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Implementation of Capital Budgeting for MSME in Fixed Assets Investment Decisions Through Andragogy Approachment

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Abstract

Small Micro Enterprises become solution for society to eradicating poverty, providing job vacancies and strengthening micro economic sector. One of weakness for MSMEs are budgeting management and decision maker in investment, especially in fixed assets becomes major problem, because the owner of MSMEs not all of them is well educated in business and investment. Because ineffective decision can effect their economic condition and business sustainability. So, it is a necessary to learn about analyzing investment by capital budgeting through Andragogy approachment for the owner of MSMEs. It is really important for society development. Andragogy learning is special methods that used for teach in grand training for adults. Majority of the MSME sectors are adults, so we need to provide special approachment. This type of research is qualitative used are qualitative methods. Most of the data were collected by reviewing and exploring a variety of theories and praxis through literatures. The results of this study indicate that MSMEs generally have a basic strategy of inadequate management, besides the lack of ability of MSMEs in terms of management and strategy led to business failures and difficult business to flourish. This study is determining the best learning method for the owner of MSMEs to analyze condition in decision making in investment of fix assets.

Keywords: MSME; Andragogy Learning; Capital Budgeting; Society Development.

1. Introduction

Micro, small and medium enterprises (MSMEs) are businesses which engaged in various business fields, which touched the interests of society. Based on 2010 data (www.bps.go.id), the amount of the proportion of Gross Domestic Product (GDP) of the SME sector to 56 per cent and the employment rate above 97 per cent make SME sector as a very important sector for the Indonesian economy in general.

MSMEs in 1997 amounted to 39.76511 million and in 2012 reached 56,534,592 with growth in 2012 reached 2.41% (www.bps.go.id). On average, there are 31

MMSMEs per 1,000 people across 132 economies covered. The five countries with the highest density of formal MSME are as follows: Brunei Darussalam (122), Indonesia (100), Paraguay (95), the Czech Republic (85), and Ecuador (84). Overall, economics with higher per capita income growing niche to have more formal MMSMEs per 1,000 people.

[1] stated that the Small and Medium Enterprises are known to have weak internal control systems. In general, they see that the implementation of an adequate system of internal control is as an adverse attempt. This is also supported by the statement of [2] which indicated that the restrict implementation which adequate internal control for the majority of MSMEs use a cost-benefit approach. So we can conclude that [1]the lack of knowledge of the MSMEs especially in the management and internal control. Especially in decision-making which is the purchase of fixed assets of fixed capital in a business. Indonesia is the only country with the largest storage systems spending growth in Southeast Asia with an average growth rate of 30%. It's time as a large country, rich in natural resources, Indonesia is supposed to be like other countries in Asia, even in the world in terms of economic growth.

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MSME's failure occurs due to a lack of management skills and prediction for investing their capital that are needed by the leaders of MSMEs. To set the functional areas of MSMEs effectively, it is essential for leaders of

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MSMEs have a critical management capabilities (eg. abilities in planning, organizing, directing and monitoring) and operational capability (example: the ability to make the operation of the business to function in day-to-day implementation). A leader of MSMEs also have to understand how to analyze the needed of firm, especially in making decision for their fixed assets. Because it uses in long term. When the leaders of MSMEs have the capabilities, it will be easier for them to respond to business risks that affect for their sustainability. The proper way to provide insight to the MSMEs is through learning Capital Budgeting in decision making purchases of fixed assets. It needs special approachment, because the leader of MSMEs majority is adults. It needs special treatments.

An understanding of capital budgeting is budgeting refers to the entire process of collecting, selecting and determining the investment alternatives that will provide income for the company for a period of more than a year [3]. In order to optimize the investment and financing decision-making, financial management using financial tools called capital budgeting analysis. 1 Type of business which run considering the amount of funds available for the purchase of fixed assets allocated. Projects that require consideration are usually mutually exclusive projects, the acceptance of this project will eliminate the chance to run another project to run. Project feasibility analysis which is meant form of consideration purchase of fixed assets used by MSMEs. The process of planning or evaluation of fixed assets on MSMEs to determine whether or not the investment viable. The reason why this consideration is needed, because of long- lived assets and invested large.

According to the definition of fixed assets are assets that have a life span of more than one year, including in such long term investment consideration for capital investment in fixed assets requires consideration. Investments in fixed assets based on motives - motives: the purchase of new fixed assets, the replacement of the old fixed assets, and repair or modernization of fixed assets are long [3]. Afandi argued that Feasibility of investment that is researching and analyzing on whether or not an investment project carried out successfully. And financial feasibility, namely the success of a project is measured by the ability of create the project to provide benefits for the company financially.

The pro-MMSMEs have argued that MMSMEs Enhance competition and entrepreneurship and Thus have wide economy benefits in efficiency, innovation and productivity growth. Thus Spake direct government support of MMSMEs can help countries reap social benefits. Second, MMSMEs are Generally more productive than large firms but are impeded in Reviews their development by failures of financial markets and other institutions for capital and other non-financial assistances. Thus Spake, pending financial and institutional improvements, direct government support of MMSMEs can boost economic growth and development. Finally, the growth of MMSMEs boosts employment more than the growth of large firms Because MMSMEs are more labour intensive[2].

Management of MSMEs that will generate profits stable. These benefits will be played back to fund operational activities to support the sustainability of the business. Funding for operational activities can not be separated from the purchase of fixed assets that are already obsolete.

All SMEs do not know what it capita budgeting and how the use of capita budgeting. So we need a distribution science by using a special approach. Psychology of adult maturity as a person who self-directed this gave rise to a very deep psychological need is the desire viewed and treated others as a person who directs himself, not [2]directed, forced and manipulated by others. With so if adults have a situation that does not allow him to be himself then he would feel himself depressed and unhappy. Because adult not a child, the adult education can not be equated with the education of school children. It must be understood what incentive for adults to learn, what barriers they experienced, what he expects, how he can best learn and so on [4].

Reevers, Fansler, and Houle claim that adult education is the effort made by the individual in order to develop themselves, which is done without coercion (legal). Sharper UNESCO defines education adults as a well-organized educational process content, methods and levels, both formal and informal, which continued well replace education in schools, colleges, universities, and vocational training that makes people who are considered adults by the public can develop the skills, enrich their knowledge, improve technical and professional qualifications, and the resulting changes in the attitudes and behaviour in a dual perspective in personal development intact and participation in the development of social, economic, and cultural balanced.

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[1] Pandi Afandi ,lecturer STIE AMA Salatiga, http://jurnal.stiesemarang.ac.id/index.php/JSS/article/viewFile/93/84

Afandi argued that the financially, project feasibility analysis can done by some method, such as Payback Period (PBP), Net Present Value (NPV), Profitability Index (PI), and Internal Rate Of return (IRR)

[2]Agyapong, Daniel. Department of Management Studies, School of Business. University of Cape Coast, Cape Coast, Ghana. International Journal of Business and Management Vol.5, No. 12; December 2010. http://www.ccsenet.org/journal/index.php/ijbm/article/viewFile/8507/6351
Snodgrass & Biggs [1996] argued that finally, the growth of MSMEs boosts employment more than the growth of large firms because MSMEs are more labour intensive
Beck & Demirguc-Kunt,[2004] commented that So subsidizing MSMEs may help reduce poverty

[3]kolonial_kuh_perdata.pdf
http://hukum.unsrat.ac.id/uu/kolonial_kuh_perdata.pdf

The actors of MSMEs which we focused is adults. Based on Civil Code Article 330, "There are adults who have not attained the age they even twenty-one years, and the first was married". Here means that the adult is when someone has twenty-one full year or married. If not yet twenty-one full year but already married adults have said, though divorced still said to be an adult and will not return to a state of 'immature' (KUH Perdata)[3].

2. Literature

2.1. Capital budgeting

Capital budgeting is the process of evaluating specific investment decisions. It is the whole process of analyzing projects and deciding which ones to include in the capital budget. It involves large expenditures. The results of capital budgeting decisions continue for many years. Capital budgeting decisions define the firm's strategic directions, which is very important to firm's future. Several capital budgeting decision rules have been created to reduce the probability that incorrect capital budgeting decisions will be made.

2.2. Payback period

In choosing a capital budgeting decision tool, academics recommend net present value (NPV) as the primary tool followed by the internal rate of return (IRR) measure. The payback period method is also presented but is treated as a decision aid. As a decision tool, the payback period measure is typically regarded as intuitively appealing but with little practical relevance due to its shortcomings. The payback method has been criticized in the literature for its failure to consider the time value of money and also for ignoring cash flows that occur after the payback period [5,6].

According to Avery, Flaherty and Rhee can be conclude that while the payback period may be less sophisticated, its continued use suggests that managers find some value in its results. We suggest that the payback period maybe a more useful measure with some augmentation or fortification. A method for calculating a payback period is demonstrated, with cash flows are growing at a constant rate. At the payback period describes the time required for the initial investment return of an investment may get over all or certain period of time required to recover the initial Investments of a project by using in flow cash generated by the project. Calculation for the payback period which has the same pattern from year to year following the cash inflow constant growth:

$$Payback\ period = \frac{initial\ investment}{cash\ in\ flow} \tag{1}$$

Source: (Syamsudin: 2013)

Calculation of the payback period with non - constant growth in Cash in flow. If the relationship is not the same cash flow growth from year to year, then, is done with the calculation of cash inflow needs to be done one by one. Avery, Flaherty and Rhee argued that If the rate of change in this growth rate is not entirely erratic, it Becomes mathematically reasonable to establish an effective overall growth rate to use in establishing the payback period. Suppose that the cash flows occur evenly over the periods. The payback period is a Future Value Interest Factor for an Annuity (FVIFA). The study was also extended to incorporate discounted cash flows to adjust for the time value of money. In this situation and with exponential cash flow growth, the discount rate acted like a negative growth rate in determining the payback period.

2.3. Net present value

Net Present value can be defined from cash flow in the future, disconto with cost of capital which suitable, then substracted with beginning of project. Project with NPV positive will be accepted, and project with NPV negative will be rejected. If two project which mutually exclusive, NPV which has higher value will be accepted. This method use cash flow and time value of money. NPV is the net present value which is the sum of all the future cash flows to determine the present value. Cash flows include the both inflows and outflows that are discounted at a rate. It is calculated as:

NPV = Cash inflows – Cash outflows or expenditure of Investment. Arshad argued that the net present value (NPV) of a project is the sum of the present value of all its cash flows, both inflows and outflows, discounted at a rate consistent with the project's risk.

$$NPV = -I_0 + \sum_{\tau=n}^{n=1} \frac{CF_\tau}{(1+r)^\tau} \tag{2}$$

Source: (Shapiro: 2005)

Where is:
$CF\tau$ = Cash in flow in the year τ
r = Discounted rate (cost of capital)
I_0 = Initial investment
τ = Period
n = Sum of period

2.4. Internal rate of return (IRR)

Dechyar Argue IRR is the discount rate that is set on the present value of a project is equal to the value of the investment. In other words, the IRR is the discount rate that results in NPV to zero. NPV and IRR methods similar that have accepted or rejected decisions except when the project is mutually exclusive IRR calculation must be done by trial and error until eventually obtained a discount rate which will cause the NPV equal to zero. The determination of the

IRR for a pattern in the form of cash flow easier than the cash flow pattern that is not the same from year to year (mixed stream of flow) [3]. To obtain IRR to figures, determining with interpolation approach, so the PV of investment - PV of cash inflow equal to 0. Evans and Forbes argue IRR management view more cognitively efficient as a measure of comparison. In a comparison of past studies, it is seen that managers are moving toward the NPV as a method of choice, but never to the level of IRR [7].

On another side it was that the NPV and IRR describe Differ in two ways. First, the NPV assumes that cash inflows are reinvested at the required rate of return, whereas the IRR assumes that cash inflows are reinvested at the IRR computed. To reinvest at the required rate of return is more realistic and provide reliable results when Comparing mutually exclusive projects. Second profitability measures NPV and IRR in an absolute manner in relative measures Manner [8].

On the other place it was argued that in some Also cases IRR is better and in some cases the NPV is better but concluded with the superiority of NPV. For independent project NPV and IRR Reaches the same result, if projects are mutually exclusive and different in size than the NPV is best Because It selects the project that maximizes the value. At conclusion it was said that the NPV is better than IRR [9].

2.5. MMSMEs (Micro, Small and Medium Enterprises)

Definition of Micro and Medium Enterprises (MMSMEs) in accordance with Law No. 20 of 2008 are:

a. Micro is a productive enterprise owned by individuals and or entities that meet the individual individuals who meet the criteria as set forth in Micro law. (Act No. 20, 2008, Micro, Small and Medium Enterprises, Art 6, paragraph 2)
b. Small businesses are productive economic activities are independent, which is done by the individual or business entity that is not a subsidiary or affiliate or branch of the company not owned, controlled, or be directly or indirectly part of a medium or large businesses meet the criteria which small business referred to in this Act (Act No. 20, 2008, Micro, Small and Medium Enterprises, Art 6, paragraph 2)
c. Medium is economically productive activities undertaken by individuals or entities that are note subsidiary or branch of companies owned, controlled, or be a part either directly or indirectly with small business or large enterprise with total net assets or annual sales revenue as stipulated in the Act. (Act No. 20, 2008, Micro small and Medium Enterprises, Art 1, paragraph 3)

2.6. Andragogy learning methods

Andragogy is derived from the Greek aner meaning adults, and agogus which means lead. Another term that is often used as a comparison is pedagogy paid which is concluded of word meaning children and agogus means to lead. Then pedagogy literally means the art and science of teaching children. Therefore, pedagogy means the art or science of teaching children that if they used the term pedagogy for adults is not that right, because it implies the contrary. Meanwhile, according to [10], that pedagogy (better known as androgogi, the science lead or educate people; aner, andros = man; agoo = lead, educate) is the science of the human form; which form the whole personality, so that it is capable of independently in social. In psychological environment, by knowing the needs of adults as participants in education or training, it will be able to easily and can be determined learning conditions must be created, the content of what material should be given, strategies, techniques and methods are suitable. According [11] are important in adult education is: What students learn, not what is thought from the teacher. That is, the end result is assessed is what is obtained from a meeting adult education or training, not what conducted teacher or trainer or speaker at the meeting.

The concept of andragogy learning:

a. The concept of self-educator
   Is a natural thing when in a maturing process, a person will change depending on the nature towards having the ability to drive yourself, but each individual has a different rhythm and also the dimensions of different life anyway. And the teachers are responsible for promoting and maintain the continuity of such changes. In general, adults are more psychologically require directing themselves, although in certain circumstances they are dependent.
b. The function of experience Students
   Here there is a presumption that the person making such a tool development shelter (reservoir) experience which will then be a very useful source of learning for themselves would also for others. Anyway someone will catch better sense of what is experienced than when they acquire passively, therefore, the main delivery technique which is experiments, experiments in laboratory experiments, discussion, problem solving, simulation exercises, and field practice.
c. Readiness Learning
   Someone will be ready to learn something if he felt the need to do so because by studying something that he can solve the problem or can complete daily duties well. Educators function here is to create conditions, prepare the tools and procedures to help them discover what they need to know. Thus the study program must be prepared in accordance with the actual needs of their life and sequences presentation must be adapted to the readiness of learners.
d. Orientation Learning
   Learners realize that education is a process improvement self-development capability to develop the full potential in his life. They want to be able to apply knowledge and skills gained today to achieve a better life or more effective for tomorrow. Based on the foregoing, learning should be arranged in the direction of grouping

capability development. Thus orientation centred learning activities. In other words, how to prepare a lesson based inability what or how the appearance that it is expected that there is on the learner.

3. Methods

This research method uses literature-based research study or book study conducted by analyzing and exploring the various theories and praxis through the literature ranging from books, scientific journals, dissertations, e-books, the internet and a variety of data and facts that exist in society, especially Capita Budgeting and Andragogy Learning methods.

This study is a descriptive-qualitative research which states "qualitative methodology" as a research procedure that produces descriptive data in the form of words written or spoken of people and behaviours that can be observed. Qualitative research should consider qualitative methodology itself.

4. Discussion

4.1 Financial inclusion

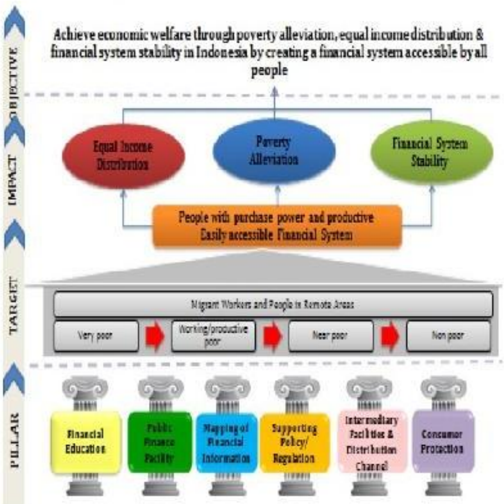

Fig. 1. Six pillars of financials inclusion strategy

4.1. Effective learning strategies capital budgeting approach uses andragogy

In the National Strategy for Inclusive Finance, inclusive finance is defined as: The right of every person to have access and full service financial institution in a timely, convenient, informative, and affordable cost, with full respect for the dignity and status. Financial services are available to all segments of society, with special attention to the poor, the poor productive, migrant workers, and residents in remote areas. One of the fundamentals is giving financial education.

Poverty is a crucial issue in Indonesia. Although poverty has been the subject of scientific research for a long time with the theme or label diverse, but if further explored most of the research on poverty conducted scientifically more emphasis on understanding, which is the aspect of "what it is" out of poverty. While efforts to comprehensively in poverty reduction is rarely done although many policy in poverty alleviation has been done. The concept of planning for prevention need to get a different understanding of the prevention concept. Various initiatives have been implemented by ministries or agencies involved in the implementation of the National Strategy for Inclusive Finance. This shows the commitment of the various ministries or agencies to actively seek to implement plans for the future and upcoming programs related to the national strategy of inclusive finance which goal is to eradicate poverty.

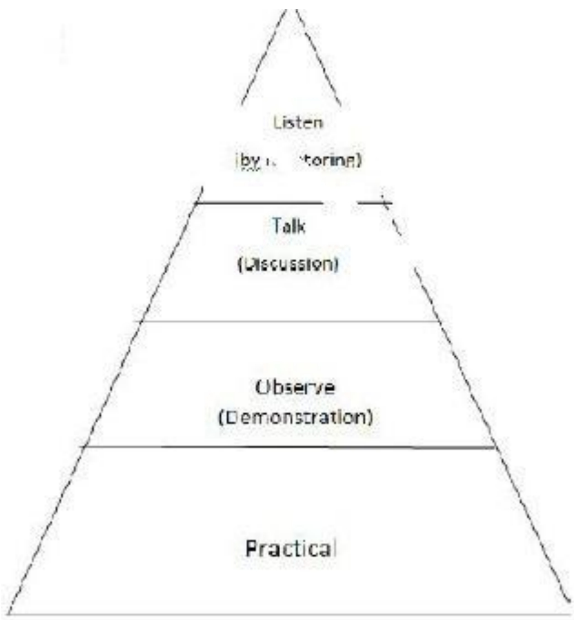

Fig. 2. Source Lunadi (1987)

Learning methods used for adults is with mentoring. There is a tutor who presented and explained in advance. After that there will be a discussion on Capital Budgeting material on case studies in investment decision making often done by the community. In this demonstration study will combine the ability to see, hear and speak as well as practical exercises.

Many of the criticisms of andragogy stem from the lack of empirical evidence to support the assumptions [12]. Andragogy has been called a “theory, method, technique, or set of assumptions” [13]. Hartree was critical of andragogy, stating that it failed to encompass an underlying epistemological base. He also questioned whether adult learning was truly different from child learning. Knowles viewed his assumptions of andragogy as a “system of concepts” rather than a theory, and the influence of many educational theorists is evident in these assumptions [14].

[14] acknowledged the work of Eduard Lindeman as having a profound influence on his approach to adult education. Lindeman envisioned learning as a long life process rather than simply a means to an end [15]. He believed education was based on situations defined by learner needs versus predetermined curriculums because learners came to understand the meaning of education while they were actually “engaged in the process” of education [15]. He also purported that small group discussion was a central component to quality adult education and that adult learners attended classes voluntarily [15]. Lindeman’s influence is evident in Knowles‟ andragogical assumptions as well as the process outlined for implementation of them.

To get maximum results in the learning process of capital budgeting, required the application of the principles of adult learning. The implications are as follows: The experience, thought and recognition of the fact. Community MSMEs in tourism village Tingkir Lor 8 of 10 MSMEs do not know how to analysis if they want to invest in the purchase of fixed assets.

Efforts towards the application of the theory of andragogy in adult education activities have tested by several experts, is based on four basic assumptions such adults have described above, namely: self-concept, the accumulation of experience, readiness to learn, and orientation learning. The basic assumptions outlined in the planning of educational activities with the following steps:

1. *Creating a structure for joint planning*.
   In the village which consist MSMEs also consists of a range of village government and community leaders. So that the learning structure of the andragogy methods could be made.
2. *Creating a learning climate* that is conducive to adult learning. Which meant climate is provident a convenient infrastructure. So that the facilitator is to help no govern or judge. Because MSMEs in the village of Lor Tingkir 19-40 years old and the majority fall into the category of adults
3. *Diagnosis own* learning needed. SMEs in deciding the investment of fixed assets is usually based on the desire and opportunity. Occasion in question here is if its income surplus. So that they do not use the right tools in the future analysis. Not used for long-term analysis.
4. *Formulation purposes*. In determining the formulation of learning objectives Capita Budgeting, the MSMEs need to understand the risks or failure of what they've experienced while using less precise investment analysis. In addition, the affirmation of the fact also very important. Therefore, the formulation of objectives should be drawn together, the facilitator with her mentee.
5. *Develop a general model*. Divide the participants into groups to facilitate the discussion and practical exercises.
6. *Planning the evaluation*. As in the diagnosis of needs, the evaluation should in line with the principles of adult, i.e. as a person and can be self-directed. Then the evaluation is the evaluation itself or evaluation along with. So that it can continue to be evaluated whether the learning done has been effective or not. As a way to facilitate the delivery of training materials.

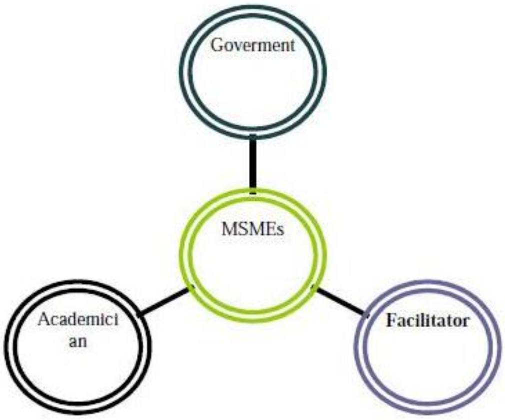

Fig. 3. Structure for joint planning.

Measures of capital budgeting decision is divided into four steps:

1. Preparation of the net cash flow

   In capital budgeting, pay attention to the net cash flow equation can be write:

$$\text{Net cash} = \text{Net cash} + \text{depreciable cost} \qquad (3)$$

   Calculate depreciation method use straight-line

$$\text{Depreciable Cost} = \frac{\text{Cost} - \text{residual value}}{\text{Useful life}} \qquad (4)$$

2. Calculate initial fixed asset investment
   With the following calculating the cost of depreciation of fixed asset per period by straight-line method depreciation uses:
   a. Calculate the lifespan of fixed assets, with depreciation cost of usage straight-line method
   b. Calculate the price of books old machine, purchase price of the old machine less the future usage
   c. Calculate tax, the tax burden is divided into long term capital gains and ordinary capital gains imposed if the situation as following:

   Long term capital gains, if sales over the book value of assets obtained from equation:

$$= [(\text{selling price of the old machine}) - (\text{purchase price of the old machine})] \times 10\% \qquad (5)$$

According to constitution number 49 in 2009 goods value added tax and service and sales tax of luxurious goods. 16 d clause rate of value added tax remain to 10% regulation in Indonesia.

Ordinary capital budgeting, above the purchase price if the sale of asset.

= [(selling price of the old machine)-(book value of assets)] x 10% (6)

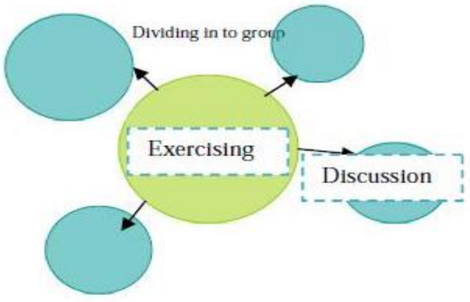

Fig. 4. Developing general model.

The picture above explain us the step of andragogy learning for MSMe users in society. Starting from make a group and dividing all the members. Making discussion and exercising to deepen the knowledge of the student about capital budgeting.

d. Proceed purchase the old engine will describe initial investment obtain equation:

= [(selling price of the old machine)-(text time)] (7)

e. Net cash flow calculate the purchase price

= total initial investment – proceed purchase of fixed assets (8)

3. Comparing alternative capital budgeting, three dimension capital budgeting:
   a. Techniques – Payback Period (PP)
   Calculating the payback period is presented with presented with assumption of constant growth in cash inflow with and without discounting This assumes that cash flow is expected to grow at a constant rate. Using the same constant growth assumption and the same geometric progression as in other models, we show that the payback period is simply the Future Value Interest Factor for an Annuity (FVIFA) capturing the primary factors of I and g1 [16].
   FVIVA with interest rate g for T period, equation can be write:

   FVIFA = (g % T) = 1 (9)

   b. Net present value
   This approach for implementation process as follows:
   - Determine rate adjustment with level of inflation
   - MSMES must know BI rate in Indonesia as a reference if funding comes from bank loans, the loan interest rate must be above BI rate.
   - Parameter rate for present value, if dimensionless year, the dimensionless month year all if it must be converted to year.
   - Determine the present value of cash flows, including inflows and outflows are discounted to the capital cost of the project.
   - The number of these discounted cash flow, defined as the NPV project.
   - If the NPV is positive, then the project should be accepted, while if the NPV is negative, then the project should be rejected.
   - If the end result is positive, choose one of the mutually exclusive considerations
   c. IRR
   Calculation for the cash flow is not the same from year to year, can be done at the following steps:
   - Calculate the average annual cash flow
   - Divide the initial investment by the averaging to determine the estimated payback period
   - Using the present value interest factor tables annuity (PVIFA I, n) and the line of the project's life (n), the numbers look the same or nearly same.]this result will be the estimated IRR
   - Adjust IRR obtained in the third step above to increase or decrease. If the cash flow derived from the initial investment is too small then it should raise the discount rate to be greater, and otherwise it should reduce the discount
   - Calculate the net present value of the discount rate
   - If the result is greater than zero
   - To check the truth, then the NPV calculated using a discount rate that is new, to finally obtain a discount rate that is positive or negative.
4. Decision
   The outcome depends on the forte of each capital budgeting techniques as follows:
   - The payback period of the project reflects the liquidity level (speed closed capital invested), and thus the risk considerations to be able to close the back investment with the cash flow generated by the investment [3].
   - If the IRR of cash flow can be reinvested at the discount rate obtained by the IRR technique will provide real results, and if not so used technique NPV [3].
   - Based on steps above measures, it is expected that MSMEs can understand Capita analysis Budgeting easily and can implemented directly
5. Case study

This case is one of investment analysing that can be used by the actors of MSMEs.

Table 1
Fotocopy Jaya Baya 2009-2013

Year	Net Income	Depreciation	Proceed
1	1.440.000	9.572.000	11.012.000
2	3.690.000	10.529.000	14.219.000
3	6.003.000	11.582.604	17.585.604
4	6.995.700	10.433.916	17.429.616
5	6.161.130	9.380.952	15.542.082
			75.788.302

Investment analysis

Payback Period (PP) Total Investment: USD 61.5 million
Proceed year-1: Rp 11.012 million
Time: Rp 50.488 million
Proceed year-2: Rp 14.219 million
Time: Rp 36.269 million
Proceed year-3: Rp 17,585,604
Time: Rp 18,683,396
Proceed year-4: Rp 17,429,616
Time: USD 1.25378 million

5th year is calculated as follows: (1.25378 million / 15,542,082) x 12 = 0968. The shorter the payback period of investment is 5 years of age (4 years, 1 month <5 years), so that this investment program may be accepted or implemented.

Method of Accounting Rate of Return (ARR) ARR = ((24,289,830 / 61,500,000) X 100%) = 39.495%

ARR> 18% then the program

This investment is acceptable or workable

Table 2
Net present value

Year	Proceed	DF (18%)	PV Proceed
1	11.012.000	0.847746	9.335.378
2	14.219.000	0.718180	10.211.801
3	17.585.604	0.608630	10.703.126
4	17.429.616	0.515790	8.990.021
5	15.542.082	0.437110	6.793.599
Book value	10.000.000	0.437110	4.371.100
		PV from Proceed	75.788.302
		PV from Outlay	61.500.000
		NPV	14.288.302

The method of Net Present Value (NPV)
NPV is positive (75.788,302 – 61.5 million = 14.288.302) then the program

This investment can be implemented.

Method Internal Rate of Return (IRR)

NPV is positive (75,788,302 - 61.5 million = 14,288,302) then the program.

From the calculation, where the IRR is greater than the rate of return (38%> 18%) then this investment proposal could be implemented. From the case studies above, matters relating to the accounting aspects are: Affect the state of balance of SMEs, as it will add to the debt to the bank, adding equipment, and reduce cash.

Affect the state of the income statement of SMEs, as it will increase costs and increase revenues due to the activity of a new copy machine. Therefore, the activity of the new engine will increase revenue that will improve performance MSMEs.

Table 3
Internal Rate of Return

Year	Proceed	DF 20%	PV	DF 40%	PV
1	11.012.000	0.833330	9.176.630	0.71429	7.865.762
2	14.219.000	0.694440	9.874.242	0.51020	7.254.534
3	17.585.604	0.557870	10.176.789	0.36443	6.408.722
4	17.429.616	0.488225	8.509.574	0.26031	4.537.103
5	15.542.082	0.401880	6.246.052	0.18593	2.889.739
Book value	10.000.000	0.334900	3.349.000	0.13281	1.328.100
		PV Proceed	47.332.287	PV Proceed	30.283.950
		PV Outlay	61.500.000	PV Outlay	61.500.000
		NPV	-14.167.713	NPV	-31.216.040

$$IRR = \frac{20\% - 14.167.713\ (40\% - 20\%)}{-31.216.040 - (-14.167.713)} = 38\%$$

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5. Conclusion

Andragogy learning methods can be applied for actors MSMEs which has a majority of the adult population aged. An understanding of capital budgeting techniques should be taught through the mentoring process and the analysis of case planning the purchase and investment of fixed assets. Making investment decisions based on the calculation four steps: Preparation of the net cash flow (net cash), calculate the initial fixed asset investment, comparing alternative techniques of capital budgeting, and decision-making. MSMEs are expected to be able to determine whether the asset purchase decisions are.

6. Recommendations

This study is expected to be a recommendation for local governments to develop MSMEs in Salatiga, through learning-learning Andragogy. Especially in the analysis of investment considerations Capita Budgeting in Fixed Assets.

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