

Identification of the Failure of Waste Bank Enterprises as Undiksha Students' Entrepreneurial Activity Unit

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Abstract--This study aimed to determine the factors that caused the failure of the waste bank business and the dominant factor affecting the failure of the waste bank as part of students' entrepreneurial activity unit of Undiksha. The study used factorial research designs and data collected by questionnaire, analyzed by factor analysis through *Statistical Program Social Science (SPSS) 16.0* for windows. The sample in this study were 450 Undiksha students. The results showed that five factors influenced the failure of the waste bank business, namely the saver factor, the executing factor, the collecting factor, the management factor, and the role of the executor. Saving factors, implementing factors, and executor's role factors become the most dominant factors that have the highest variance explained, respectively 28.793%, 21.459%, and 13.790%, meaning that the total value of variance explained from the three overall factors can influence the failure of the waste bank business as a unit of students' entrepreneurship activities of Undiksha by 64,042%. This research implied that more intensive socialization should be carried out so that the existence of a waste bank is better known; therefore, the savers can save their waste.

Keywords: waste bank, entrepreneurship, students

I. Introduction

The limited opportunities of working in the government sector for tertiary education graduates turned them to the private sector. With limited opportunities in the private sector, entrepreneurship is the only big opportunity. Higher education as one of the educational institutions should change the mindset of students who are not only job seekers, but also as job creators. Therefore, it is necessary to instill an entrepreneurial spirit to students by providing entrepreneurial knowledge, both by including entrepreneurship education in the core curriculum and by providing entrepreneurship training in order to foster entrepreneurial spirit for students.

The Directorate General of Higher Education has launched a program called the Student Entrepreneurship Program (PMW) to be implemented and developed by universities. The garbage bank is the answer to the

opportunity for students to be able to build independent businesses to help the community to sort waste. This statement is in line with the Regulation of the Minister of Environment of the Republic of Indonesia Number 13 of 2012 concerning Guidelines for the Implementation of Reduce, Reuse, and Recycle through Waste Banks. Waste Bank indirectly help the community to sort waste by taking inorganic waste as savings. The concept of a garbage bank is where savers must save disaggregated waste.

The implementation of the waste bank actually contains quite high social-economic potential because the activities of the waste bank can provide tangible output for the community in employment opportunities, additional income for both the employees and the community of the savers (customers) of the waste bank, and most importantly well-maintained environment which is free from waste, malaria, other sources of disease, free from flooding, and waste volume pressure on the landfill decreases so that the life of the landfill can be longer.

The purpose of building a waste bank is not focused on the waste bank itself, but on the strategy in developing and building community awareness to manage their waste by developing a people's economy in the form of selling waste products and developing creative and innovative craftsmanship in the form of utilizing waste into handicrafts, composting, business ornamental plants, and other benefits that have creative economic value. The creation of this situation is expected to not only develop a strong people's economy but also the development of a clean and green environment to create a healthy society.

However, not all students' interest in participating in PMW was accompanied by success in running their business until monitoring ended. Failures are still experienced by students in running the PMW business. Considering these problems, the authors felt the need to conduct a research on the factors that cause failure of the garbage bank business, the researcher took the title "Identification of the Failure of Waste Bank Enterprises as Undiksha Students' Entrepreneurial Activity Unit"

II. REVIEW OF LITERATURE

A. Waste Bank

Waste bank is a place for sorting and collecting waste that can be recycled and / or reused that has economic value (Permen LH Number 13 of 2012 Article 1 paragraph 2). Residential waste management that implements a system of depositing some rubbish to an agent that is formed and agreed with the local community to collect waste that has economic value is saved up to a certain amount and time exchanged with a certain amount of money (Sucipto, 2004: 204). This is one way to change social behavior so people do not throw garbage into rivers, sewers, and burn rubbish by implementing a 3R strategy (Reuse, Reduce, and Recycle), but this concept does not work well because the image is embedded in the community that garbage is worthless, useless, with no economic value so the easiest solution is to throw it away or as long as it's not in their environment. This image or stigma is believed to be changed by turning waste into a blessing by efforts to develop a people's economy through the development of a waste bank.

B. Aim and Economic Opportunity of the Waste Bank

The purpose of building a waste bank is not actually a waste bank itself, but is a strategy in developing and building community care so that they can be friends with waste by developing a people's economy in the form of selling waste products and developing creative and innovative craftsmanship in the form of utilizing waste into handicrafts, making compost, businesses ornamental plants, and other benefits that have creative economic value. The creation of this situation is expected to not only develop a strong people's economy but also the development of a clean and green environment to create a healthy society.

The implementation of the waste bank actually contains quite high social-economic potential because the activities of the waste bank can provide tangible output for the community in employment opportunities, additional income for both the employees and the community of the savers (customers) of the waste bank, and most importantly well-maintained environment which is free from waste, malaria, other sources of disease, free from flooding, and waste volume pressure on the landfill decreases so that the life of the landfill can be longer.

C. Students' Entrepreneurship Program (PMW)

Student Entrepreneurship Program (PMW), is part of an education strategy in Higher Education intended to facilitate students who have an interest in entrepreneurship and through business based on science, technology, and art. The facilities provided include entrepreneurship education and training, internships, business plans, capital support, and business assistance. This program is expected to be able to change the mindset of a job seeker into a job creator and become a tough and successful entrepreneur in facing global competition. Ganesha University of Education (Undiksha) is

one of the State Universities that organizes the DIKTI Program. Undiksha developed the Entrepreneurial Student Program which is managed directly by the Undiksha Working Group (POKJA) under the Coordination of Student Affairs. The Student Entrepreneurship Program (PMW) in its implementation has a background, objectives, benefits for students and requirements for students that are met in the submission of PMW.

D. Entrepreneurship Failures

Zimmerer (in Suryana, 2001), suggested several factors that cause entrepreneurs to fail in running their new business, which are as follows.

- 1) Managerial incompetence. Inept or inadequate ability and knowledge to manage a business is a major contributing factor that makes a company less successful.
- 2) Lack of experience in technical abilities, ability to visualize businesses, the ability to coordinate, the skills to manage human resources, as well as the ability to integrate company operations.
- 3) Lack of financial control. Maintenance of cash flow is a significant part of the success of companies; therefore, expenses and receipts must be managed carefully. Mistakes in maintaining cash flow will hamper the company's operations resulting in the company not going well.
- 4) Fail in planning. Planning is the starting point of an activity, once it fails in planning it will experience difficulties in implementation. Failure to implement a plan is usually due to a plan that has been made based on the experience of others or an idealist that has never been applied. This failure occurred because he did not know at all the conditions or the field of business he was in
- 5) Inadequate location. A strategic business location is a factor that determines business success. Non-strategic locations can make it difficult for companies to operate because they are less efficient. Business premises and location determine the smooth running of the business. One of choosing, building or opening a place of business that hopefully can enlarge the business foundered because of the error. The place of business should be examined for its feasibility such as culture, character, social strata, income, tastes, security of the surrounding community.
- 6) Lack of equipment supervision. Supervision is closely related to efficiency and effectiveness. Lack of supervision can result in the use of inefficient and ineffective tools. The ability to procure, maintain, supervise raw materials and equipment is very important. Because if you do not have expertise in this field will make operational costs higher and losses will occur.
- 7) A lack of earnest attitude in trying. A half-attitude toward business will result in the business being made unstable and fail. With a half-hearted attitude, the

possibility of failure will be great. The success of an entrepreneur can be obtained if he can be confident and always optimistic about running his business.

- 8) Inability to make entrepreneurial changes/transition. Entrepreneurs who are not ready to face and make changes, then there is no guarantee to become successful entrepreneurs. Success in entrepreneurship can only be obtained if you dare to make changes and can make the transition every time.

III. RESEARCH METHODOLOGY

This research was conducted to determine the factors that influence the failure of the garbage bank as an Undiksha student entrepreneurial activity unit and to know the dominant factors that influence the failure. The study used factorial research designs. Data in this study were analyzed using factor analysis. Factors influencing the failure of a waste bank as a unit of student entrepreneurial activity are classified as : (1) competent in managerial, (2) experience, (3) financial, (4) planning, (5) location, (6) supervision of equipment, (7) attitude, and (8) transition / transition.

Table 1. Operational Variable

Variable	Dimension	Indicator(s)
The failure of waste bank as an entrepreneur unit	Managerial Competence	1. Ability and knowledge to manage a business
	Experience	1. The ability to visualize businesses 2. The ability to coordinate 3. The skills to manage human resources 4. The ability to integrate company operations
	Financial	1. The ability to arrange expense 2. The ability to arrange receipt
	Planning	1. The ability to plan 2. The ability to know the business field
	Location	1. Analysis regarding the location of the business to be run
	Supervision	1. Procurement of equipment 2. Equipment maintenance
	Attitude	1. Confident 2. Optimistic
	Transition	1. The ability to make change 2. The ability to take risk

Source: (Suryana, 2001 and Suryana & Bayu, 2011)

Population is the whole object that is the target of research, whether they are all members, groups of people, events or objects that have been formulated and have the same characteristics or characteristics (Sanusi, 2003). The sample in this study were Undiksha students consisting of eight (8) faculties. Each faculty is proportionally sampled according to the number of students in each faculty.

The data collection method used in this study is a questionnaire. The questionnaire is a method of data collection done by giving a list of statements to the respondents to be answered, especially relating to the factors that influence the failure of the waste bank as a unit of student entrepreneurship development.

Following the formulation of the problem, research objectives, and types of data collected, the analysis of the data used in this study is factor analysis. According to Suliyanto (2005) factor analysis consists of several stages, namely: 1) making a matrix, 2) determining the number of

factors, 3) factor rotation, 4) factor interpretation, and 5) determining the accuracy of the model.

IV. FINDINGS AND DISCUSSION

A. FINDINGS

Factor analysis is used to analyze conceptual hypotheses by entering all the total values of each dimension or factor against the total score of items from each dimension. The Kaiser-Meyer-Olkin (KMO) coefficient is used to measure the adequacy of the sample in the study. Based on the results of testing with KMO of 0.604, thus the number of KMO Measure of Sampling Adequacy is greater than 0.50, meaning that the right factor analysis is used to analyze the data obtained. The results of the Barlett's Test of Sphericity show significant results at 0.034 meaning that the correlation matrix has a significant correlation with a number of variables because the significant value is less than 0.05. For more details about the value of KMO can be seen in Table 2.

Table 2. Result for KMO testing and Barlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.604
Bartlett's Test of Sphericity Approx. Chi-Square	40.173
Df	28
Sig.	.034

On the results of the Statistical Program for Social Science (SPSS) 16.0 for Windows (Anti-image Matrices), it is known that the factors or variables that are feasible to be used in factor analysis are factors that have an MSA value > 0.50. If there are factors that have an MSA value < 0.50, then these factors are excluded so that a factor analysis can be done. MSA value of each factor can be seen in the following Table 3.

Table 3. Value of Measure of Sampling Adequacy (MSA)

Factors	MSA value	Decision
Managerial Competence	0,60 > 0,50	Factor can be analyzed
Experience	0,63 > 0,50	Factor can be analyzed
Financial	0,53 > 0,50	Factor can be analyzed
Planning	0,68 > 0,50	Factor can be analyzed
Location	0,57 > 0,50	Factor can be analyzed
Supervision	0,56 > 0,50	Factor can be analyzed
Attitude	0,61 > 0,50	Factor can be analyzed
Transition	0,56 > 0,50	Factor can be analyzed

Based on Table 3, it can be seen that the factors used in factor analysis are (1) competent in managerial, (2) experience, (3) financial, (4) planning, (5) location, (6) supervision, (7) attitude, and (8) change/ transition. The percentage value of each factor determined the number of

factors that influence the failure of a waste bank as an Undiksha student entrepreneurial activity unit. The value of the Total Variance Explained as the basis for knowing the percentage of the eight factors analyzed. The results of factor analysis through SPSS show the percentage of each factor can be seen in the following Table 4.

Table 4. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Managerial Competence	2.303	28.793	28.793	2.303	28.793	28.793
Experience	1.717	21.459	50.252	1.717	21.459	50.252
Financial	1.103	13.790	64.042	1.103	13.790	64.042
Planning	.866	10.824	74.867			
Location	.724	9.049	83.915			
Supervision	.523	6.534	90.450			
Attitude	.416	5.206	95.655			
Transition	.348	4.345	100.000			

Table 4 shows that the managerial competent factor has an eigenvalue of 2,303 with a variant value of 28,793%, the experience factor has an eigenvalue of 1,717 with a variant value of 21,459%, financial factors have an eigenvalue of 1,103 with a variant value of 13,790%. While the planning factor has an eigenvalue of 0.866 with a variance value of 10.824%, a location factor has an eigenvalue of 0.724 with a variance value of 9.049%, a supervision factor has an eigenvalue of 0.523 with a variance value of 6.534%, an attitude factor has an

eigenvalue of 0.416 with a variant value of 5.206%, and a factor of the change / transition has an eigenvalue of 0.348 with a variant value of 4.345%. So that all eight of these factors affect the failure of the garbage bank as an Undiksha student entrepreneurial activity unit. Factor extraction can explain the failure of a waste bank as an Undiksha student entrepreneurial activity unit. Factor extraction can be explained by the total percentage of each main factor. The main factors are competent managerial factors, experience factors, and financial factors that have an eigenvalue parameter > 1.

To find out the distribution of dimensions that have not been rotated into the factors that have been formed, it can be seen in the SPSS 16.0 (Rotated Component Matrix) output.

Factors that can influence the failure of a waste bank as a unit of Undiksha student entrepreneurship activities, can be seen in Table 5 below.

Table 5. Factors Causing the Failure of the Waste Bank Business

Faktor	Eigenvalue	Varianced Explained (%)	Factor Loading
Managerial Competence	2.303	28.793	.580
Experience	1.717	21.459	.508
Financial	1.103	13.790	.814
Planning	.866	10.824	.532
Location	.724	9.049	.695
Supervision	.523	6.534	.772
Attitude	.416	5.206	.695
Transition	.348	4.345	.825

From Table 5, it can be explained that the factors that have an eigenvalue > 1 are *managerial competence*, *experience*, and *financial*, the total value of varianced explained from all three factors can explain 64.042%, thus 64.042% of all factors, can be explained by the third formed factor. *Managerial competence* has varied explained 28,793%, meaning that *managerial competence* can influence the failure of the garbage bank as a unit of Undiksha student entrepreneurial activity 28.793%. *Experience* has variated explained 21,459%, meaning that experience can influence the failure of the garbage bank as

an Undiksha student entrepreneurial activity unit of 21,459%. *Financial* has variated explained 13.790%, meaning that *Finance* can influence the failure of the garbage bank as an Undiksha student entrepreneurial activity unit of 13.790%.

Determining the name of the factors that have been formed for each factor is subjective, sometimes the factor that has the highest loading factor value is used to name the factor. To see the value of the loading factor, see Table 6 below.

Table 6. Rotated Component Matrix
Rotated Component Matrixa

	Component		
	1	2	3
Managerial Competence	.580	.215	-.698
Experience	-.558	.508	.425
Financial	-.119	.814	-.040
Planning	-.407	.254	.532
Location	-.180	.695	-.091
Supervision	.230	.124	.772
Attitude	.698	.421	-.173
Transition	.825	-.051	.049

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Based on Table 6 above, it can be grouped into 3 (three) factors. Factor 1 (one) was formed from managerial competent factors (X1) with a loading factor of 0.580, attitude factor (X7) with a loading factor of 0.698, and a change/transition factor (X8) with a loading factor of 0.825. Factor 2 (two) is formed from the experience factor (X2) with a loading factor of 0.508 and a financial factor (X3)

with a loading factor of 0.814 and a location factor (X5) with a loading factor of 0.695. Factor 3 (three) is formed from the planning factor (X4) with a loading factor of 0.532 and supervision (X6) with a loading factor of 0.772.

Based on hypothesis testing, determining the dimension or the most dominant factor influencing the waste bank as an Undiksha student entrepreneurial activity

unit used the varimax coefficient parameter approaching 1 or close to -1. A value close to 1 starts with a value of 0.5 while a value close to -1 starts with -0.5. In more detail, the

results of a summary of the rotation of the factor matrix containing the varimax rotation values can be seen in Table 7 below.

Table 7. Matrix Rotation of Factors Analysis Result

Dimension/Factors	Varimax Rotation (%)		
	(1)	(2)	(3)
Managerial Competence	28,793	-	-
Experience	-	21,459	-
Financial	-	13,790	-

Based on Table 7, the most dominant factor influencing the failure of the garbage bank as an Undiksha student entrepreneurial activity unit is a managerial competent factor with a varimax rotation value of 28.793%. This means that the most dominant clarity of the dimensions or factors of failure of the waste bank as an Undiksha student entrepreneurial activity unit is managerial competence of 28.793%, the experience factor with a varimax rotation value of 21.459% and the financial factor with a varimax rotation value of 13.790%.

B. Discussion

The failure of the garbage bank as an Undiksha student entrepreneurial activity unit is influenced by factors of managerial competence, experience, finance, planning, location, supervision, attitude, and change/transition. The managerial, experience and financial competency factors are the most dominant factors affecting the failure of the garbage bank as an Undiksha student entrepreneurial activity unit. They are the most dominant compared to other factors because managerial competence does not only cover managing the business but the ability and knowledge to manage existing human resources to achieve success in a business is a necessity. Therefore, this is the major causative factor that makes a company less successful. Students as managers of waste banks have the ability in terms of entrepreneurial and financial knowledge. Hence, theoretically, they have no problems, which is evident since they had succeeded in designing the waste bank activities properly as shown in the following figure.

On the other hand, the waste bank is less successful indicated by the asynchronous management time in running the business. For example, when students or the public wanted to save their waste, the garbage bank manager was not available. Under these conditions, the savers who want to save their trash are not served which will lead them to save their waste with other waste banks or they will sell their waste through scavengers. The results of this study are in line with Suryana (2001), being a successful entrepreneur requires having skills, abilities or competencies.

The experience factor is the basis for running a business where the success of a business activity must be based on adequate experience. The failure is due to the lack of experience from the waste bank manager which is evident in the habit of those who are confused in terms of determining the price of waste. Managers do not understand how to determine the adequate price of waste purchased from students or the community. Therefore, they should determine the price of waste by looking for a comparison of the price of waste set by scavengers. The results of this study are in line with Suryana (2001) quoted from A. Kuriloff, John M. Memphil, Jr. and Douglas Cloud, to achieve the success of a business is not enough to have the skills and abilities alone, but it is important to have a balanced experience.

Similarly, financial factors are the basic competence used in running a business. This factor is dominant compared to other factors not caused by a lack of capital but rather inaccuracy in determining the purchase price of waste obtained from students or the community. When the price of waste purchased from students or the community is too cheap (lower than the price set by scavengers), then students or the community will prefer to sell their waste to scavengers. The lack of accuracy in determining the price of waste will have a direct impact on the purchase that will ultimately hamper the operation of the waste bank, resulting in the waste bank not running smoothly. Thus, they experience limitations and difficulties to make the process of buying waste. A final impact of these problems will make zero banknotes and financial statements. The results of this study are in line with Basrowi (2014), Every business owner must control financial records and reports to determine the financial condition of his business. Entrepreneurs make records only for tax purposes and do not use them as a vital control tool, so companies often fail. An entrepreneur must at least have a basic understanding of accounting and



Figure 1. Waste Bank Activities

finance so that entrepreneurs can get to know what is happening in their business.

Carefully examined, it can be said that this is in accordance with the theory stated by Zimmerer quoted by Suryana, that the factors that influence the failure of an entrepreneur are incompetent in managerial, inexperienced, lack of financial control, failure in planning, inadequate location, lack of equipment supervision, lack of seriousness, and an inability to make the transition.

V. Conclusion

Based on the results of data analysis and discussion, the following conclusions can be drawn.

- 1) Factors that influence the failure of a waste bank as an Undiksha student entrepreneurial activity unit are the managerial competency factor with a variant value of 28.793%, an experience factor with a variant value of 21.459%, a financial factor with a variant value of 13.790%, a planning factor with a variant value 10.824%, location factor with a variance value of 9.049%, supervision factor with a variance value of 6.534%, attitude factor with a variance value of 5.206%, and a transition / transition factor with a variance value of 4.345%.
- 2) The most dominant factor influencing the failure of the garbage bank as an Undiksha student entrepreneurial activity unit is the managerial competent factor with a varimax rotation of 28.793%, an experience factor with a varimax rotation of 21.459% and a financial factor with a varimax rotation of 13.790%.

References

- [1] Arikunto, Suharsimi. 2006. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT Rineka Cipta
- [2] Irianto, Agus. 2004. *Statistik Konsep Dasar dan Aplikasinya*. Jakarta: Prenada Media.
- [3] Peraturan Daerah Provinsi Bali Nomor 5 Tahun 2011 Tentang Pengelolaan Sampah
- [4] Peraturan Gubernur Bali Nomor 97 Tahun 2018 Tentang Pembatasan timbulan Sampah Plastik Sekali Pakai
- [5] Peraturan Menteri Negara Lingkungan Hidup Nomor 13 Tahun 2012 Tentang Pedoman Pelaksanaan *Reduce, Reuse, Dan Recycle* Melalui Bank Sampah.
- [6] Peraturan Pemerintah Republik Indonesia Nomor 81 Tahun 2012 Tentang Pengelolaan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga
- [7] Rivai, Veithzal & Dedy Mulyadi. 2013. *Kepemimpinan dan Perilaku Organisasi*. Jakarta: PT. Raja Grafindo Persada
- [8] Sucipto, Cecep Dani. 2012. *Teknologi Pengolahan Daur Ulang Sampah*. Yogyakarta: Gosyen Publishing
- [9] Sugiyono. 2012. *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung: CV Alfabeta.