

Design of Objective IT Strategy, Risk Driver and Risk Control

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Abstract

Information technology (IT) played a central role in the productivity of IT industry intensively. IT provides organizations with the flexibility to redesign processes and create a high-performing organizational design. IT strategy objective used to focus on developing specific business capabilities. Right IT strategic can bring the corporate achieve vision, mission and objectives have been established. Risk must be managed effectively to maximize the effectiveness of its use and that the associated risks of the implemented technology can be mitigated. This paper present a case study in risk management at Food and Beverage Corporate related to achievement of corporate goals . The Research method used is Strategic Objectives at Risk (SOAR) which consists of four stages. The results of this study is proposed strategic Objective IT Map in related Risk driver, risk control include its metric.

Keywords: IT Strategy Objective, Risk Driver, Risk Control, SOAR

1. Introduction

This study was conducted to analyze Objective IT Strategy, Risk Driver and Risk Control in related to achievement of corporate goals. The results of this study are expected to provide an overview to stakeholders in managing IT risk has effect in achivement strategic corporate. IT strategy objective used to focus on developing specific business capabilities. Right IT strategic can bring the corporate achieve vision, mission and objectives have been established [1].

From 1995 to 2000, information technology played a central role in the productivity of IT-intensive industries such as financial services, media, and telecommunications, all of which experienced faster productivity growth than other industries [2]. Information technology provides organizations with the flexibility to redesign processes and create a high-performing organizational design [3].Utilization of Information Technology (IT) in an enterprise, in addition to benefit from the implementation of IT come along with the risks (Information Technology Risk) that may affect the achievement of corporate goals [4]. Given a thought that IT is an important asset than it must be managed effectively to maximize the effectiveness of its use and that the associated risks of the implemented technology can be mitigated. [1].

Risk Management is a process that is systematic and sustained designed and implemented management at all levels and the entire personnel of government, in order to provide reasonable assurance that all risks that could potentially hinder the achievement of objectives have been identified and managed in such a way that the risks referred to are within the limits acceptable [5]. It can be used as a tool to achieve strategic objectives companies [1].

A risk driver is defined an independently acting force that may move a away from its plan. With the risk driver view, can focus shaply on the plan itself. While the risk control is to prevent, reduce, detect or find an error on an issue. Implementation of risk control mechanism may impact positive for the company and reduce the impact of losses. Control risk can be divided into risk management planning, risk solving, and monitoring risks. Reduce risks that have been identified can be done by selecting the appropriate IT controls.

2. Research Method

Research method used is Strategic Objectives at Risk (SOAR) method. The data used are taken from secondary data i.e annual report and website corporate. The case study is taken from companies engaged in food and beverage sector and has implemented the Information Technology on its operations SOAR carried out with the following steps [6]:

1. Setting metrics for each of the defined strategic objectives.
2. Observing metric values
3. Analyzing movements in metric values
4. Reacting to what the analyses reveal

Methodology SOAR (Strategic Objective of Risk), which can improve opportunity for the corporate to achieve its strategic objectives corporate. Each of the corporate's strategic objectives certainly lead on achieving results (outcomes) [1].

- **Strategic**
 The decisions that have short-term impact and Long-term towards the activities of the organization include analysis guide the to provide resources and upon application of these decisions to give the value of to main parties associated with the company and defeating competitors.
- **Objective**
 The direction of an organization
- **Risk**
 Risk is the potential for loss caused by an event (or series of events) that can adversely affect the achievement of a company's objectives [7]

3. Results and Analysis

3.1 Analysis Role of IT Strategic Related Achievement Objectives Corporate

This corporate has implemented IT to enhance the corporate performance, the vision to become the best and the largest Food and Beverage industry in Indonesia, through consistently prioritizing consumers' satisfaction, and highly upholding our stockholders' and business partners' trusts. One of the goal corporate's to become the holder of the highest market share (market leader) beverage products Ultra High Temperature (UHT). To achieve these objectives the corporate has made significant investments one in the field of information technology. The corporate has been using the application System Application Procedure (SAP). The use of this technology systems have an impact on the efficiency and effectiveness of the corporate's internal business processes and organizational stability of the corporate [8].

Based on the corporate's strategic objective is the market leader UHT beverage products, the corporate has made significant investments in marketing activities, technology, product development and the most important is the distribution. The role of distributors in marketing contributed greatly to the spread of the corporate's products (distribution). This happens because no distributor manufacturers will not be able to competed with its competitors. Due to its crucial role towards the achievement of corporate objectives, the strategy requires the implementation of integrated information systems in real-time throughout the distributor marketing support. With the utilization of information technology in enterprise communications with branch offices can be done more quickly (real time), and is not limited by space and time

Table 1. The proposed of Objective IT Strategy

<i>Strategy Objective IT</i>	Metric	Key Performace Indicators
Implementation Integrated information system in real-time throughout the distributor to support the marketing 5 years ahead	Number of distributor implemented Integrated information system in real-time	<ul style="list-style-type: none"> • Every year in the five-year period the number of distributor that has been the implementation of the Information System increased • Within five years all distributor are already using an integrated information system

Implementation integrated information system in real-time throughout distributor is required to support the corporate's strategy objective is the market leader. Utilization of integrated information systems provide benefits including better coordination between the distributor and the central office, so that data/information be able to made online/real time, accuracy and speed of decision-making to help select potential areas, the distribution of the amount and items of products, competitive pricing, facilitate the creation of reports to top

management, facilitate consultation with employers through the presentation of data be related solution to problem.

Determination of the potential marketing areas that generate a turnover of greater need to be considered, when incorrectly set priorities be able to result in increased operating costs. The implementation plan be able to carried out over example five years (depends on conditions), implementation is done by considering priority on the distributor which has the largest market share.

Implementation of the information system would be offset by a variety of risks (especially in IT) that will affect the achievement of the corporate's strategic objectives. To minimize and give due consideration to the action to be taken to deal with the various risks that it is necessary to study the factors which increase uncertainty (risk drivers) and reduces uncertainty or reduce the risk (risk control). The Proposed of Objective design IT Strategy, Risk Driver and Risk Control in Table 2.

Table 2 Proposed of Objective design IT Strategy, Risk Driver and Risk Control

Strategy Objective Corporate	Holders of the highest market share (market leader) beverage products Ultra High Temperature (UHT)
Strategy Objective IT	Implementation of integrated information system in real-time for all distributors to support the marketing
Risk Driver	<ul style="list-style-type: none"> a. The availability of the IT infrastructure for the implementation of Integrated information system in real-time b. Availability of Integrated Information System application in real-time (SAP) c. Interconnection Integrated information systems in real-time d. Human resource be able to operate Integrated Information System in real-time
Risk Control	<ul style="list-style-type: none"> a. Supporting the supply of IT infrastructure b. Development of Integrated Information Systems Applications in real-time (SAP) c. Supply of Integrated information system interconnection link in real time d. Human Resources Training Information System Integrated in real-time

Table 2 gives description how the role of Information Technology applied by the corporate. IT infrastructure investment be able to reduce the corporate expenses significantly if associated with the use of Human Resources and other resources were used than when not using information technology. With the utilization of information technology, risks that be able to disrupt operations on the sale of the branches of the corporate can be known early so that important decisions at the top level management can be done immediately.

3.2 Risk Driver

To achieve the objectives of IT strategy would be influenced by the risk factors. Implementation Integrated information system in real-time throughout distributor corporate will be affected by uncertainties include: the IT infrastructure for the implementation of Integrated information system in real, integrated Information System application in real-time, integrated information system interconnection link in real-time, and human resources that be able to use Integrated information system in real-time.

IT infrastructure that existed before is server (centralized) using frame relay communication channel that connects all branches and the headquarters [3]. It is possible to use the existing infrastructure to be used interconnect distributor. The company has been using SAP applications for the company's internal business processes even though getting the constraints Human Resources in the form of readiness on the such applications. Existing applications can be implemented for the entire distributor corporate.

Table 3. Risk Driver

Risk Driver	Key Risk Indicators (KRIs)
The availability of the IT infrastructure for the implementation of Integrated information system in real-time	Number of IT infrastructure supplied
Availability of Integrated Information System application in real-time (SAP)	Number of applications
Interconnection Integrated information systems in real-time	Number of interconnections
Human resource be able to operate Integrated Information System in real-time	Number of qualified Human resource on the Integrated information system in real-time

3.3 Control Driver

To reduce the uncertainty or mitigate risks to plan the implementation of Integrated information system real-time throughout the corporate distributor be required control of risks. Based on driver risk described above the necessary controls, as shown in Table 4.

Table 4. Risk Control

Risk Control	Metric
Supply of Integrated information system interconnection link in real time	Number of IT infrastructure support
Development of integrated Information Systems Applications in real-time (SAP)	Number of Application Development
The supply of integrated information system interconnection link in real time	Number of the supply of Interconnection
Human Resources Training Information System integrated in real time	Number of Human Resources Training

3.4 Strategic Objective IT Map

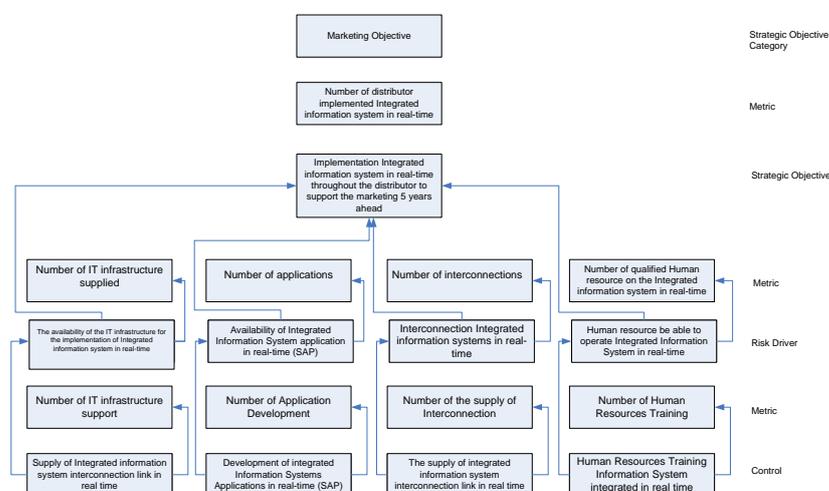


Figure 1. Proposed Strategy Map Strategic Objective IT

Based on Figure 1 the role of information technology in support of targeted marketing company is very important. There are 3 significance in achieving marketing objectives namely equipment, software and human resources that manage enterprise information systems. To achieve such significance, the investment required is quite large. Greater efforts are needed from the funding aspect, especially in investment in equipment and training of human resources, especially if associated with the target interconnection on all distributors

3.5 Implementation Strategic Management of Risk IT

Resources needed in the implementation of the strategic management of IT i.e:

a. Human Resources

In the implementation process involved representatives from distributors are expected to more quickly adopt changes. A team appointed distributor corporate directly handle fully operational. Refer to the implementation of SAP companies have done for the purpose of internal business processes, the implementation is also formed a team called the SAP Forum.

b. Technology

- IT infrastructure (servers, PC)
- SAP Applications
- Interconnection frame-relay

Table 5 Plan stages of implementation

No	Stages of implementation	Years				
		1 st	2nd	3 th	4th	5th
1.	Provision of IT infrastructure and implementation of integrated information systems by using the application MySAP. Starting from the central office in turn passed on to distributors spread at several locations.					
2.	Implementation of integrated information system					
3.	Implementation of integrated information system					
4.	Implementation of integrated information system					
5.	Establish a team called the SAP Forum of representatives from each distributor and vendor SAP					
6.	Socialisation and training of new system					
7.	Integrated information system able to run on all distributors and corporate					

4. Conclusion

This study describes analyze Objective IT Strategy, Risk Driver and Risk Control in related to achievement of corporate goals. Based on Objective Strategic Corporate and Objective IT Srategic, proposed 4 risk driver and control risk which must be managed i.e. infrastructure, apliacation system, interconnection and human resources. Risk drivers are important in the design of enterprise IT management strategy is integrated information system interconnection link in real time. This is because the interconnection that connects all corporate distributor is an activity that has not been implemented.

5. Further Study

Further study is needed on analysis of the added value of IT risk management for the company's operations based on Objective IT Strategy, Risk Driver and Risk Control.

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