



Risk Management of Islamic Crowdfunding Livestock-Based in Indonesia: The Case Study at Ternaknesia Farm Innovation

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Abstract. The aim of the study is to analyze the risk of management at Ternaknesia Farm Innovation as a Fintech. This study uses a qualitative approach with the case study method. This research uses purposive and snowballs sampling to collect data using direct interviews, documentation, and observation. The unit of analysis in this study is the risk management process using a Standards Australia/Standards New Zealand AS/NZS 4360:1999 methods. This study shows that Ternaknesia Farm Innovation conducts a risk management process focusing on breeder selection and assistance. That is because the business core in Ternaknesia is in the real sector of breeders. In addition, there are risks related to technology risk, investor risk, sharia compliance risk, investment project risk, and market risk. This study is expected to provide a new perspective and consideration of the risk management process carried out by Islamic crowdfunding with the same business (livestock) base. This study uses case studies with the object of research being limited to Ternaknesia Farm Innovation so that risk management can be different from other research objects. This study can be a policy suggestion in risk management and developing the fintech, especially in prioritizing risk at Islamic Crowdfunding. So that in practice, it can be done effectively and efficiently.

Keywords: Risk Management · Financial Technology · Islamic Crowdfunding · Livestock · Ternaknesia Farm Innovation

1 Introduction

Otoritas Jasa Keuangan showed that the financial inclusion index in 2019 reached 76.19% (OJK, 2020b). This shows that more than 24 percent of the people do not have access to finance. Therefore, an innovation emerged in a more effective, easy, and modern funding system. This innovation is a form of collaboration between the financial system and technology in a website or application platform that smartphones can access. The financial innovation in question is called Financial Technology.

The need for fast, easy, and cheap transactions from the community is one of the drivers of the emergence of this business industry. Even in 2020, the total number of registered and licensed fintech operators was 158, which increased to 38 companies

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compared to 2016 (OJK, 2020a). This indicates that fintech has considerable potential in the future.

Based on the financial access problem that is still not comprehensive to certain levels of society, this Islamic fintech crowdfunding is interesting to discuss as an innovation and financing source solution. Islamic Crowdfunding is the same as other financial services. It also requires a strategy to keep its performance running well. Karim (2004) is an intermediary institution in line with the external and internal environmental situation of Islamic financial institutions experiencing market developments. Islamic Crowdfunding will always face various types of risks with varying levels of complexity and inherent in its business activities.

So, the manager of Islamic crowdfunding must be able to prevent or minimize this risk. This process is called risk management. The objectives of risk management are as follows: to provide information about risks to regulators; to ensure that crowdfunding does not suffer any unspecified losses; to ensure that users of funds adequately use funds; to minimize losses from various uncontrolled risks, and to allocate capital.

The object of this research is Ternaknesia, Islamic crowdfunding with the concept of collecting funds from investors and distributing them to selected breeders to provide solutions to livestock problems to realize livestock independence and food security in Indonesia. The reason for choosing Ternaknesia based on the interview is because Ternaknesia in 2018 already has 54 partner farms spread over 33 cities/districts. In addition, Ternaknesia has also been incorporated into the Indonesian Sheep and Indonesian Goat and Sheep breeder association (HPDKI) and Aspetindo (Indonesian Livestock Association). Until 2018, Ternaknesia has had several large projects, including the Qurban Domba Mas Aringga project with a project value of Rp. 588,500,000 with a total of 32 investors, the Jawara Banten Farm Project with a project value of IDR 170,000,000 with a total of 34 investors and the Kediri Project. Mr Limin with a project value of IDR 100,700,000 with a total of 18 investors. Each project provides an ROI of 10%-15% when compared to deposit interest or profit-sharing in banks, which is a relatively large number, still around 2%-5% per year. That is also what attracts researchers to choose Ternaknesia, how Ternaknesia manages all current and future risks. Not only that, in 2017, Ternaknesia was able to sell approximately 150 cows and 1000 goats. In addition, in 2018, Ternaknesia became a finalist in a prestigious competition, namely the Astra Startup Challenge. For this reason, the researcher chose the object of research on Ternaknesia.

In managing risk in Ternaknesia, based on brief research from researchers, it shows that Ternaknesia carries out risk management strategies starting from the selection of breeders, handing over funds from Ternaknesia when running their business until the funds can be returned to investors. Regarding the risk failure phenomenon that occurred in Ternaknesia, in 2017, there was a management failure in selecting breeders, causing relatively significant losses. At that time, Ternaknesia chose breeders who were still traditional and whose markets were unclear because their orientation was only social. It turns out that traditional breeders are difficult to regulate, and sales of breeders are not smooth. Losses obtained up to 150 cattle that have not been sold. With some conditions, the livestock is still tiny. So, it is interesting to study how to manage the risks in Islamic Crowdfunding based live-stock with case study at Ternaknesia.

2 Literature Review

2.1 Islamic Crowdfunding

The presence of fintech is an innovation of modern science. Innovation is born from the human thought process. Humans are required to continue to think, gain knowledge and innovate in various fields, including exploring the greatness of God. Scientific exploration can bring innovations in terms of equipment, machines, methods, and other works that can answer human needs regarding the existence of all things in heaven and earth. Humans must pay attention to and examine the signs of the greatness of Allah because in paying attention to the greatness of Allah SWT, humans can think and produce works, things to always think about the greatness of Allah, it is stated in Surat Al- Ghasiyah 17–20 (Abduh & Bagir, 2001).

An example of innovating is crowdfunding. Crowdfunding is a funding technique for projects or business units that involve the community at large (Pambudi, 2014). The concept of crowdfunding was first coined in the United States in 2003 to launch a site called Artistshare. On the site, musicians try to find funds from their fans to produce a work. That initiated the emergence of other crowdfunding sites such as Kickstarter, which was involved in funding the creative industries in 2009, and Gofundme, which managed various events and businesses in 2010. Crowdfunding itself is already quite well known internationally and is estimated to have raised \$16.2 billion. Dollars in 2014 (Pambudi, 2014). Crowdfunding is a fundraising model that has several actors in it, namely (Rahayu, 2013):

1. the project owner or the individual who makes the proposal and is responsible for the project.
2. a crowdfunding institution, a forum in the form of an online site as a medium for project promotion.
3. donors are interested in providing support for the project.

Nivoix and Ouchrif (2016) explains Islamic crowdfunding is Islamic financial system must avoid three things is loans with interest (Riba), speculation, gharar, and activities related to alcohol, pork, derivatives markets, gambling, and pornography. Furthermore, this principle leads to the existence of specific financial contracts or contracts in response to the needs of entrepreneurs and individuals. There are two types of cooperation contracts: mudharabah, which is based on profit-sharing, and musharakah, which is based on profit and loss sharing.

Marzban et al (2014) argue that in financing startup businesses, whether technology-based or otherwise, Equity-Based crowdfunding is the most appropriate value. Equity-Based crowdfunding is a form of investment type where a group of investors provides capital support to a business to obtain a return on investment or capital gain. In Islamic finance, the investor's return on investment gets a share of the invested capital in the form of a profit—and loss-sharing scheme. Increasing third-party funds through mutual assistance initiatives with other organizations (such as non-bank financial services and mass organizations) may be used to fund vulnerable bank customers via crowdfunding and additional partnership contracts (Himmawan & Firdausi, 2021). Thaker et al (2020) show that Integrated Agricultural Land Crowdfunding Model (IALCM) is expected to assist

breeders in East Java in reaching their liquidity needs and the Indonesian government in accelerating social entrepreneurship innovation by providing feasible recommendations for the agricultural sector's development in East Java.

2.2 Risks in Islam and Crowdfunding

Risk is danger. Risk is a threat or possibility of an action or event that has an impact different from the goals achieved (Idroes, 2017). According to Wahyudi et al (2013), the risk is a consequence of choices that contain uncertainty that can lead to unexpected results or other negative impacts that are detrimental to decision-makers. Risk can be interpreted as the possibility of an event that can be detrimental, and there are three crucial elements of something that is considered a risk. First, it is an event. Second, the incident is still a possibility, so it may or may not happen. Third, if it happens, it will cause losses (Kountur, 2008). If Organizations, companies, or governments lack self-awareness, and thus are incapable of risk (Holton, 2004).

No one can guarantee that a business run by someone will experience profits or losses in the future (Wahyudi et al., 2013). No one knows what will happen in the future. Thus, the risk is a *sunatullah* in a business. In Islam, there is no risk-free business transaction. That has been explained in the Qur'an Surah Al-Lukman verse 34. An essential *fiqh* gift related to this is *al ghorh bil ghonn and al khraj bil daman*. That means that Islamic business is that no results are allowed without risk being borne and, in the income, earned there are obligations attached to it (Khan et al., 2008). Li and Lin (2021) show that stocks with a higher credit risk generate higher expected returns, and credit risk premiums account for a significant portion of equity returns in China.

The risks that may occur in crowdfunding based are platform failure, risk of fraud, money laundering and terrorism financing, liquidity failure, information asymmetry, investor inexperience, and lack of due diligence (IOSCO, 2015). Bhawika (2017) explains that the potential risk that occurs is the risk of dehumanization. Several cases of funding failure occurred due to the lack of strong interpersonal relationships between applicants and donors. Islamic financial technology industries should also work to mitigate risk exposure for online platforms by enhancing the security of the virtual transactions (Sulaeman, 2021; Thaker, 2018). Additionally, Islamic FinTech should make the internet platform safer for all users' privacy (Sulaeman, 2021).

2.3 Risk Management Stages

Risk management attempts to identify, analyze and control risks in every company activity to obtain higher effectiveness and efficiency (Darmawi, 2006). Meanwhile, Wahyudi et al (2013) risk management is a process in which various stages are interrelated and repeated to complement and perfect each other. Djojosoedarso (1999) defines risk management as the implementation of management functions in risk management, especially the risks faced by organizations/companies, families, and communities. So, it includes the activities of planning, organizing, compiling, leading/coordinating, and supervising (including evaluating) risk management programs.

Karim (2004) explains that the objectives of risk management policies are to identify, measure, monitor, and control the business activities of financial institutions with a reasonable level of risk in a directed, integrated, and sustainable manner. Risk management involves developing systems and procedures to identify, measure, mitigate, monitor, and control risk (Ghosh, 2012).

2.4 Proposition

A proposition is a provisional guess from a study of a phenomenon that occurs. Based on this framework, the research proposition is as follows:

1. Risks that may hinder implementation can be identified.
2. If the risk is handled correctly, then the company's performance will be good.

3 Research Methods

The approach used in this research is a qualitative approach with a case study method. Case study research is one of several forms of social science research. Others include experiments, surveys, histories, and archival analyses such as economic or statistical modelling. Doing case study research would be the preferred method, compared to the others, in situations when (1) the main research questions are "how" or "why" questions; (2) a researcher has little or no control over behavioural events; and (3) the focus of the study is a contemporary (as opposed to entirely historical) phenomenon (Yin, 2014).

The unit of analysis in this study is the risk management process of Islamic crowdfunding in Ternaknesia using a Standards Australia/ Standards New Zealand AS/NZS 4360:1999 methods, a series of processes in question consists of (AS/NZS 4360:1999, 2003):

- a) Risk Identification
- b) Risk Measurement
- c) Risk Mitigation
- d) Controlling Risk
- e) And other things that will be found in the field.

Data obtained from several data sources such as interviews, observations, and documentation will be validated and processed first, based on various literature in this study. The primary data used as data sources in this study are as follows: Interview with the CEO of Ternaknesia, who informant 1 in this study. Informant 1 is expected to get information about the general description of Ternaknesia, the mechanism of the crowdfunding risk management system. In addition, interviews were conducted with the Chief Financial Officer as an informant 2 to strengthen the explanation of Informant 1. Furthermore, interviews were also conducted with the Chief Operating Officer as an informant 3. In selecting informants, the researcher used the snowball technique, meaning that there was a possibility that the informant recommended informants. After the data is collected, the data will be reduced by doing abstraction. In this study, there are two triangulations to test validity: Data Source Triangulation and Technique Triangulation. In addition, the researcher also conducted interviews with three investors and three partner breeders to triangulate all information provided by Ternaknesia.

4 Results and Discussion

4.1 Risk Identification

Basically, the livestock principle provides capital to breeders the same as banks do, namely using the 5C or five C's of credit. These tools help the underwriter in conducting credit analysis and making a lending decision (Baiden, 2012). In this case, collateral is not applied to each breeder because it utilizes the social capital of the breeder so that the principle used can be called the 4C principle. There are six identified risks in the Ternaknesia risk identification: breeder, market, investment project, operational, investor, sharia compliance, and technology.

Firstly, the risk of breeders related to character. Ternaknesia makes a selection in the selection of breeders, indicating that Ternaknesia considers the risks caused by breeders. Something is interesting in identifying the risk of breeders, according to Ternaknesia's breeder partners, is to utilize social capital. According to (Cohen & Prusak, 2006), social capital is any relationship that occurs. It is bound by trust, mutual understanding, and shared values that bind group members to make joint action possible efficiently and effectively. So Ternaknesia can control all breeder risks, and even the entire risk is by utilizing breeder's social capital, which results in no guarantee being applied to each breeder partner. It causes Ternaknesia not to use the collateral principle to breeders because social capital has been formed.

Second, investment project risk relates to the aspect Condition of the Economy, for example, the possibility of natural disasters, epidemics that can disrupt the investment project process, which is reflected in the livestock measurement policy. The Condition of Economic explains that current and future economic conditions should also be assessed according to each economic sector in assessing the capital aspect. The business of the prospective breeder survives if it is affected by inflation which all economic sectors cannot avoid. Good decision making must be done carefully in conducting breeder assessments as detailed as possible to prevent things that are not desirable. The things that can affect the condition of breeders are: government policies on meat imports that will affect the supply and demand for meat; the competition of the Qurban Season with parties who have the same business process; the political situation or world economy; other conditions that affect marketing.

The identification of investment project risks is closely related to the identification of breeder risks. Because if the breeder has been researched through the 4Cs carried out by Ternaknesia, then the overall investment project will be good. Investment project risk also includes operational risk. For example, if the character of the breeder is good, it will be less likely that the breeder will misuse funds or other things. Possible risks of investment projects outside of the 4Cs are the risk of natural disasters, epidemics, the risk of failure of breeder management, which includes the risk of reporting errors, the risk of negligence of supervision from the Livestock team. Third, identifying market risk caused by considering capital from the 4Cs, Ternaknesia considers market risks, especially from the breeders themselves. Fourth, investor risk identification arises related to investor risk because, according to (Hadad, 2017) crowdfunding can carry out money laundering tools. Moreover, because most fintech is still not supervised by the OJK, especially for

Ternaknesia, the possibility of crowdfunding being used as a place of escape for illegal money can arise.

Fifth is the risk of sharia compliance because Ternaknesia is platform sharia. The risk of sharia compliance arises, primarily related to funding management and reporting. In addition, there is no Sharia Supervisory Board that supervises and is included in the ranks of Ternaknesia's organizations. Communication with the Board of Sharia on Ternaknesia is still in consultation with external parties. So that in the future, it is necessary to create a special Sharia Supervisory Board within the Ternaknesia organization. Sixth, in terms of technology risk identification, Ternaknesia can cause material and non-material losses because Ternaknesia uses the help of websites and applications in its operations. However, not all of them are operated through technology. There might have been a web error or occurrence of a bug that caused the website and application to be inaccessible. However, it does not have a significant effect on the fundamental aspects of livestock.

4.2 Risk Measurement

Qualitative analysis is an analysis of risk using verbal forms or a descriptive scale to explain the magnitude of the likelihood and impact of the risk. The following is a table of possibilities and an impact table to determine the level of risk (AS/NZS 4360:1999, 2003).

After the assessment has been carried out, appropriate treatment will be carried out. There are several treatments carried out by the organization, namely by avoiding risks. Risk mitigation can be done by reducing the possibility of reducing the impact, the third is transfer of risk to a third party, and the last is accepting the risk (AS/NZS 4360:1999, 2003). Based on field data, it was found that there are six types of risks, namely breeder risk, investment project risk, sharia compliance risk, investor risk, technology risk, and market risk. The following will perform coding on the list of risks for Ternaknesia:

Based on the identified risks, an assessment of the likelihood and impact is carried out, and the level of risk and impact is carried out. The following results from the measurement of the risk list above are associated with the risk assessment matrix. In Table 1, each column will be coded according to the opportunities and consequences arising from the risk described above.

After that, it will be detailed again to find out which risks include high-level risk, significant level risk, moderate level risk, and low-level risk. Then the next step will be given recommendations for handling that must be carried out according to the applicable standards. The following is the Table 2 matrix of Ternaknesia risk measurement based on researcher analysis (Table 3).

The risk assessment process produces four risk statuses: high, significant, moderate, and low.

An interesting finding in the risk assessment results carried out on 22 types of risk descriptions is that it lies in the risk of managing funds obtained from investors to breeders. Based on research on the entire risk measurement process, Ternaknesia has a high average level of risk, which is related to risk to breeders. In contrast, the average significant level of risk is investment project risk, market risk, and sharia compliance risk related to managing the funds. As it is known that the core business of Ternaknesia is providing capital to breeders, it is natural that the risks related to livestock activities

Table 1. Coding of Types of Risk Management

Risk Type	Code	Risk Description
Investment Project Risk/Operational Risk	1a.	Risks are caused by natural disasters, such as tsunamis, earthquakes, volcanic eruptions that cause the death of livestock.
	1b	Risk caused by intentional failure of breeder management.
	1c	Risk of reporting errors and transparency in financial statements.
	1d	The risk of mixing the interests of breeders with the interests of the project.
	1e	Risk of misuse of capital by breeders.
	1f	The risk of getting an epidemic.
	1g	The risk of negligence by the Ternaknesia team in supervising.
	1h	Risk of death of livestock.
Sharia Compliance Risk	2a	Sharia compliance risk related to non-sharia fund management.
	2b	The risk of financial reports is not based on the applicable sharia principles.
Investor Risk	3a	The risk of investors doing money laundering.
	3b	The risk of investors manipulating or fraudulent data on capital deposited through ATMs.
Market Risk	4a	Similar business competitor power risk.
	4b	Risk of decreasing selling price of livestock.
	4c	The risk of demand for livestock is reduced
	4d	Risks to government policies and Indonesia's socio-political economic conditions.
Breeder's Risk	5a	The risk of error in choosing a breeder due to the lack of thoroughness of Ternaknesia in analyzing the 4Cs.
	5b	The risk of investors' money being taken away.
	5c	The risk of breeders doing data manipulation.

(continued)

Table 1. (continued)

Risk Type	Code	Risk Description
	5d	Risk of regeneration of young Indonesian breeders.
Technology Risk	6a	Cybercrime risk, misuse of user data.
	6b	Website and Application Error Risk.
	6c	Risk has not been involving Apple/iPhone iOS users

Source: (Data processing).

Table 2. Ternaknesia Risk Measurement Matrix.

OPPORTUNITY	1. Not Significant	2. Minor	3. Moderate	4. Major	5. Very Dangerous
5. Almost certain		4a			
4. It might happen	6c	4b, 4c	1h	5a, 5c	
3. Medium	5d, 2b	6a, 3a, 6b	2a, 4d	3b	
2. Little chance		1c	1f, 1d	1a, 1b, 5b, 1e	
1. Rarely				1g	

Source: (Data processing)

are risks that must be considered or are at a high or significant level. Meanwhile, related to technology risk, investor risk is at a moderate and significant level. Meanwhile, the risk of sharia compliance in the aspect of fund management is at a significant level.

There is also an interesting thing because of the risk of technology, not including high risk. It also strengthens the income of all informants who explain that current technology risks do not significantly affect livestock farming activities. The risk at a moderate level means that it does not.

involve top management, but it is better to take immediate treatment or non-emergency conditions. As for the risk at a significant level, it requires attention from the management and takes corrective action as soon as possible. Regarding the risk that is at a low level, it is enough to handle it with the applicable routine procedures (AS/NZS 4360:1999, 2003).

Table 3. Ternaknesia Risk Mitigation

Risk Mitigation	Analysis
Investment Object	<p>The Investment Object is based on the whole livestock project, not on a single farm animal.</p> <p>This concept aims to prevent losing investors' money because if the investment is based on one livestock, if all losses are related to the livestock, then only that one investor will bear. If the investment is based on one project, other investors will also share the risk if there is a loss in one livestock. On the other hand, this concept indirectly carries out insurance and sharia principles. Because everyone bears the risk of the death of their livestock, it is different from crowdfunding with the same business process. In general, the livestock has been insured with another party, that if the livestock dies, the related insurance will cover the risk. The mechanism is Ternaknesia offers a project to investors with the model number of shares. The price of each share depends on Ternaknesia's policy. Then investors buy the shares. If there is a profit, the investor can receive a portion of the profit by the portion of the shares purchased and the losses incurred. So that the losses experienced will be borne together with other investors by the portion of the shares, not borne by one investor alone.</p>
The concept of giving capital	<p>The concept of providing capital by Ternaknesia to breeders is carried out in stages. Gradually, this means that funds will be given to breeders when breeders provide a list of funding needs to livestock. Ternaknesia will evaluate whether the list of breeders needs to be funded or not. The period for granting funds is based on the needs of the breeder in each application. The needs of breeders every month are to purchase livestock seeds, medicines, animal feed, and capital. There is no specific time for granting funds. The aim is to prevent the risk of funds being misused by breeders.</p>
New Account Concept	<p>Ternaknesia requires breeders to create new accounts so that the funds are not mixed with the breeder's personal account and so that the expenditure and income obtained by the breeder can be known from the account.</p>
Ifamarket downturn	<p>Ternaknesia also mitigates the risk of market decline by helping to sell their livestock to other livestock such as urban livestock, mart livestock, and aqiqah livestock. Ternaknesia also helps in the marketing aspect, thereby minimizing livestock that is difficult to sell in the breeder's market due to unexpected things. It learned from a mistake in 2016, where livestock was not sold because they were thin, so in that case, Ternaknesia helped sell the livestock to buyers.</p>

(continued)

Table 3. (continued)

Risk Mitigation	Analysis
Reporting concept	<p>Breeders are required to provide monthly reports on the activities they have undertaken.</p> <p>Ternaknesia performs two documents, the first is the reporting of transactions, and the second is the financial statements. The recording of transactions is carried out to record every transaction, whether it is giving capital to the breeder or there is an income from the breeder. The mechanism is that financial reports are made every month, which will be reported to all investors. The reported data is processed by Ternaknesia itself, which is obtained from breeders. Financial reports are made in the simple form of income and expenses from breeders. The financial report contains the state of animal feed, livestock health, and documentation of the cage and livestock condition.</p>

Source: (Data processing)

4.3 Risk Mitigation

4.4 Risk Monitoring and Controlling

Risk monitoring and control is a form of Ternaknesia supervision by forming a team. Especially to monitor high and significant risks that come from breeder risk and investment project risk. The way to control the risk of breeders and investment projects is to conduct supervision and assistance from the management and financial aspects. Supervision of management aims to supervise breeders so that they carry out good breeder care, for example, not being late in giving food and vitamins. If there are livestock that is sick, they must be treated immediately.

In addition, direct visits to breeders are also carried out and carry out asset taking, which means checking related to livestock assets and reports that have been given. Breeders are also invited to come to the Ternaknesia office for discussions and directions about livestock. Meanwhile, in the financial aspect, by providing knowledge about the preparation of financial reports guided by a team from Ternaknesia, breeders are required to make reports on livestock development from health conditions to weight so that investors feel safe. Next is controlling market risk is to return to the breeder supervision function described earlier so that the livestock is in line with expectations and can be sold quickly through the Ternaknesia market or breeder partners. In addition, Ternaknesia also helps in marketing management aspects by offering other Ternaknesia products in the form of mart livestock, aqiqah livestock, and urban livestock.

5 Conclusion

Based on the results of the research conducted, it can be concluded that:

1. Ternaknesia carries out risk management by means of risk identification, measurement, mitigation, and risk monitoring and control.

2. There are 6 identified risks, namely breeder risk, investment project risk, investor risk, market risk, sharia compliance risk, and technology risk.
3. The biggest risk in managing funds is not technology risk, but breeder risk, because the core business of Ternaknesia is the real breeder and in carrying out all its activities it does not fully use technology. So that Ternaknesia Farm Innovation carries out risk management in managing its funds, focusing on the selection of breeders and breeder assistance.
4. Ternaknesia identifies breeder risk, market risk, and investment project risk, by looking at the 4Cs (character, capacity, condition, and capital). Ternaknesia Farm Innovation does not use guarantees, and emphasizes the principle of mutual trust, this is also reflected in the agreed contract, namely the Mudharabah contract. Therefore, Ternaknesia is selective by requiring breeders who have at least 3–4 years in running their business, are members of the Indonesian Sheep Goat Breeders Association or the Indonesian Livestock Entrepreneurs Association and have a clear and disciplined market.
5. Ternaknesia perform risk measurements are divided based on the cause of the incident. The first is due to natural disasters, failure of breeder management, and external factors other than natural disasters (epidemic, unfavorable markets).
6. Ternaknesia mitigates risk by creating an investment concept based on one project, not one livestock, then providing capital to breeders in stages according to the needs of breeders, then requiring breeders to create new accounts devoted to investment projects and creating a separate market that is obtained. From other livestock products.
7. Ternaknesia conducts monitoring and control by forming a team on all aspects, specifically on risks related to livestock. Two members are formed, each of which focuses on financial aspects and management aspects. The team held direct visits to breeders, carried out asset taking and provided advice and recommendations to breeders regarding all their activities.

The results of this study contribute both theoretical and practical knowledge. This study is expected to provide a new perspective and consideration of the risk management process of fund management that will be carried out by crowdfunding with the same business base. Furthermore, it is hoped that there will be the development of risk management mechanisms and strategies for Ternaknesia Farm Innovation by involving technology in it, so that this research becomes a reference for further risk management development.

Ternaknesia Farm Innovation is expected to form a Sharia Supervisory Board within its internal organization. Suggestions for future research are to increase the number of informants from external parties and also add the same business-based crowdfunding objects, and compare them in order to make comprehensive findings.

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