



## **Strategic Planning of Information Systems Using IT Balanced Scorecards on KSU Talenta**

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### **Abstract**

Information Systems Strategic Planning is one of the determining aspects for companies in achieving goals in this digital era. One type of business that requires Information System Strategic Planning is businesses that interact directly with customers or customers related to improving services. Talenta Savings Cooperative (KSU) is one type of business that needs, this is because information technology can improve the quality and quality of services provided to customers so that the company is ready to compete in the era of the industrial revolution 4.0. Most of the service processes at KSU Talenta are still using manual techniques. This research is qualitatively descriptive where data collection uses observation techniques, interviews, and documentation. While the method of discussing strategic planning of information systems using the IT Balanced Scorecard, by conducting assessments on 4 (four) perspectives, namely, user orientation perspective, company contribution, operational improvement, and future orientation. To clarify the comparison between real conditions in the company and the ideal condition of information systems, the author also describes it using the Gap Analysis method. The result achieved is the availability of information system application series suggestions at each level of management. This strategic planning is also expected to be able to answer every need of the company in achieving existing goals.

**Keywords:** Strategic Planning, Information Systems, IT Balanced Scorecard

## **1. INTRODUCTION**

Information Systems (IS) or Information Technology (IT) is one of the most dominant drivers of the world economy today. In this era of zero-point (4.0) industry, everything began to be transformed into digitalization and automation. The rapid development of information technology is considered able to facilitate the work of everyone in the organization or company to achieve the expected goals. However, developing information technology requires a strategy or planning that is very mature and careful so that the development carried out can improve the performance of everyone in the organization to achieve the goals that have been formulated. Information Systems Strategy Planning is a set of



long-term goals that describe the goals of information technology systems and architectures to achieve company goals. Strategy planning is a management tool used to manage current conditions and project future conditions.

According to Ward and Peppard, strategy can be defined as a unified set of actions that become a tool to increase the success and long-term strength of a company in achieving competitive advantage. With the development or renewal of information technology systems in an organization or company, it must be ensured that the expected goals can be achieved. Because this will be directly related to the future of the organization or company. If within the specified period the goal has not been achieved, improvements must be made related to the strategy used. To measure whether an organization succeeds or does not achieve its goals, measurements can use a Balanced Scorecard framework that can be adjusted to the needs of the organization or company concerned. The balanced scorecard method itself has four perspectives, namely 1) Corporate Contribution, 2) User Orientation, 3) Operational Excellence, and 4) Future Orientation. The selection of the IT Balanced Scorecard method in this study is because this method is considered capable of being used as a measuring tool for companies whether the vision and mission adopted have been achieved and able to measure the competitive advantage, they have so that it can be maximized to improve the company's services to customers.

Each perspective that has been mentioned also has its targets that must be achieved by the company based on the vision, mission and strategy that has been set before. Talenta All-Business Cooperative or better known as KSU Talenta is a cooperative that stands behind the efforts made by the Gospel Church in Timor (GMIT) to assist small traders in developing their businesses. The Gospel Church in Timor (GMIT) was moved because it saw that congregations with small businesses (papalele and mamalele) were difficult to get capital loans from banks. After all, the very burdensome requirements also succeeded in encouraging KSU Talenta to be able to facilitate these small traders concerning lending business capital. Based on this rationale, the Talenta All-Business Cooperative was successfully established and inaugurated on June 28, 1996, which was located in Kupang [3]. During its establishment for approximately 25 years and contributed greatly to the development of economic aspects of the community in NTT, KSU Talenta still uses manual techniques and even the website owned is no longer used as a medium of presenting the latest information for existing customers.

The research that will be carried out by researchers is also expected to be able to contribute, especially in the IT field to improving services and accelerating the process of providing services to customers. This research will use the IT Balanced Scorecard method, which was adapted from Kaplan and Norton's

Balanced Scorecard concept. The difference between the two concepts lies in the second point, namely User Orientation and Customer Orientation, which in the IT Balanced Scorecard, there will be an analysis related to the perspective of the customer or customer orientation instead of from the perspective of the users or user orientation. . Based on the background that has been stated by the author above, the author also summarizes it in several problem formulations to answer existing problems, namely, how to arrange strategic planning in organizations or companies using the IT Balanced Scorecard method to be able to utilize IT as a medium in improving service to customers. The limit of the problem in this study is the IT Balanced Scorecard concept which includes four points, namely: 1). Organizational Contribution Perspective (Corporate Contribution), 2). User Perspective (Customer Contribution), 3). Operational Excellence Perspective, and 4). The perspective of Future Orientation.

## 2. METHOD

The method the author uses in this study is a qualitative method, according to [5], qualitative research methods can be interpreted as research methods based on philosophy, which are used to research the condition of natural objects, where researchers are key instruments, data collection techniques are carried out by triangulation (combined observation, interview, and documentation), data analysis is inductive or qualitative, and the results of the study put more emphasis on meaning than generalization. While the analysis unit targeted by the researcher is the employees at KSU Talenta both working in the general part that acts as user control and employees who directly use IT, namely customer service employees. In addition, in the research process carried out, researchers also need data sources to complete research data. Lofland in Lexy J. Moleong (2007:157)[6] also suggests that the main data sources in qualitative research are words and the rest of the actions are additional data such as documents and others. This study consists of two data sources, namely:

### a. Primary Data

Primary data sources are sources that can provide information, facts, and images of the desired event in research. Recording primary data sources through interviews or observations participates in a combination of viewing, hearing, and asking activities. Data sources were obtained by making observations and interviews.

### b. Secondary Data

Secondary data has two meanings. First, data that has been further processed for example in the form of tables and diagrams. Second, data collected by other people or other institutions, in other words, is not data collected by researchers themselves.

Based on the opinions of the experts above, the research conducted by the author also has 2 (two) data sources, namely primary sources that directly provide

data to researchers through observation and interviews and secondary, indirect sources, namely through documents, browsing the internet and so on. Here is a table that describes in detail the techniques used by the authors in this study.

**Table 1.** Collection Techniques Data

Data Type	Data Source	Techniques used	Purpose
Primary	Employees in the General Section	Observation, Interview, and Documentation	To explore information about the history, development of KSU Talenta, IT used and developed to run the company.
	Employees in the Customer Service Department		
Secondary	Blogspot Perusahaan	Browsing	As complementary data.

### 3. RESULT AND DISCUSSION

After the author completes the preparation of the above parts, then the author also researches the company that has determined the author, which according to the author's point of view with the approval of the supervisor, the method that the author raised is also following the problems in the company in question, namely, KSU Talenta. Based on the research that the author has carried out well by using observation methods, interviews, documentation and browsing, KSU Talenta also does not have a design and plan for the development of IS / IT in the future. This can also be seen from most of the processes that run on KSU Talenta still using manual methods. Like, registration of new members of KSU Talenta can only be done by going directly to the company or company branches, registration cannot be done online when as we know that currently the technology is very developed and very advanced and of course, the use of technology can save time when registering and make it easier for customers/customers to access it from where and anytime, Not limited to time and space.

Based on the problems encountered by the author, the author will also formulate SI / IT goals and profiles that can answer the needs of the company in the future so that the company continues to be able to adjust to the times, answer the needs of customers/customers who are increasingly diverse and who can especially continue to compete in this era of globalization. In addition, the preparation of SI / IT goals and profiles also refers to the vision and mission of KSU Talenta,

so that the implementation of IS / IT in the organization can run in line with the company's goals. After that, it is also necessary to analyze the gap between the current conditions and the expected conditions to formulate SI / IT solutions for the company. Here is the flow of formulating a strategic plan that the author designed to answer the needs of KSU Talenta:



Figure 1. Si/IT KSU Talenta Strategic Plan Formulation Flow

### 3.1 Strategic Planning Based on the Vision and Mission of KSU Talenta

Strategic planning according to McLeod as quoted in the [7], states that strategic planning is a participatory, systematic, sustainable process that helps an organization concentrate all activities for its mission and ensure that all its staff work to achieve the same goals. Meanwhile, according to other experts, [8] stated that strategic planning is a systematic management process that is defined as the proses of decision-making on the programs to be implemented by the organization and the estimated resources that will be allocated in the program faithful for several years. forthcoming.

In the framework of preparing a strategic plan in the company using the IT Balanced Scorecard method, it must first be identified and analyzed the company's objectives contained in the vision and mission of the related company, where the vision and mission are the basic references for the company in its operation. This is done with the aim that strategic plans and IT performance can be aligned, in line, and of course, can provide full support in achieving company goals. The vision and mission of KSU Talenta are as follows [3]: **Vision:** Declaring Shalom Allah to fellow human beings. **Mission:** Empowering the economy of the people of East Nusa Tenggara to be independent and prosperous.

After elaborating on the company's vision and mission, the vision and mission need to be translated into the IT profile as a form of translation of the company's vision and mission. The preparation of the company's IT strategic plan must be in line with the company's mission, namely, "Empowering the economy of the people of East Nusa Tenggara to be independent and prosperous". The implementation of IT is also expected to support the process

of optimizing community empowerment sustainably. Based on the exposure, the following is the formulation of the IT' profile of KSU Talenta.

### 3.2 KSU Talenta IT Profile



Providing SI / IT' services to improve people's services and quality of life to improve welfare.

### 3.3 Strategic objectives of IT KSU Talenta

The two experts, Van Grembergen and Van Bruggen adopted the balanced scorecard (BSC) method in 1997 to be applied to the information technology department. The purpose is to match the planning and activities of information systems with the purpose and integrity of the organization, adjust the efforts of employees to the objectives of the information system, provide measurements to evaluate the effectiveness of information system organizations, encourage and maintain the performance of information systems that are increasing, and achieving balanced results between stakeholder groups. In addition, this hal is also due to the IT unit in a company usually serving internal needs and projects that are carried out for the benefit of the company's unit as a whole [10]. The following is a description of the modifications that have been poured into the strategic objectives of KSU Talenta.

Business Contribution	: Implementation of integrated Information Systems on every line in the company
User Orientation	: Meeting the needs of every level of management and customers
Operational Excellence	: Improve performance to achieve established company goals, improve service to customers, improve the quality of life of the community and maximize existing promotional media
Future Orientation	: Improving the quality of human resources in the IT' field so that they can manage, utilize, and care for existing IT'.

**Table 2.** Relationship between Strategic Goals

Business Contribution	Implementation of integrated Information Systems on every line in the company 
User Orientation	Meeting the needs of every level of management and customers 

Operational Excellence	Improve performance to achieve established company goals, improve service to customers, improve the quality of life of the community and maximize existing promotional media
Future Orientation	Improving the quality of human resources in the IT field so that they can manage, utilize, and take care of existing IT



Based on the table that the author has described above, it can be seen that to achieve the company's goals in the perspective of Future Orientation requires human resource qualifications with the ability to manage, utilize and care for existing IT, then at the operational excellence level, with adequate human resources quality is expected to improve performance for the achievement of company goals, able to improve services to customers, improve the quality of life of the community and can improve and maximize promotional media to build image and branding. Then at the User Orientation level, there will be the fulfilment of the needs of each level of management and able to answer customer needs, and finally at the Business Contribution level, the achievement of integrated information systems on each line of the company to achieve the goals of the company.

### 3.4 Gap Analysis

In this section, the author will also outline a comparison between gap analysis or Gap Analysis based on the IT Balanced Scorecard theory and the real state of IT in related companies.

**Table 3.** Gap Analysis

Perspective	Gap
Business Contribution	There is no availability of applications that can connect each field according to their respective needs.
User Orientation	<p>No application can facilitate customers to be able to directly interact with the staff at the company digitally. If there are obstacles encountered, then the customer is required to go directly to the company. As for registration and claim.</p> <p>Information services to the public can only be done at the KSU Talenta office.</p> <p>The application available is only 1 (one) so if there is a disruption to the application system, it will interfere with the overall running of operations in the company.</p>



Operational Excellence	Data management has not been fully automated, so it still requires and uses data management manually.
	The existing promotional media, namely Blogspot companies are not up to date for information and data and the appearance of blog spots that are not interesting.
Future Orientation	There is no availability of human resources that can be fully responsible for the information systems in the company.

### 3.5 KSU Talenta Information System Strategic Plan

Based on the gap analysis that the author has outlined in the table above, it can be designed the formulation of needs at KSU Talenta is as follows:

**Table 4.** Information Systems Application Needs List

Management Level	Management Sub-Level	Information Systems Application Suggestions
Manager and Supervisor		Application for Goal Achievement Monitoring in Companies
Management	General Manager	Employee Performance Monitoring App
		Company Financial Control Application
General Manager and HR	Personnel	Employee Attendance Application
	Secretariat	Employee Data App
Development	Research	Correspondence Application
		Employee Development and Training Application
	Accounting	Aplikasi Laporan dan Pencatatan Keuangan
Finance Manager		Enterprise Data Processing Application
	PDE	Utilization of Youtube, Instagram, Facebook, and websites for promotion
	Control	Network Security Applications
Credit Manager	Loans & Deposits	Registration and Customer Service Application
Commerce Manager	Trade	Company Inventory and Assets
	Commercial Services	Application



After the author conducts a gap analysis on the related company, the author also designed several applications needed by the company concerning the company's IT development. The applications mentioned above, are intended to facilitate existing human resources to carry out their basic tasks and functions. With the increasing number of Information Technology investments in these applications, the leadership will be increasingly moved to ensure that the investment will get a commensurate benefit [11]. Furthermore, Saull also argued that the IT Balanced Scorecard method can be used to harmonize business strategies and evaluate the performance of Information Technology assets [12].

The above applications also make it easier for companies to adapt and compete with their rivals in this digital era, where the use of technology becomes absolute and dominant as a means of communication, dissemination of information, or establishing business cooperation. Technological developments also encourage economic development and contribute to economic growth. In addition, the economic progress of a country can also be seen from the development of information and communication technology. The higher the development, the higher the economic growth of the country. The maximum use of technology at KSU Talenta will certainly help encourage economic growth. Moreover, KSU Talenta has a market share of small entrepreneurs, so if it continues to be driven by technological developments, the use of technology by entrepreneurs continues to be pursued. The integration of technology in KSU Talenta opens opportunities for the wider community to be able to access information from anywhere and anytime without being limited to space and time. The company is also able to quickly and precisely answer the needs of each customer to improve customer welfare. Appropriate technology will certainly make it easier for companies to operate and facilitate customers in their economic activities. Even IT development is also able to reduce the economy of high costs because the distribution chain of products or services can become shorter along with the connection directly between producers and consumers in an application that has been integrated.

In the gap analysis that the author designed, it can be known that from the perspective of Business Contribution no application can integrate the work of each field to facilitate the implementation of monitoring activities. This is also behind the author's advice to hold a monitoring application for the achievement of company goals so that it can be known the performance of each field to achieve goals. While at the manager level, several supporting applications are needed to facilitate the provision of services to customers to improve customer welfare and the development of promotional media to build image/branding. The customer service application will be provided information related to the finances needed. The application is also useful for improving customer quality.

The presence of technology-savvy customers increasingly encourages customers to utilize technology effectively and efficiently.

In addition, some of the suggested applications are also intended so that companies can gradually abandon manual ways that take time and spend a lot of paper changing into the use of appropriate technology. Existing applications are also expected to be able to answer gaps in the perspective of User Orientation and Operational Excellence. Then in the perspective of Future Orientation, the company is expected to provide debriefing or training to employees to improve the quality of employees in the company so that employees can manage, utilize to the maximum and be able to take care of hardware and software. which already exists. After that, the company must also be able to provide human resources that focus on handling problems and IT treatment in the company. Furthermore, companies are advised to have data security applications, networks, and applications to minimize or even be able to avoid data, network, and application damage that may occur at the time of their use.

When the company has successfully held the applications in question, then the procurement of servers that become the company's database is a must. This aims to maintain and ensure the confidentiality of company data from parties who do not have the right to access it.

#### 4. CONCLUSION

Based on the results of the management and analysis of data that the author has explained in the discussion above, it can be concluded that KSU Talenta has only 1 (one) application in the operation of his company so far. If there is a disruption to the application, it will interfere with the overall operation of the company. In addition, most of the service process is still done manually so it is limited to space and time. Services at KSU Talenta are also available on special media for customers to get information services quickly, precisely, and accurately. The only promotional medium that is owned is Blogspot. However, until now Blogspot is no longer active in providing the latest information and data. The combination of the IT Balanced Scorecard and Gap Analysis methods is also able to identify in detail the IT needs of KSU Talenta and provide an overview of the gap that occurs between the ideal use of technology in this digital era and the reality that occurs in KSU Talenta. So the suggestion of application can help the company in transforming leaving manual ways that are less effective and efficient and make it easier for companies also in the management and search for the data needed. In addition, KSU Talenta's promotional media improvement by utilizing youtube, Instagram, Facebook and website development with attractive designs and the presentation of the latest data can also help the company in building a better company image/branding.

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