which has been invested. Investors are keeping their investment in cattle breeding in the ‘basuduai’ concept although getting profit, which is sometimes below the coupon rate or return of any other investment method. This is the main reason why investor keeps doing the ‘basuduai’ method in their cattle breeding investment (Kalangi et al., 2014; Soedjana, 2011). However, for investors seeking a high margin in the investment (higher than the coupon rate), the ‘basuduai’ method is not an attractive alternative. The balance between profit and risk sometimes is not equal and tends to be low profit with high risk. As one of the investors stated: “My family is really interested in basuduai. My father, sister, and brother already invest in several cattle breeders (farmer). But me, as an enthusiastic businessman, I will not invest in the basuduai method because of lack of profit and high risk!” (Resource 3, 35).

Based on the explanation above, the concept of the business model canvas, in the context of value proposition and customer segment, would focus on the mutual benefit of investor and breeder based on economic and social factors. A cultural approach to cattle breeding in Indonesia is also supported by the social value among the actors, such as the ‘Gaduhan’ system in Bali (Simatupang et al., 1992). This context of cattle breeding would also explain the channel and customer relationship building blocks of the BMC, which describes the relations and interactions among the socio-entrepreneurship actors of cattle breeding partnership investment.

However, based on the financial aspect, the total revenue in cattle breeding activity has not yet been interesting. For one cattle which produces one calf for a year, the economic value of the calve is only around IDR 8.000.000 at the age of 6 months. It means, after one and half years, the revenue of one cattle breeding activity is only 4 million on each side between the breeder and the investor. The financial aspect of ‘basuduai’ seems not feasible from an economic perspective. But, if this model is developed through a systematic breeding system which can increase the quantity of cattle, we believe this partnership model could be developing and more feasible from the economic value perspective.

Therefore, in describing the ‘basuduai’ model of cattle breeding, the value proposition in the business model is a similar
understanding of social norms among the stakeholders. ‘Basuduai’ will not be successful if the cultural values are not the basis of the agreement. Hence, in implementing the ‘basuduai’ model of cattle breeding, stakeholders should explore the level of understanding of cultural values among the parties.

2. ‘Basuduai’ as a Part of Indigenous Economic Empowerment Activity

The informants agreed that basuduai is a local wisdom which has been implemented since decades ago. Resource 4 (70) as the oldest informant, argues that her father and grandfather have already done the method since she was young. She also added that the basuduai concept is already known among the society as the culture where wealthy people help farmer to improve their revenue and side income. The sources in this research also stated that investor and breeder in this basuduai method are gaining profit and benefit each other in a different way. This mutual relationship is the main reason why basuduai is acknowledged as the local wisdom in society, especially in a rural area where local tradition and culture are still being kept in faith.

“I am just continuing what my fathers did. He advised me to do the same as a part of our family’s financial management. This cattle breeding is also giving me the opportunity for a low-risk investment because I know whom I’m investing in. So, the social relations between my family and the breeder are also growing positively (Resource 4, 70).

The concept of risk and benefit in this model is surprisingly interesting since the ‘basuduai’ is also based on the cultural value among the actors. Therefore, strategic business development in this model is also needed. The concern on external factors influencing business development has been a concern among business practitioners (Maulana & Hutagalung, 2019).

The need for a formal entity to manage and control this partnership investment is highly recommended. A socio-entrepreneurship organization should be developed in cooperation with this local system. The author believes that the partnership could be developed into modern and more accountable management with a formal intervention through a legal entity. Therefore, risk management could be carefully mitigated among the stakeholders.

In the context of BMC, the customer segment of the ‘basuduai’ model should be the farmer and investor in a similar community basis, such as an ethnic community, religious community, or geographical community. The understanding of shared values among the parties involved in the model should be the priority intervention in the partnership agreement.

Meanwhile, in the context of channel and customer relationships, the existence of third-party organization should be supported. In the current model of the ‘basuduai’, a middleman between investor and farmer is needed to build communication and interaction between the two parties. This middleman is usually taking a role informally when the initial idea of ‘basuduai’ is initiated by the investor. Therefore, in the upcoming socio-entrepreneurship approach of ‘basuduai’, a formal entity as the middleman between investor and farmer is needed.
3. **The Implementation of ‘basuduai’**

As the backstage element of the business model canvas, the portrait of key activity, key resource, key partner, and cost structure of ‘basuduai’ is explained by the informants. The main activity of ‘basuduai’ is cattle breeding which is integrated with the agricultural plantation as the main work of the farmer as breeder. The investor in this partnership could be investing in cattle breeding only, or even in some cases, investing in both cattle breeding and agricultural plantation such as rice fields, orange farms, and others.

In the context of a key resource, the farmer should have a breeding area, such as the source of green grass for the cattle’s main food and also the area for cages. For investor, the main resource needed is the connection to the trusted farmer as the partner. This is where the middleman takes the role of the process. Therefore, the key partner is important to be developed before implementing the breeding partnership. Information about the breeding technique from a veterinarian is also important, as well as access to the animal marketplace for getting the best cattle and also to sell the production result at the end of the agreement.

What about the cost structure needed in the ‘basuduai’? Our informants reveal that both parties in the partnership should provide the cost-sharing agreement. The investor will provide cash money to buy the cattle, and farmer should provide money or asset to build the cage and to prepare the green grass as the main food for the cattle. However, the cost of insemination veterinarian’s routine check is usually paid by the investor as the variable cost, which is later included in the profit-sharing scheme of the breeding.

“Sometimes investor pay all the variable costs during the breeding. But in some practices, the variable cost will reduce the profit-sharing at the end of the breeding program. It is based on the agreement at the beginning of the partnership between investor and farmers. There is no exact guidance on this matter” (Informant 6, 50 years old).

4. **The Portrait of Business Model Canvas of ‘Basuduai’**

After Summarising the interview results, the author describes the business model of ‘basuduai’ as a simple business model canvas. In this canvas, there are two perspectives to be carefully considered. First, the ‘white circle’ icon indicates the value for investor. Meanwhile, the black square indicates the value for breeder. Therefore, in this canvas, we can portray the business model of the ‘basuduai’ concept in cattle breeding partnership in West Sumatra which could be developed and duplicated in other socio-entrepreneurship approaches in other rural areas. The business model canvas will help us understand a complex business model with an easy approach (Carter & Carter, 2020). Below is the business model canvas of the Basuduai method:
### Key Partners
- Bank
- Village community
- District/village council
  - Family Member
  - Animal Trader
  - Veterinary Clinic

### Key Activities
- Providing individual investment for breeder
  - Breeding activity to optimize the quality of the cattle

### Value Proposition
- Helping Farmer in optimizing their side income with mutual investment benefit
  - Alternative revenue as side income without owning capital investment

### Customer Relationships
- Community Gathering
- Religious Values and Social Investment
  - Charity and CSR

### Customer Segments
- Individual Investor
  - Farmer as Breeder

### Key Resources
- Trust and Positive tradition from investor
  - Individual Investment capital
    - Farm and breeding area in the village

### Channels
- Village Major/Head
- Family & Friends Network
  - Local Village where cattle breeding is applicable

### Cost Structure
- Survey and Review the Cost
  - Daily Operational Cost

### Revenue Streams
- Margin from Cattle Sales
  - Charity program from investors

---

**Figure 2.** *Basuduai* Method in Cattle Breeding as Partnership Investment, a socio-entrepreneurship approach

*Note: ‘black square’ indicated value/model for Breeder, meanwhile white circle indicated Investor*
E. CONCLUSION

The business model of the ‘Basuduai’ cattle breeding method in Payakumbuh, West Sumatra, is a unique approach which has been believed and implemented by the local villagers for decades ago. The spirit of basuduai as an investment method is already understood among investor and breeder. However, the value of trust and helping each other is becoming the first reason why people are involved in this basuduai method.

For breeder and investor, the value of implementing the ‘basuduai’ approach in cattle breeding partnership is based on mutual understanding in helping each other, as the value of collaboration and cooperation. However, besides the social relationship approach, the ‘basuduai’ concept also indicates the economic value expected for both parties, the breeder and investors. Therefore, this concept supports the approach of socio-entrepreneurship in a different implementation.

The local culture and community approach is one key success factor for the successful program of ‘basuduai’. As stated in key resource, key partner, and key activity, the role of the community where the farmer is living and the investor is involved would be the main factor in the sustainability of the implementation of ‘basuduai’. The trust built among the parties would be the first basis of the program. Hence, the monitoring and evaluation system is commonly implemented through social regulation within the community.

Based on this study, the authors suggest that the implementation of the ‘basuduai’ approach or other cattle breeding partnerships in rural areas should involve the main actors in the community. The investors and breeders should carefully manage the role of community involvement in the program. Therefore, this approach should implement the socio-entrepreneurship concept in their program by partnering with some NGO’s or another socio-economic empowerment program from the government and corporates. Perhaps, based on this research, some NGOs or start-ups would develop their business model in serving this captive market by implementing the social entrepreneurship concept.

This study is exploratory research using a qualitative approach. This is the limitation of the analysis, which is only based on one data analysis method. Therefore, in future research, the quantitative approach to analyzing the factors that influence the successful socio-entrepreneurship program should be developed.

The implementation of the business model in other rural areas should also be interesting to be further evaluated. This study uses the phenomenon found in West Sumatra. Otherwise, the implementation in other rural areas in Indonesia would be different and could propose various insights for researchers.

REFERENCES


Rural Economic Development through ‘Basuduai’: A Portrait of Business Model Canvas on Cattle Breeding Partnership in West Sumatera


Rural Economic Development through ‘Basuduai’: A Portrait of Business Model Canvas on Cattle Breeding Partnership in West Sumatera


Managerial Performance Improvement Strategy Based on Budget Participation

Aprih Santoso, Andre Setyo Nugroho

(Fakultas Ekonomi, Universitas Semarang)

*corresponding author : aprihsantoso@usm.ac.id

Abstract

Regional autonomy has led to the decentralization of health services. The impact of the decentralization of health services is the emergence of differences between provinces and districts/cities in terms of the status of funding sources and changes in the structure of the health system in the regions. The main purpose of this study is to examine the relationship between budgetary participation and managerial performance in a public sector organization. It also attempts to examine whether organizational commitment and perception of innovation mediate the budgetary participation and performance relationship. As one of the government-owned public sector organizations in charge of health issues, Semarang City Health Office became the public spotlight regarding budget and performance. The study was conducted at Semarang City's Health Office, and all of the Public Health Centers, the sample size used is 60 echelon officers, using path analysis. The analysis results indicate that Budgetary participation affects managerial performance via the mediating variable of organizational commitment but not perception of innovation. There is a direct relationship between budgetary participation, managerial performance, organizational commitment and perception of innovation.

Keywords: Budgetary, managerial performance, commitment, innovation, public sector

JEL Classification: H51, H61, R10

A. INTRODUCTION

Regional autonomy has led to the decentralization of health services. The impact of the decentralization of health services is the emergence of differences between provinces and districts/cities in terms of the status of funding sources and changes in the structure of the health system in the regions. The decentralization of health services eliminated the deconcentration offices of the Ministry of Health and transferred the authority of regional health services to the Health Office which was formed by each autonomous region, in this case the Province and District/City.

The Health Office has 4 (four) roles as emphasized by WHO, namely: (1) role in stewardship (implementer); (2) role in financing (financing); (3) role in the service provision (terms of service); and (4) roles in resource management (resources). For these four roles to be fulfilled, good budget planning is needed. It is hoped that through performance-based budgeting, the development process can run more efficiently and participatively because the budget preparation process involves the parties involved in budget execution.

The performance-based budgeting process in local government begins with capturing the community's aspirations through
the Development Planning Conference (Musrenbang). The results of the Musrenbang are summarized in preparing a strategic plan. The strategic plan identifies strategies for future activities and operations, generally covering at least the next five years. Furthermore, the strategic plan is described in a work plan to be proposed to become the General Budget Policy and Temporary Budget the Price Unit Standards and KUA PPAS that have been set by the Regional Head and the Legislature. The RKA that has been compiled is discussed jointly between the executive and the legislature to be then determined as a Budget Implementation Document (DPA), Regional APBD Regulations and Regional Head Regulations APBD.

Mardiasmo (2016), a budget is a statement regarding the estimated performance to be achieved during a certain period of time which is stated in financial measures. The budget-making process in the public sector is a fairly complicated stage and contains high political nuances. This is different from budgeting in the private sector, which is relatively less political. In the private sector, the budget is part of company secrets that are closed to the public, but on the other hand, in the public sector, the budget must be informed to the public to be criticized, discussed and given input. The public sector budget is an instrument of accountability for managing funds allocated to the public or the people and implementing programs financed by public money.

Mardiasmo (2016) suggests that the budget functions as a performance appraisal tool. The performance will be assessed based on achieving performance goals and targets, budget targets and budget execution efficiency. The performance of public sector organizations managers is assessed based on how much was achieved in relation to the predetermined budget. Williams (1990) in Yahya et al. (2008) encourage researchers to examine budget behavior in public sector organizations with a bureaucratic character. Budget behavior may differ in public sector organizations from budget behavior in private sector organizations. Williams (1990) in Yahya et al. (2008) state that research on the relationship between budget participation and Ceiling Priority (KUA PPAS). The Budget Work Plan (RKA) is prepared based on managerial performance in the public sector is important. However, the literature has neglected research on the relationship between budget participation and managerial performance in public sector organizations, particularly in developing countries.

Organizational commitment is one of the most widely used intervening variables in budget participation research with managerial performance. Organizational commitment is a strong belief in and acceptance of the goals and values of the organization, as well as the desire to carry out efforts properly which are considered beneficial to organizational interests.

Perceptions of innovation describe the extent to which managers consider themselves innovative so they can provide new ideas in organizational development and problem-solving.

### B. LITERATURE REVIEW

#### Budget Participation and Organizational Commitment

Participation in budgeting has a very important role. The participation of subordinates in the budgeting process will indirectly affect themselves, because they may
be considered to have the ability, so that it can motivate the subordinates to work even better impact on increasing company performance (Gunawan & Santioso, 2015). This has the impact that managers will have a higher affective commitment to the organization because they have the same values as the organization. Agustianto (2019), budget participation and organizational commitment.

H1: Budget Participation effects on Organizational Commitment

Budget Participation and Perceptions of Innovation

Budget participation is a process that involves individuals directly in it and has an influence on the preparation of budget objectives whose performance will be assessed and likely to be rewarded on the basis of achieving their budget goals. Participation in budget preparation is closely related to the performance of local government officials because the performance of government officials can be seen based on the participation of government officials in preparing the budget (Mahoney, 1963). According to Fitrianti and Mastura & Marbawi (2013) in Ermawati & Susanti (2018), several factors affect managerial performance, namely: budget participation, job satisfaction and perceived innovation. Budget participation is a budget preparation process that involves OPD employees to participate in budget preparation.

H2: Budget participation effects on the perception of innovation

Organizational Commitment and Managerial Performance

Organizational commitment is the degree to which a person's involvement in his organization and the strength of his identification with a particular organization. Shultz & Shultz (1993), organizational commitment is characterized by three things, namely: 1) A strong belief in the organization and acceptance of organizational goals and values, (2) A strong desire to nurture a strong relationship with the organization and (3) Readiness and willingness to give up endeavors for the benefit of the organization. Nouri & Parker (1996) state that organizational commitment positively and significantly affects managerial performance. According to Zurnali (2010), organizational commitment is a psychological condition that characterizes employee relations with the organization or its implications that affect whether employees will remain in the organization or not, which are identified in three components, namely: affective commitment, continuous commitment and normative commitment. Dewi & Ningsih (2020) stated that organizational commitment positively affects managerial performance. This shows that performance managerial who has a high commitment to the organization, helping the work unit to achieve the expected organizational performance. Meanwhile, the role of the manager of Regional financial management affects performance. This is because good financial management in SKPD helps the work unit achieve performance and shows good managerial performance.

H3: Organizational commitment effects on managerial performance

Perceptions of Innovation and Managerial Performance

Managers will be more motivated to carry out their work when the organization appreciates their ideas. This will increase the innovations in their work. Managers with a high
perception of innovation will have better work quality too. Fatimah & Wahidahwati (2019) stated that the perception of innovation positively and significantly affects managerial performance. Managers with a high perception of innovation will make them more innovative and creative in carrying out their work to increase performance.

H4: Perception of innovation effect on managerial performance

**Budget Participation and Managerial Performance**

Rather than imposing budgets on subordinate managers, participative budgeting allows subordinate managers considerable say in how the budgets are established. Typically, overall objectives are communicated to the manager, who helps develops a budget that will accomplish these objectives (Hansen & Mowen, 2008). Supriyono (2018) states that in Indonesia, budget participation has a significant positive effect on manager performance. Based on the description above, the following hypothesis can be drawn:

H5: Budget participation effects on managerial performance

**C. RESEARCH METHODS**

**Operational Definition**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>DEFINITION</th>
<th>INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Participation</td>
<td>Manager involvement and extent of influence in the budgeting process (Milani, 1975)</td>
<td>1. The level of manager involvement in the budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The level of logic superiors rejects the manager’s budget proposal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The intensity of the boss discussing the budget with the manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. The influence of managers in budgeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Manager’s contribution to budgeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. The frequency with which superiors ask managers for opinions on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>budgeting issues</td>
</tr>
<tr>
<td>Managerial Performance</td>
<td>The results of work and efforts made by managers in carrying out their duties and functions in</td>
<td>1. Planning</td>
</tr>
<tr>
<td></td>
<td>the organization (Mahoney et al., 1965)</td>
<td>2. Investigation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Monitoring evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Staff arrangement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Negotiation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Representative / Representation</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>Strong belief and acceptance of the goals and values of the organization and the desire to try</td>
<td>1. Strive for the success of the organization</td>
</tr>
<tr>
<td></td>
<td>to achieve the goals of the organization (Mowday et al, 1979)</td>
<td>2. Pride in working for the organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Willingness to accept assignments for the sake of the organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. The similarity of individual values with organizational values</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Pride in being part of the organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. The organization is an inspiration to carry out tasks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Happy for the choice of working at the organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Assume that the organization is the best</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Concern for the fate of the organization</td>
</tr>
<tr>
<td>Perceptions of Innovation</td>
<td>Shows how much a manager feels that he is an innovative person in carrying out the tasks that</td>
<td>1. Innovation</td>
</tr>
<tr>
<td></td>
<td>that they carry out in the organization (O’Reilly et al., 1991)</td>
<td>2. Opportunity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Risk-taking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Be careful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Rules orientation</td>
</tr>
</tbody>
</table>

Table 1. Operational Definition
Research Object and Sample Unit

The object of research is the Semarang City Health Office. The data used are primary data from interviews and questionnaires. The sample unit of this research is structural officials within the Semarang City Health Office who are involved in the preparation of strategic plans and performance accountability reports of government agencies.

Population and Sample Determination

The population of this study were structural officials in the Semarang City Health Office, starting from the Head of the Department to the Head of the Puskesmas. The total population is 60 (sixty) structural officials. While the method of determining the sample uses disproportionate stratified random sampling.

Table 2. Number of Structural Officials of Semarang City Health Office

<table>
<thead>
<tr>
<th>Position</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of Department</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Head of Division</td>
<td>4</td>
</tr>
<tr>
<td>Section Chief</td>
<td>12</td>
</tr>
<tr>
<td>Head of subsection</td>
<td>3</td>
</tr>
<tr>
<td>Head of Puskesmas / UPTD</td>
<td>39</td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

Descriptive Statistical Analysis

The descriptive statistical analysis aims to provide an overview or description of the research variables so that the data presented is easier to understand, using a frequency distribution table.

Validity test

The validity test is used to measure whether a questionnaire is valid or not. If the correlation between each item or indicator on the total score of the variable shows the probability result < 0.01 or <0.05, it means that the probability number is significant so that each question item is valid (Ghozali, 2016).

To complement the results of the normal probability plot graph analysis, the Kolmogrov-Smirnov (K-S) non-parametric statistical test was used. In the Kolmogrov-Smirnov one-sample statistical test, if the probability is significant above 0.05, then the variable is normally distributed (Ghozali, 2016).

Multicollonierity Test

The multicollinearity test aims to test whether the regression model finds a correlation between independent variables. Value is a tolerance value < 0.10 or a VIF value > 10 (Ghozali, 2016).

Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is an inequality of variance in the regression model from one residual observation to another. If the variance from the residual of one observation to another is constant, then it is called homoscedasticity and vice versa. Detection is done with a plot graph between the predicted value of the dependent variable and its residual. The basis of plot graph analysis is that if there is a certain pattern, such as the dots forming a certain regular pattern (wavy, widened, then narrowed), then it indicates that heteroscedasticity has occurred and vice versa.

Data analysis

The Baron and Kenny (1986) method is an analysis strategy for testing mediation hypotheses. In this mediation method, there are two paths to the dependent variable. Mediation is tested through three regressions:
Managerial Performance Improvement Strategy Based on Budget Participation

(1) Independent variable predicting the dependent variable. (2) Independent variable predicting the mediator. (3) Independent variable and mediator predicting the dependent variable.

Hypothesis testing in this study uses path analysis (path analysis). The regression equation used in path analysis is as follows:

\[ Y_{OC} = b_0 + b_{BP}X_{BP} + e_1 \]  
Regression Equations 1

\[ Y_{PI} = b_0 + b_{BP}X_{BP} + e_2 \]  
Regression Equations 2

\[ Y_{MP} = b_0 + b_{BP}X_{BP} + b_{OC}X_{OC} + b_{PI}X_{PI} + e_3 \]  
Regression Equations 3.

Information:
BP = Budgetary Participation
OM = Organization Commitment
PI = Perception of Innovation
MP = Managerial Performance
\[ b_{BP} = \] Budgetary Participation Intercept
\[ b_{OC} = \] Organization Commitment Intercept
\[ b_{PI} = \] Perception of Innovation Intercept
\[ b_{MP} = \] Managerial Performance Intercept
\[ e = \] Error

D. RESULTS AND DISCUSSION

Description of Research Object

Semarang City Health Office’s vision, “Realizing Independent Semarang City Communities for Healthy Living.” Meanwhile, the missions carried out by the Semarang City Health Office are: (1) Improving quality health services; (2) Empowering people to have the will and ability to live healthily. In order to realize its vision and mission, a well-structured, well-planned and executed budget is needed.

A good budgeting process must begin with the direct participation of all management elements, which will later be involved in budget execution so that it is expected to produce good managerial performance. In addition, to achieve good performance, managers are also required to have a high commitment to the budget they compile, and managers are also expected to use the perception of innovation, both during the budgeting process and budget execution.

Table 3. Respondent Profile

<table>
<thead>
<tr>
<th>Data</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Female</td>
<td>41</td>
<td>68.3</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30-39</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>40-49</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>&gt;= 50</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Department</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Secretary &amp; Head of Division</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Head of subsection</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Section Chief</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Head of Puskesmas &amp; UPT</td>
<td>39</td>
<td>65</td>
</tr>
<tr>
<td>Years of Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \leq 10 )</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>11-20</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>21-30</td>
<td>28</td>
<td>46.7</td>
</tr>
<tr>
<td>( \geq 30 )</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Experience compiling a budget (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \leq 3 )</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>3-6</td>
<td>20</td>
<td>33.3</td>
</tr>
<tr>
<td>( \geq 7 )</td>
<td>29</td>
<td>48.3</td>
</tr>
</tbody>
</table>

Descriptive Statistical Analysis

The table above shows the mean value of budget participation of 35.77. This indicates
that budget participation is relatively high. The mean value of organizational commitment is 56.43, which indicates that employee organizational commitment is relatively high. Perceptions of innovation The mean value of perceived innovation is 18.13. This indicates that the employees’ perception of innovation is moderate or sufficient. Managerial performance The mean value of managerial performance is 49.83, which indicates that the respondents’ managerial performance is relatively high. Meanwhile, the standard deviation for each variable is 1) budget participation of 3,748; 2) organizational commitment of 4,451; 3) perception of innovation of 3,427; and managerial performance of 3,431. The higher the standard deviation level, the more heterogeneity will be.

### Table 4. Descriptive Statistical

<table>
<thead>
<tr>
<th>Variable</th>
<th>Theory (Mean)</th>
<th>Actual (Mean)</th>
<th>Deviation standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Participation</td>
<td>6-42</td>
<td>27-42</td>
<td>35,77</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>9-63</td>
<td>48-63</td>
<td>56,43</td>
</tr>
<tr>
<td>Perceptions of Innovation</td>
<td>6-30</td>
<td>11-25</td>
<td>18,13</td>
</tr>
<tr>
<td>Managerial Performance</td>
<td>8-56</td>
<td>42-56</td>
<td>49,83</td>
</tr>
</tbody>
</table>

### Validity test

The validity test is used to measure whether a questionnaire is valid or not. If the correlation between each item or indicator on the total variable score shows the probability result <0.01 or <0.05, it means that each question item is valid (Ghozali, 2016):

### Table 5. Data Validity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Pearson Correlation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Participation</td>
<td>BP 1</td>
<td>0.677**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BP 2</td>
<td>0.741**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BP 3</td>
<td>0.706**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BP 4</td>
<td>0.803**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BP 5</td>
<td>0.849**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>BP 6</td>
<td>0.757**</td>
<td>Valid</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>OC 1</td>
<td>0.693**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>OC 2</td>
<td>0.758**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>OC 3</td>
<td>0.810**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>OC 4</td>
<td>0.748**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>OC 5</td>
<td>0.812**</td>
<td>Valid</td>
</tr>
<tr>
<td>Management Performance</td>
<td>MP 1</td>
<td>0.663**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 2</td>
<td>0.596**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 3</td>
<td>0.579**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 4</td>
<td>0.587**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 5</td>
<td>0.629**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 6</td>
<td>0.723**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 7</td>
<td>0.796**</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MP 8</td>
<td>0.781**</td>
<td>Valid</td>
</tr>
</tbody>
</table>
The table above shows that the correlation between each indicator/item is significant at the 0.01 level. So each indicator/question item is valid.

**Reliability Test**

A reliability test is conducted to measure the reliability or consistency of the item as a research instrument. Statement items that have been declared reliable or reliable if the Cronbach Alpha coefficient is > 0.6 (Ghozali, 2016).

**Table 6. Reliability Testing Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>0.846</td>
<td>Reliable</td>
</tr>
<tr>
<td>OC</td>
<td>0.894</td>
<td>Reliable</td>
</tr>
<tr>
<td>PI</td>
<td>0.843</td>
<td>Reliable</td>
</tr>
<tr>
<td>MP</td>
<td>0.825</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

These results show that all variables have an Alpha coefficient > 0.60, so all the concepts of measuring the variables are reliable.

**Normality test**

The normality test aims to test whether the regression model, the dependent variable (dependent) and the independent variable (independent) have a normal distribution. To test whether the data is normally distributed or not with graphical analysis and statistical tests. By looking at the distribution of data (points) on the diagonal axis of the normal probability plot graph. Decision-making in the normality test using graphical analysis is based on if the data spreads around the diagonal line and follows the diagonal line. The regression model fulfils the normality assumption and vice versa.

**Figure 1. The Results of Normality-Regression Equation Test 1**

**Figure 2. Normality-Regression Equation Test Results 2**

**Figure 3. Normality-Regression Equation Test Results 3**
Managerial Performance Improvement Strategy Based on Budget Participation

Figure 1 - 3 shows the points (data) spread around the diagonal line and follow or approach the direction of the diagonal line, meaning that the regression models meet the normality assumption.

The normality test results showed that the Kolmogorov-Smirnov value for all regression equations is significant > 0.05, meaning that the regression model meets the normality assumption.

**Table 7. Normality Test Results**

<table>
<thead>
<tr>
<th>Regression Equation</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.747</td>
</tr>
<tr>
<td>2</td>
<td>0.956</td>
</tr>
<tr>
<td>3</td>
<td>0.611</td>
</tr>
</tbody>
</table>

**Multicollinearity Testing**

In the multicollinearity test results, the tolerance value shows that no independent variables have a tolerance value < 0.1. The calculation results of the VIF value also show that there is not one independent variable with a VIF value > 10, so there is no multicollinearity.

**Table 8. Multicollinearity Test Results**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable Independent</th>
<th>Variable Dependent</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression Equation 1</td>
<td>Budget Participation</td>
<td>Organizational Commitment</td>
<td>1.000</td>
</tr>
<tr>
<td>Regression Equation 2</td>
<td>Budget Participation</td>
<td>Perceptions of Innovation</td>
<td>1.000</td>
</tr>
<tr>
<td>Regression Equation 3</td>
<td>Budget Participation</td>
<td>Organizational Commitment</td>
<td>0.509</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managerial Performance</td>
<td>0.471</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perceptions of Innovation</td>
<td>0.621</td>
</tr>
</tbody>
</table>

**Heteroscedasticity Testing**

Figure 4 - 6 shows that the dots spread randomly and are spread above or below the number 0 on the Y axis, so there is no heteroscedasticity.

**Figure 4. Heteroscedasticity Test – Regression Equation 1**
Managerial Performance Improvement Strategy Based on Budget Participation

The results of multiple linear regression analysis obtained equations:

\[
Y_{KO} = 27,601 + 0.806 X_{PA} + e
\]

\[
Y_{PI} = 0.531 + 0.492 X_{PA} + e
\]

\[
Y_{KM} = 17.036 + 0.240 X_{PA} + 0.416 X_{KO} + 0.043 X_{PI} + e
\]

Regression equation 1 analyses the effect of budget participation on organizational commitment. The table above shows the adjusted R square test value of 0.452, which means that the organizational commitment variable of 45.2% can be explained by the budget participation variable, while the remaining 54.8% is explained by other variables. The results of the individual significance test (t-test) regression equation 1 have a value of 7.040 with a significance of 0.000. This means that budget participation significantly and positively affects organizational commitment. As for the feasibility test, the F value test is 49.566 with a significance of 0.000. The significance value <0.05 indicates that the regression equation model 1 is feasible (goodness of fit).

The regression equation 2, which is used to analyze the effect of budget participation on perceptions of innovation, based on the table above shows the adjusted R square test value of 0.277. This means that 27.7% of the innovation perception variable can be explained by the budget participation variable, while the remaining 72.3% is explained by other variables. The results of the individual significance test (t-test) regression equation 2 have a value of 4.864 with a significance of 0.000. This means that budget participation significantly and positively affects the perception of innovation. The value of the feasibility test with the F-value test is 23.654 with a significance of 0.000, which means that the regression equation model 2 is feasible (goodness of fit).

Regression equation 3 examines the effect of budget participation on managerial performance through organizational commitment and perceptions of innovation. Based on the table above, it can be seen that the adjusted R square value is 0.570. This means that 57% of managerial performance variables can be explained by the variables of budget participation, organizational commitment and perceptions of innovation, while the remaining 43% can be explained by other variables outside of this study. Based on
the results of the individual significance test (t-test) on the recession 3 equation, only the perception of innovation variable has no significant effect on managerial performance. This is because the significance value of the perception of innovation is > 0.05, which is 0.693. The budget participation variable has a t-value of 2.186 with a significance of 0.033, and the variable of organizational commitment with a t-value of 4.334 with a significance of 0.000, so the two variables have a positive and significant effect on managerial performance.

<table>
<thead>
<tr>
<th>Table 9. Regression Equation Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Regression Equation 1</td>
</tr>
<tr>
<td>Regression Equation 2</td>
</tr>
<tr>
<td>Regression Equation 3</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

In the regression equation test results in 1, the standardized beta value for the effect of budgetary participation on organizational commitment is 0.679 and is significantly below 0.05. The standardized beta value of 0.679 is the path value or path p1. In the results of the regression equation test 2, the standardized beta value for the effect of budget participation on the perception of innovation is 0.538 and is significantly below 0.05. The standardized beta value of 0.538 is the path value or path p2. In the results of the regression equation test 3, the standardized beta values are 0.262 respectively; 0.539, and 0.043. The standardized beta value of 0.262 is the path value or path of p5 and is significant <0.05. The standardized beta value of 0.539 is the path value or path p3 and is significant <0.005. The standardized beta value of 0.043 is the path value or path p4 and is not significant. The value of $e = \sqrt{1-R^2}$ so that $e_1 = \sqrt{1 - 0.461} = 0.734$; the value of $e_2 = \sqrt{1 - 0.290} = 0.843$; and the magnitude of $e_3 = \sqrt{1 - 0.592} = 0.638$.

To test the mediating power of the intervening variables, the Sobel test was performed by analyzing the regression data as follows:
Managerial Performance Improvement Strategy Based on Budget Participation

Table 10. SPSS Regression Model Output Results 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>27.601</td>
<td>4.117</td>
<td>6.703</td>
</tr>
<tr>
<td>BP</td>
<td>.806</td>
<td>.115</td>
<td>7.040</td>
</tr>
</tbody>
</table>

a. Dependent Variable: OC

Table 11. SPSS Regression Model Output Results 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.531</td>
<td>3.639</td>
<td>.146</td>
</tr>
<tr>
<td>BP</td>
<td>.492</td>
<td>.101</td>
<td>4.864</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PI

Table 12. SPSS Regression Model Output Results 3

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>17.036</td>
<td>3.846</td>
<td>4.429</td>
</tr>
<tr>
<td>BP</td>
<td>.240</td>
<td>.110</td>
<td>2.186</td>
</tr>
<tr>
<td>OC</td>
<td>.416</td>
<td>.096</td>
<td>4.334</td>
</tr>
<tr>
<td>PI</td>
<td>.043</td>
<td>.108</td>
<td>.397</td>
</tr>
</tbody>
</table>

a. Dependent Variable: MP

The Effect of Organizational Commitment in Mediating Budget Participation on Managerial Performance.

From tables 9 and 10, the following data can be obtained:

- Unstandardized Coef. B. BP The regression equation 1 = a = 0.806
- Unstandardized Coef. Std.Error BP The regression equation 1 = Sa = 0.115
- Unstandardized Coef. B. OC The regression equation 3 = b = 0.416
- Unstandardized Coef. Std.Error OC The regression equation 3 = Sb = 0.096

The effect of mediation that is shown by the multiplication of the coefficient (ab) needs to be tested with the Sobel test as follows:

\[
Sab = \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2}
\]

\[
Sab = \sqrt{(0.416)^2(0.115)^2 + (0.806)^2(0.096)^2 + (0.115)^2(0.096)^2}
\]

\[
Sab = 0.09055
\]

To calculate the t statistical effect of mediation using the following formula:

\[
t = ab/Sab
\]

\[
t = (0.806)(0.416) / 0.09055
\]

\[
t = 3.7029
\]
From the above calculations, it is known that the t-value (3.7029) is greater than the t-table value (1.96), so it can be concluded that the mediation coefficient of ab (0.3966) means that there is an influence of partial mediation or intervening organizational commitment in relation to budgetary participation.

The Effect of Perceptions of Innovation in Mediating Budget Participation on Managerial Performance.

From table 10 and 11 above, the following data can be obtained:

- Unstandardized Coeff. B. BP
  Regression Equations 1 = c = 0.492
- Unstandardized Coeff. Std.Error BP
  Regression Equations 2 = Sc = 0.101
- Unstandardized Coeff. B. PI
  Regression Equations 3 = d = 0.043
- Unstandardized Coeff. Std.Error PI
  Regression Equations 3 = Sd = 0.108

The effect of mediation, which is shown by the multiplication of the coefficient (cd), needs to be tested using the Sobel test as follows:

\[
Scd = \sqrt{dSc^2 + c^2Sd^2 + Sc^2Sd^2}
\]

\[
Scd = \sqrt{(0,043)^2(0,101)^2 + (0,492)^2(0,108)^2 + (0,101)^2(0,108)^2}
\]

\[Scd = 0,002941\]

To calculate the t-statistical effect of mediation using the following formula:

\[
t = cd / Scd
\]

\[t = (0,492)(0,043) / 0,002941\]

\[t = 7,1935\]

From the above calculations, it is known that the t-value (7.1935) is greater than the t-table value (1.96), so it can be concluded that the mediation coefficient of cd (0.02116) means that there is an effect of partially mediating or intervening on the perception of innovation in relation to budgetary participation.

Discussion

The Effect of Budget Participation on Organizational Commitment

Hypothesis 1, namely that there is a positive and significant influence between budgetary participation and organizational commitment, can be proven and accepted through the results of regression equation analysis 1. This is indicated by the results of the individual significance test (t-test) regression equation 1 has a value of 7.040 with a significance below 0.05, which is equal to 0.000, which means that budget participation has a significant and positive effect on organizational commitment. Thus, the higher the level of budget managers’ participation, the higher the organizational commitment they have. These results are consistent with the research of Yahya et al. (2008) that participation in the budgeting process allows managers to be more in line with organizational goals. Then the goals and values of the organization are indirectly believed to increase organizational commitment. Also, according to Hariyanti (2002), budget participation has a significant positive relationship with organizational commitment. Managers involved in and participating in the budgeting process will better understand budget objectives that reflect organizational goals. With managers understanding budget goals and organizational goals, managers will have alignment between personal manager goals and organizational goals. This has the impact
that managers will have a higher organizational commitment.

**The Effect of Budget Participation on Perceptions of Innovation**

Hypothesis 2, namely that there is a positive and significant influence between budget participation and perceptions of innovation, can be proven and accepted through regression equation analysis 2. This is indicated by the results of the individual significance test (t-test) regression equation 2 has a value of 4.864 with a significance below 0.05, which is equal to 0.000, which means that budget participation has a significant and positive effect on the perception of innovation. Thus, the higher the level of managerial budget participation, the higher the perception of innovation they have. This result is in line with the research by Yahya et al. (2008) that budget participation positively affects perceptions of innovation.

**The Effect of Organizational Commitment on Managerial Performance**

Hypothesis 3, namely that there is a positive and significant influence between organizational commitment and managerial performance, can be proven and accepted through the results of regression equation analysis 3. This is indicated by the results of the individual significance test (t-test) regression equation 3 has a value of 4.334 with a significance below 0.05, which is equal to 0.000, which means that organizational commitment has a significant and positive effect on managerial performance. Thus, the higher the level of managerial organizational commitment, the higher the managerial performance. The acceptance of the results of this study shows that the higher the level of commitment of managers to the organization, the managers feel they belong to the organization where they work so that the managers will provide better results of efforts and performance. This research is in line with Sinaga (2013), which states that organizational commitment positively and significantly affects managerial performance. Research by Nouri & Parker (1996) shows that organizational commitment has a significant positive relationship with managerial performance. The results of his research state that organizational commitment and performance have a positive and significant relationship. The higher the commitment to the organization, the manager feels that he belongs to the organization in which he works so that the manager will provide better results and performance. Likewise, Amelia (2015) and Supriyono (2018) show that organizational commitment positively affects managerial performance. A strong organizational commitment will encourage individuals to strive to achieve organizational goals, through organizational commitment will indirectly improve managerial performance.

**The Influence of Perceptions of Innovation on Managerial Performance**

Hypothesis 4, namely that there is a positive and significant influence between the perception of innovation and managerial performance is rejected and cannot be proven through the results of regression equation analysis 3. This is indicated by the results of the individual significance test (t-test) regression equation 3 has a value of 0.397 with more significance. Greater than 0.05, namely 0.693, which means that the perception of innovation has a positive but not significant effect on
managerial performance. This study’s results align with the research by Yahya et al. (2008) that budget participation affects managerial performance but not through perceptions of innovation.

Effect of Budget Participation on Managerial Performance

Hypothesis 5, namely that there is a positive and significant influence between budgetary participation and managerial performance, can be proven and accepted through the results of regression equation analysis 3. This is indicated by the results of the individual significance test (t-test) regression equation 3 has a value of 2.186 with a significance below 0.05, which is 0.033, which means that organizational commitment has a significant and positive effect on managerial performance. The results of this study are consistent with the results of research by Yusfaningrum (2005), which states that budget participation has a significant positive relationship with managerial performance. Budgeting involving superiors/power holders and subordinates/executors of the budget is one tool that can be used as a benchmark in improving managerial performance. To prevent functional or dysfunctional impacts on the attitudes and behavior of organizational members in budgeting, it is necessary to involve management at a lower level so that participatory budgets can be considered as a managerial approach that can improve the performance of each organization. The results of this study are consistent with the results of research by Supriyono (2018) and Yahya et al. (2008), which state that budgetary participation has a positive and significant effect on managerial performance. Yusfaningrum (2005) also found a relationship between budget participation and managerial performance.

E. CONCLUSION

Budget participation has a positive and significant effect on organizational commitment. The higher the level of budget participation, the organizational commitment will increase.

Budget participation has a positive and significant effect on perceptions of innovation. This means that the level of budget participation is in line with the perceived level of innovation.

Organizational commitment has a positive and significant effect on managerial performance. The higher the organizational commitment, the managerial performance will increase.

Perceptions of innovation do not have a significant effect on managerial performance.

Budget participation has a positive and significant effect directly on managerial performance. This means that the higher the level of budget participation, the higher the managerial performance.

Organizational commitment and perceptions of innovation are intervening variables proven to be able to mediate the relationship between budget participation and managerial performance.

Research Suggestions

It is hoped that the Semarang City Health Office can optimize budget participation not only at the level of managers or echelon officials but also for all parties with interest in the
Managerial Performance Improvement Strategy Based on Budget Participation

budget so that the performance of budget execution and organization is getting better.

The Semarang City Health Office should periodically hold activities that foster a commitment to the organization, such as outbound activities. In addition, it is also necessary to carry out periodic monitoring and evaluation of the main tasks and workloads so that it can increase organizational commitment.

Semarang City Health Office is expected to provide flexibility for each employee to develop their perception of innovation to improve performance.

Research Limitations

The limitation of this study is the use of a self-rating scale to measure managerial performance variables, which may result in personal bias to reduce data objectivity.

Future Research Agenda

For the research results to be more objective, it is hoped that further research can add interview techniques to obtain data in addition to questionnaires. Future research is intended to expand the scope of research in order to contribute to public sector services.

REFERENCES


Managerial Performance Improvement Strategy Based on Budget Participation


Managerial Performance Improvement Strategy Based on Budget Participation


