

Study Of Different Approaches For Determining And Calculating The Risk Management In Business

Fatkul Anam¹, Arifin Idrus², Taufan Maulamin³, Rita Irviani⁴, Yenni Patriani⁵

¹Mathematics Education Program, Universitas Wijaya Kusuma Surabaya, Indonesia. E-mail: fatkulanam@yahoo.co.id

²STIE Bongaya, Makassar, Indonesia

³Institut STIAMI, Jakarta, Indonesia

⁴STMIK Pringsewu, Lampung, Indonesia

⁵IAIN Bengkulu, Bengkulu, Indonesia

Abstract—

Business Risk management is the part of the risk management. If there are any changes will be done in business system, business process and business risk then business risk management used to calculate the risks related to that. For minimum risk the business risk management set the priorities of the risk, identifies the risk and addresses the risk. It also has the ability to response multiple risks, can handle the more risk based condition and have capabilities to risk based decision making .

Keywords- business; risk management; calculate; decision making.

I. INTRODUCTION

A condition or situation which gives the negative impact on any business can be considered as risk like if a store do not have proper security problem then there is a risk of stolen money or other equipment. There are several business risk are there, they can vary according to business [2].



Figure 1: risk management framework

It is decided at the beginning of the business that how much risk can handle the business. Some business risk can very harmful for the business and it can affect the growth of that [3].

It is seen in today's life that business are being more complex day by day. These risks may be very harmful and unpredictable.

Businesses today are unpredictable, volatile and seem to become more complex every day. And it is very obvious that business is always filled with several kinds of risks. For identify that which risk provide the opportunities and which is not suitable for that business, assessments of risk provide a mechanism [4]. A risk can give the positive, negative or both impact. A risk which gives the negative effect can harm the business and its reputation and business with positive effect can provide the opportunities for increment and growth of business.

II. LITERATURE REVIEW

Aven [13], described in his research that theory of risk is based on the review that is taken from last 15-20 years and in 1679 he define the concept of risk in Oxford English Dictionary. Ave and Veland [14] also gave the same classification as described by Aven.

Karimiazari et al [15] design a risk as the technological point of view, and see its perspective and development from financial and economical side. So it describes the risk that the condition or event that affect the business or organization adversely can known as risk [16]. Mazouni [17] proposed that the risk is the intrinsic property of any decision, a risk can evaluate by many different factors.

The risk can be presented as a changeable condition or event when it occur then it effect on one or more objectives and goals of business [18]. Marhavilas et al [19] proposed that risk can be defined as the chance which something or someone evaluates and it adversely affected the business growth.

Lavaster et al [20] defined that in the last few decades the supply chain and risk management concepts are rapidly developed. Lavaster et al [20]. In 2005 Jutter et al described first time about Chain Risk Management (SCRM), in the paper "Supply Chain Risk Management: outlining an agenda for future research". After that Fekete [21] defined that risk management have many conflicting terms in its area and there is need to define the risk management core definitions, principles and contents.

III. IDENTIFYING RISKS

A well prepared business can minimize the risk on its earning, productive and efficiency. It can reduce the negative impact of the business on customers. So it is very necessary to identify the risk in established organizations and startup business. It is a basic requirement for successful business. Which risk provides the threats to successful operations are the important factor of business planning. There are several methods [5] are techniques are available which identify the business risk. But methods are based on comprehensive analysis of specific business and they present the company challenges.

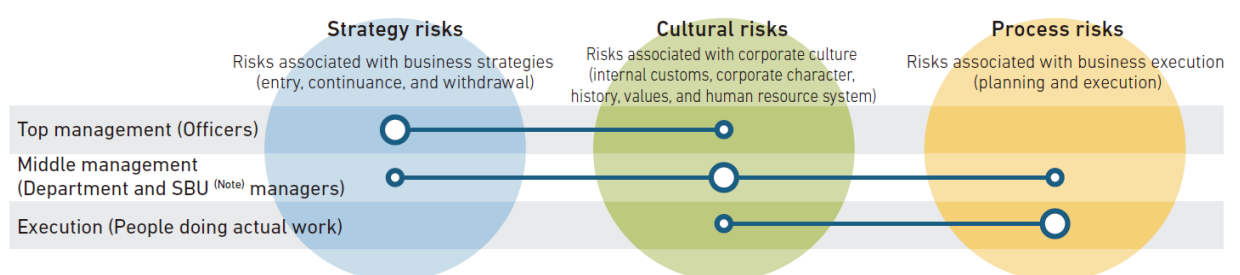


Figure 2: matrix of business risk management

There exist risk in every condition and business. We cannot avoid the risk but it is possible to reduce the impact of the business [6]. In risk management strategy risk identification is the first step. The step by step process is described below:

1. Identify the sources that is the reason of the problem

It is very necessary to analyze and identify the sources that are the reason for the problem. These sources can be internal or external.

2. Act now

To avoid becoming the potential problem to actual problem the managers doing something that can avoid that situation. If a problem become threat then at that moment the executive of the company take an action according to the plan that is consider on priority.

3. participation of employees

It is not the task of top ranking team and managers to identify the risk. To identify the risk in business the management of the company involves its employees. It is the duty of the employees to identify and handle the risk at its level.

4. Create a list that should be define as industry-specific

By analyzing the environment and other industries a managers can identify the possibilities of the risk that can take place in the business. If any other company facing the risk, it is possible to suffer from same risk so by noticing the situation it is possible to avoid that risk. It is also necessary to create a solution list to handle that risk.

5. Make a list of risks

The other important task in the business is to make a record of risk. If a company facing the risk that is previously experienced than it will be very helpful to find the solution from those previous records. It is necessary to review the business on regular basis that prepare the company for better use.

IV. TYPES OF BUSINESS RISK

There are several business types, some of them are dangerous, and it can cause the loss of efficiency and profits. And some of them are not affected the business seriously. All huge organization has a department called “risk management”, which help to reduce the serious loss in that business, but small business always not concern with this serious issue [7]. Categories of business risk are described below:



Figure 3: risk categories

1. Strategic Risk

A successful business always has a well developed and comprehensive plan. But it is obvious that the time is change, and the well planned strategies can outdate [8]. This type of risk is known

as strategic risk. Strategies and methods of the company will less effective and does not require anymore. there are several reason of Strategic Risk

- It could happen due to changes in technologies [9],
- Change in requirements of customers
- Raw material cost will change
- Any competitor enter in the market
- Any large scale changes

2. Compliance Risk

It should consider about the work according to necessary law and regulations. Business law can change and there is a risk to add regulations in future. And it is also possible as the development of business, it is need to add our own requirements and rules that it is not apply on before [10].

3. Operational Risk

It is also possible to facing the risk within company. An unexpected failure in company due to day-to-day operations, can consider as Operational risk. Technical failure likes a server outage or any problem that could happen due to its members or employees are considering as operational risk.

In many situations there are more than one reasons of operational risk. For example if a employee write \$100,000, instead of \$10,000 than this type of risk is consider as operational risk [11].

4. Financial Risk

If a business require some extra cost or it's lost its revenue then this type of risk is known as financial risk. The financial risk is basically related to risk of money. It can happen if money flowing in and out of the business and due to sudden loss of money.

For example, if a large amount has to be come from a single large client but it is extend the 60 days to credit in the account. If a customer cannot pay or delay in paying the amount then it could cause the serious finance risk in the business.

5. Reputational Risk

There are several kind of business exists. In all business reputation of that business is primary concern.

If reputation of business is damages that it is the sudden loss of revenue. Some other condition also effect the business like if the employee decides to leave the organization or it can demoralize. It will be difficult to hire efficient and hard working employees due to bad reputation of the company. As the effect of bad reputation the supplier can offer the less favorable conditions and advertiser, partners, sponsors many no longer interested in doing the business with company.

V. THE RISK MANAGEMENT PROCESS

The process of risk management is described below:

1. Risks identification – identify the risk is the first step of risk management. By studying the external and internal factors of the risk that affect the objective of the business the risks can the risk can be evaluate [12].



Figure 4: process of risk management

To identify the potential risk, it should review the business. Some methods to identify the risk are given below:

- It should evaluate all functions of the business and if anything give negative impact on the business then it should be identify.
- To identify the previous problems and complaints it should continuously review the previous records.
- The external risk that can affect the business should be considered.

2. Analyzing risks –

This step analyzes the risk in every condition, for each material risk create the probability distributions of outcome. There is need to control the result of risk. There are several controls like:

- Discard
- Add
- Controls of engineering
- Personal controls
- controls of administrative department

3. Responding to risk –

After identify and analyze to risk there is need to respond that risk. There need to make a suitable strategy to respond that risk. Risk management includes developing the options that should be cost effective they include avoiding, transferring, accepting and reducing the risk.

4. Monitoring the risk and opportunities –

It is very important to take a continuous review of the business environment. It is require to measure the risk and opportunities, also its performance.

VI. CONCLUSION

A condition or circumstance which gives the negative effect on any business can be considered as hazard like in the event that a store doesn't have appropriate security issue; at that point there is a danger of stolen cash or other hardware. There are a few business hazard are there, they can change as indicated by business. Business Risk the executives is the piece of the hazard the executives. In the event that there are any progressions will be done in business framework, business procedure and business chance then business hazard the executives used to ascertain the dangers identified with that. For least hazard the business chance administration set the needs of the hazard, distinguishes the hazard and addresses the hazard. It additionally can reaction different

dangers, can deal with the more hazard based condition and have abilities to hazard based basic leadership.

REFERENCES

- [1] Ahmed, I. & Manab, N.A. (2016). Influence of enterprise risk management success factors on firm financial and non-financial performance: A proposed model. *International Journal of Economics and Financial Issues*, 6(3), 830-836.
- [2] Al-Hersh, A.M., Aburoub, A.S & Saaty, A.S. (2014). The impact of customer relationship marketing on customer satisfaction of the Arab bank services. *International Journal of Academic Research in Business and Social Sciences*, 4(5), 67-83.
- [3] Barclay, C. (2013). Preferential procurement in the South African context. London: ABA Section of International Law.
- [4] M. Retno, R.D. & Priantinah, D. (2012). Pengaruh good corporate governance dan pengungkapan corporate social responsibility terhadap nilai perusahaan (Studi empiris pada perusahaan yang terdaftar di bursa efek indonesia periode 2007-2010). *Journal Nominal*, 7(4), 33-57.
- [5] Keisidou, E., Sarigiannidis, L., Maditinos, I.D. & Thalassinou, I.E. (2013). Customer satisfaction, loyalty and financial performance: A holistic approach of the Greek banking sector. *International Journal of Bank Marketing*, 31(4), 259-288.
- [6] Olatokun, W. & Nwafor, C.I. (2012). The effect of extrinsic and intrinsic motivation on knowledge sharing intentions of civil servants in Ebony state, Nigeria. *Information Development*, 28(3), 216-234.
- [7] Zerfass, A., Verčič, D. & Volk, S.C. (2017). Communication evaluation and measurement: Skills, practices and utilization in European organizations. *Corporate Communications: An International Journal*, 22(1), 2-18.
- [8] Bosua, R. & Venkitachalam, K. (2013). Aligning strategies and processes in knowledge management: A framework. *Journal of Knowledge Management*, 17(3), 331-346.
- [9] Gakure, R.W., Ngugi, J.K., Ndwiga, P.M. & Waithaka, S.M. (2012). Effect of credit risk management techniques on the performance of unsecured bank loans employed by commercial banks in Kenya. *International Journal of Business and Social Research*, 2(4), 221-236.
- [10] Shahroudi, K., Taleghani, M. & Mohammadi, G. (2011). Application of two-stage DEA technique for efficiencies measuring of private insurance companies in Iran. *International Journal of Applied Operational Research*, 1(3), 91-105.
- [11] Lee, J. & Fink, D. (2013). Knowledge mapping: Encouragements and impediments to adoption. *Journal of Knowledge Management*, 17(1), 16-28.
- [12] Mudaki, A.L., Wanjere, D., Ochieng, I. & Odera, O. (2012). Effects of operational factors on organizational performance in Kenyan insurance industry. *International Journal of Business and Social Science*, 3(17), 45-63.
- [13] Aven T., The risk concept-historical and recent development trends, *Reliability Engineering and System Safety* (99), 33–44, 2012.
- [14] Veland H., Aven T., Risk communication in the light of different risk perspectives, *Reliability Engineering and System Safety* 110 (2013) 34–40.
- [15] Aven T., The risk concept-historical and recent development trends, *Reliability Engineering and System Safety* (99), 33–44, 2012.
- [16] KarimiAzari A., Mousavi N., Mousavi F., Hosseini S., Risk assessment model selection in construction industry, *Expert Systems with Applications* (38), 9105–9111, 2011.
- [17] Maselena, A., Huda, M., Jasmi, K. A., Basiron, B., Mustari, I., Don, A. G., & bin Ahmad, R. (2019). Hau-Kashyap approach for student's level of expertise. *Egyptian Informatics Journal*, 20(1), 27-32.
- [18] Mazouni M.H, Pour une Meilleure Approche du Management des Risques : De la Modélisation Ontologique du Processus Accidentel au Système Interactif d'Aide à la Décision, Thèse de Doctorat de l'Institut National Polytechnique de Lorraine, Université de Nancy, 2008.
- [19] Tuncel G., Alpan G., Risk assessment and management for supply chain networks: A case study, *Computers in Industry* (61), 250–259, 2010.

- [20]Marhavidas P.K., Koulouriotis D.E., Developing a new alternative risk assessment framework in the work sites by including a stochastic and a deterministic process: A case study for the Greek Public Electric Power Provider, *Safety Science* (50), 448– 462, 2012.
- [21]Bakr A.F., El Hagla K., Nayer A., RawashA., Heuristic approach for risk assessment modeling: EPCCM application (Engineer Procure Construct Contract Management), *Alexandria Engineering Journal* (51), 305–323, 2012.