



مجلة إدارة الجودة الشاملة
Journal homepage:
<http://journals.sustech.edu/>



The role of strategic Management as a quality criteria in Organizational learning

The case of Sudatel group Inc. Sudan

دور الإدارة الاستراتيجية كمعيار للجودة في التعلم المؤسسي دراسة حالة مجموعة سوداتل للاتصالات

Mohamedelfatih Firagoun Sidahmed

Mustafa Hamid Salim Elhakeem

Abstract:

The main purpose of this paper is to determine the role of strategic management as a quality criteria in organizational learning and the case study is Sudatel group Inc. This paper has investigated the existing level of organizational learning practices in the company.

The review of literature revealed the definition of strategic management as a quality criteria and its process. and strategic direction as it's currently stated on ISO 9001: 2015 .Also it explained the organizational learning as a state whereby an organization attempts to understand the recent changes and acquire information on the recent trends and changes within the market.

This paper consisted Introduction, Literature review and Research. A descriptive analytical approach was used in conducting the research, it depends mainly on data collected from primary sources through distributing of 40 questionnaire to employees and managerial staff of the Sudatel Group of which two sample were returned invalid makes the total of 38 valid sample.

The study showed encouraging level of the effectiveness of the strategic management as a quality criteria in organizational learning processes. Finally it recommends some tip points for the company to take care of, to achieve the maximum benefits of strategic management in organizational learning.

مستخلص:

الغرض الاساسي من هذه الدراسة هو تحديد دور الاداره الاستراتيجيه كمعيار للجودة في التعلم المؤسسي مع اخذ مجموعه سوداتل للاتصالات كحاله دراسه. وقد بحثت هذه الدراسة في المستوى الحالي لممارسات التعلم التنظيمي في الشركة. كما كشفت مراجعة الأدبيات عن تعريف الإدارة الإستراتيجية كمعيار للجودة وطريقه عملها يالاضافه للتوجه الاستراتيجي كما هو مذكور حاليًا في ISO 9001: 2015 ، ايضا عرفت التعلم التنظيمي كحاله تحاول من خلالها المنظمة فهم التغييرات الأخيرة واكتسابها معلومات عن الاتجاهات والتغيرات الأخيرة في السوق.

اشتملت هذه الورقه علي المقدمه والاطار النظري واخيرا البحث نفسه.استخدم الباحث في هذه الدراسة اسلوب التحليل الوصفي وهو يعتمد كليا علي المعلومات المجمعه من الاستبيانات التي تم توزيعها علي موظفي الشركة والبالغ عددها 40 نموذج مع رجوع اثنين كتالف ليصبح عدد الاستبيانات الصالحه 38 استبيان.اشارت الدراسة

لمستوي مشجع جدا لتأثير الاداره الاستراتيجيه الايجابي علي عمليه التعلم المؤسسي. اخيرا اقترحت الرساله بعض التوصيات للشركه لتحصل علي اقصي استفادة من دور الادارة الاستراتيجية في التعلم المؤسسي.

Keywords Strategic direction, Strategic management, Quality criteria, Organizational learning.

Introduction:

Conspicuously the world of Quality is heading fast toward strategic management and it thinks clearly that strategic planning is the key to quality implementation, the changes in **ISO 9001: 2015** are here, and it includes big adjustments on how companies views their quality management system, to describe those changes in one sentence we would say " No need for quality department from now on" because now everyone is responsible for quality and everyone has a role to play.

To effectively achieve and fully implement this cultural change in the new ISO standard, manufacturers need to align their organization's strategy, business processes and quality management systems to create a written Strategic Plan that defines the actions needed to achieve the right goals and to effectively communicate those goals to the entire organization. Eyesight, strategy, leadership, values, structure, processes and experiences all should be evolved in order that people's learning is improved and it accelerates organizational learning (Masudi Nadushan & Javan Shargh, 2005).

Clauses 4.1, 5.2 and 9.3 in the new **ISO: 2015** they all about strategic direction which is a course of action that leads to the achievement of the goals of an organization's strategy, also the new **EFQM 2020** places unparalleled emphasis on the importance of purpose, vision and agile strategies to organizations if they are to create sustainable value.

Learning is one of the approaches of effective strategic management. This approach require from the organization openness for changes – modifying established ways of acting, analyzing and improving existed procedures and willingness to proper responding on unusual and unpredictable situations. Companies must be prepared to maintain adaptability and flexibility in the changing world.

1.1 Objectives of the study:

- Determine the role of strategic management as a quality criteria in organizational learning
- Explain how learning is the most important way to improve performance.
- Realize the effect of strategic management as an organizational learning tool.

1.3 Hypothesis:

H1: The processes of strategic management as a quality criteria has a positive effect on company's organizational learning (strategic management as a quality criteria).

H2: Managers think strategically and holistically Instead of focusing on individual issues (system thinking).

H3: The organization learns through individuals who learn. (Personal mastery).

H4: Employees share the same vision of the organization. (Shared vision).

H5: Employees learn from each other and transfer knowledge into a team learning process (Team learning).

H6: Employees develop new skills, hence the group develops a capacity to work with mental models (Mental models).

Literature Review:

This study will give a brief explanation of the Strategic Management as a quality criteria and Learning Organization approaches so we can understand what are they and how they interact with each other and most importantly how the strategic

management concept would affect the organizational learning approach on a big organization such as Sudatel Group.

Strategic management:

Strategic management can be defined in various ways. According to Wheelen and Hungers' study (2006, 3), strategic management is a set of managerial decisions and actions that determines the long-term performance of a corporation. It involves environmental scanning (both external and internal), strategy formulation (strategic or long range planning), strategy implementation, and evaluation and control. They emphasize the analyzing and evaluating of external opportunities and threats in terms of an organization's strengths and weaknesses. (Wheelen & Hunger 2006, 3).

Wheelen & Hunger puts it this way translating into a simple word, it can be understood as a process of strategy formulation, implementation and evaluation according to the figure below

STRATEGIC MANAGEMENT

Strategic Management Process

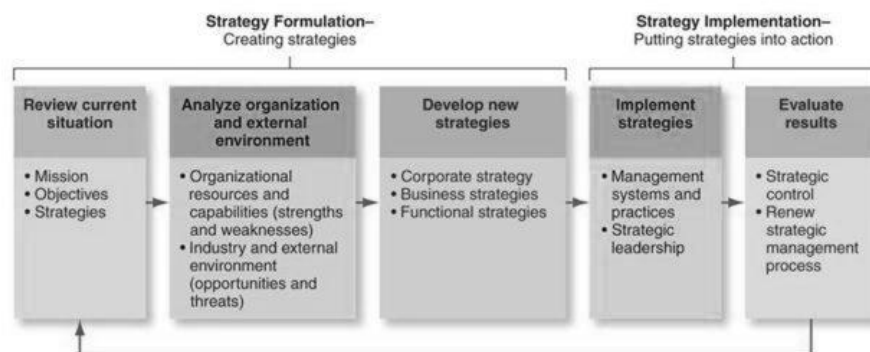


Fig. 1: Strategic Management process. Source

<https://theintactone.com/2018/12/23/sm-u1-topic-5-process-of-strategic-management>

Figure 1 explains the processes of strategic management

From the perspectives of Dess and Miller (1993), strategic management is a process that combines three major interrelated activities: strategic analysis, strategy formulation and strategy implementation. 7 In the other way, Lamb (1984) states that strategic management is an ongoing process that evaluates and controls the business and the industries in which the company is involved; assesses its competitors and sets goals and strategies to meet all existing and potential competitors; and then reassesses each strategy annually or quarterly to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors, a new economic environment, or a new social, financial, or political environment.” (Lamb 1984).

3.2 Strategic management as quality criteria

3.2.1 Strategic Direction as Currently Stated in ISO 9001:2015

Clause 4.1: The organization shall determine external and internal issues that are relevant to its purpose and its strategic direction and that affects its ability to achieve the intended results of its quality management system.

Clause 5.2: Top management shall establish, implement and maintain a quality policy that is appropriate to the purpose and context of the organization and supports its strategic direction.

Clause 6.2.1: The organization should establish quality objectives at relevant functions, levels and processes needed for the quality management system.

Clause 9.3: Top management shall review the organization's quality management system, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of the organization (ISO 2015).

ISO 9001:2015 has brought to the world of management systems a great synergy between strategic planning and quality management. This does not mean that the requirements of the latest version of the most recognized standard worldwide necessarily include strategic planning, but rather that this Standard can be used as an additional tool to strategic planning. There are several requirements in ISO 9001:2015 that can be characterized as reference for good planning, such as Context of the Organization. Resourceful tools such as SWOT (strength, weakness, opportunities and threats) analysis are commonly used for scenario evaluating, including identifying external and internal issues, which are requirements of the ISO 9001 standard. Organizational strategy is also achieved through identifying your stakeholders; another requirement of the standard. Defining them and understanding who they are and their respective requirements and expectations is key. Moreover, the quality policy itself has a significant synergy with the strategic direction of the organization, it is a document where top management defined the premises of the company taking into account the context of the organization previously established. In addition to the aforementioned requirements, ISO 9001:2015 has brought the best tool for implementing strategic processes: risk management. Through the process of risk management, it is necessary to evaluate and treat risks in the strategic, tactical and operational scope, that is, the strategic processes established in the context of the organization, as well as in the tactical scope with the management system as a whole, as well as the risks of processes in the operational activities. Another ISO 9001:2015 term that highlights its synergy as strategic planning is change management. The requirements of the Standard describe change planning and the implementation of changes in operational processes. It is a subject that can be directly related to the organizational planning and process within the organization (

<https://qms-certification.com/blog/strategic-planning-with-iso-90012015/>).2020

3.2.2 EFQM 2020 and strategic management



fig 2 Efqm 2020 model .

Source:

<https://www.efqm.org/index.php/efqm-model/>

Figure 2 shows the elements of the EFQM 2020 model.

As we see in fig 2 the Efqm 2020 also leans on strategic management by emphasizing on the importance of purpose, vision, and agile strategies to organizations.

The model has risen from being a tool for continuous development to an integrated management / leadership model that links its three components (the organization's direction, implementation, and results)

As a result, the model now covers the area of the organization as a whole and has greater capacity to integrate all administrative processes and thus can be adopted as a single model for the leadership of the institution: (Rawhey Dabagh, 2019)

- The model has developed the importance of analyzing the organization's vital environment beyond stakeholders to include the market and competition environment as well as influencing global transformations.
- The new model can be combined with strategic planning models such as strategic maps and balanced scorecard with greater efficiency and harmony than the previous model
- The current model focuses on innovation as a source of competitive advantage for institutions and companies and ensuring best results and business sustainability
- The model continuously focuses on stakeholders in all pillars and standards of the model
- The model focuses on the importance of institutional transformation and capacity building on continuous change and maximizing benefit from opportunities
- It clearly defines the necessity of building and directing the institutional culture towards the purpose of the 'Organizational Purpose' and towards innovation as one of the institution's core capabilities.

3.3 Organizational learning:

Organizational learning refers to a state whereby an organization attempts to understand the recent changes and acquire information on the recent trends and changes within the market. The business entity makes alignment with the environmental factor by gaining knowledge about them (Zepeda, 2011).

Organizational learning is beneficial as it contributes to improving the market position and more importantly, it allows organizations gain competitive advantage (Senge 1992:7).

According to Senge, over the long run, superior performance depends on superior learning. (Senge 1992: 12) There are two reasons which foster the concentration towards proper and continuous organizational learning (Lifelong learning, 2013) . One is the sustainability and other is profitability. If a business entity is committed to getting long term sustainability along with high profitability, then regular improvement within the business operations is required. Senge defined learning organizations as organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning to learn together.

Peter Michael Senge (born 1947) is an American systems scientist who is a senior lecturer at the MIT Sloan School of Management, co-faculty at the New England Complex Systems Institute, and the founder of the Society for Organizational Learning. He is known as the author of the book *The Fifth Discipline: The Art and Practice of the Learning Organization* (Wikipedia).

Fifth Discipline (Peter Senge)

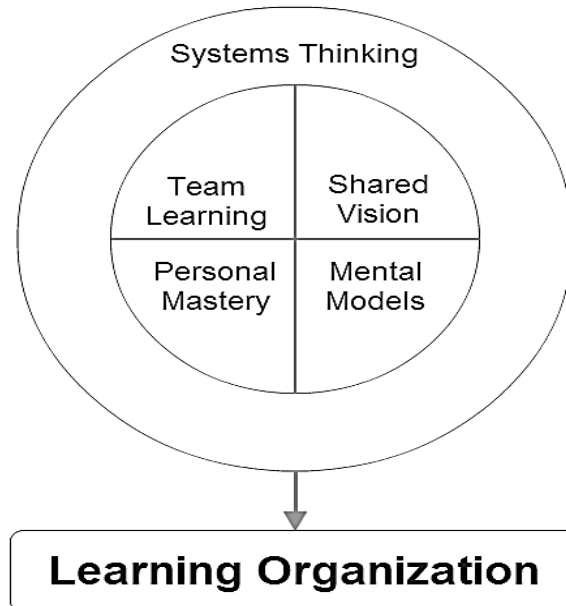


Fig. 3: Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization*, Century Business, London (1992).

Senge's learning organization describes how to manage the success and development of an organization and how employees give the extra mile that goes beyond the expectations of the company. They are: (Asa Loof 2004).

Shared vision tackles the common problem of putting the company's vision into words, creating a shared picture of the vision and making the employees adopt it as

their own personal vision. The creative difference between reality and the vision is a way of seeing progress and an objective that serves as a motivator for a lot of people. Senge makes the distinction between a genuine shared vision and the familiar “vision statement”

Mental model describes the concept of not only interpreting reality, but also the attempt to visualize companies by trying to put a “face” on the entity. What Senge is aiming at is in other words to identify the values of the companies and the perception of what the business is all about. We have to understand who we are in order to see where we like to go and to develop. The new concept and the original approach lies in that the company has to be flexible and willing to accept changing to a new mental model and face of the company. It is thus not to be seen as a static position. Moreover, as the most successful companies will be those who can learn and adapt to a new mental model faster than its competitors. Senge describes the importance of scenario and hypothetical future mental models.

Team learning the importance of team learning is that it is crucial to have good team dynamics, as the intelligence of a team can exceed the sum of its members. On the contrary, when organizations have dysfunctional teams, the collective IQ can be lower than that of the individual.

Personal mastery is when an individual has a clear vision of a goal, combined with an accurate perception of reality. The gap between the vision and the reality sets up a "creative tension" that energizes the individual. In practicing personal mastery, the individual acquires the necessary capacities and creates whatever methods and rules are necessary to realize the vision.

System thinking about observing a whole system, instead of focusing on complex individual issues. The idea is that there are no clear problems that stay in a limited area or time. We have to understand the correlation between actions and consequences, and that they can occur in different time spans. One have to be curious about understanding relations between companies (e.g. company – supplier) and interactions between different department in an organization.

3.4 Strategic management and learning at Sudatel Telecommunications Group

Managing knowledge effectively is key to the performance and competitiveness of organizations, especially in our Sudanese telecommunications market, and since it has a fierce competition in this market.

Sudatel Telecommunications Group (STG) is a telecommunications and Internet service provider in Sudan. The company is responsible for the construction and maintenance of Sudan's telecom infrastructure. Sudatel is more than 60% owned by the Sudanese government; the remainder being owned by private interests. Its stock is listed on the Bahrain Stock Exchange (Wikipedia 2020). (STG) is one of the leading telecom companies in the region, serving the needs of customers in Sudan and Africa. Since its foundation on 7th March 1993, STG has grown steadily from local to regional markets, setting a good example for privatization policy (<https://www.sudatel.sd/about-us/overview/>).

Three companies are competing to provide telecommunications services in Sudan. Including two foreign companies, namely 'Zain', which is the largest share in the telecommunications market and holds 42% of the Sudanese market. Followed by United Telecom Company 'MTN', which controls 32% of the market. Finally, the national telecommunications company comes with 26% of the market. So in order for Sudatel Telecommunications Company to compete those giants in this market it has to take a deeper look at how the company would perform at its best and be very alarmed

to any changes would happen to the market and to its rivals, in order to do so company has to innovate or create new knowledge, and retain this knowledge, and also company has to transfer this knowledge into a powerful position in the market. Also strategic implications of new results on organizational learning and knowledge management also need to be developed.

This study focuses on the impact of strategic management as a quality criteria on the company organizational learning process and how that would affect the overall performance of the company, in order to do so study has to put all aspects of strategic management and organizational learning at Sudatel Group and its staff to the test.

Case study

Research Methodology

ork within which the research is conducted. The chapter will explain how the current study is designed and the steps taken to address the research problem and test the six hypothesis laid out in chapter one; it will discuss research design followed by questionnaire design.

4.2 Study design

The researcher used descriptive analytical approach in conducting the research, it depends mainly on data collection from primary sources through distributing the questionnaire on employees and managerial staff of the Sudatel Group , Statistical analysis carried out on the questionnaire results were examined and the final research conclusion and recommendations were built upon.

4.3 Population and Sampling

The study population consist of Sudatel Group employees and managerial staff. The sample was collected from the Sudatel Group headquarter in Khartoum, we handed out outside managerial staff a total of 40 copies of the questionnaire with 2 returned invalid, so the final count will be 38 copies. The total number of employees working at Sudatel Group headquarter are about 75 and the total number of the employees at the whole corporation is more than four thousand.

4.4 Questionnaire Design

The questionnaire consisted of six sections; each section has five questions represent one of the six hypothesis, the first one was aimed for Strategic Management, the second is aimed for System Thinking, the third is for Mental Model, the fourth is for Shared Vision , the fifth is for Personal Mastery and the six is for Team Learning, later on the statistical analytical stage we gave each of this answers a Likert Scale in order to be able to select appropriate method of analysis, it goes like this :

Table 1 Likert scale Response categories

1	2	3	4	5
Strongly disagree	Disagree	Neutral	agree	Strongly agree

The questionnaire was drawn in English and Arabic language in order to be understood by the entire sample.

4.5 Questionnaire Preparation

Preparing the questionnaire was not an easy task because researcher have to match each question on the questionnaire to what it represent on the strategic management and the system thinking philosophies to prepare it, below is a Figure of those questions along with their references :

4.6 Study Reliability

Table 2 shows the reliability measures of the hypotheses of the study using the Alpha Kronbach (α) coefficient

	Number of expressions	Validity measure
System thinking	5	0.860
Mental models	5	0.926
Personal mastery	5	0.840
Shared vision	5	0.911
Team learning	5	0.927
Strategic management	5	0.924
General validity	30	0.974

The general reliability is 0.974 are very high and around (1) that means the questionnaire has high degree of reliability. Also every hypothesis questions have a high degree of reliability are ranged between (0.840 to 0.927)

4.7 Hypotheses test

Hypothesis 1 (Strategic management)

Table 3 hypothesis 1 test

	p-value	Mean	SD	Comment
Company formulates, implement, evaluate and control its strategies?	0.000	3.82	0.766	Agree
Company collects wide range of information about the market it operates in?	0.000	4.08	0.632	Agree
Company analyzes the environment in which it operates?	0.000	4.13	0.665	Agree
Company makes decisions regarding on how its resources will be aligned toward its strategic plans?	0.000	4.03	0.885	Agree
Company evaluates and corrects all the above activities?	0.000	3.89	0.981	Agree
Strategic management	0.000	3.99	0.697	Agree

SD \equiv standard deviation, The T-test was used for one sample

The p-value of strategic management is 0.000 is less than 0.05 significant level that means there is a significant different between mean of strategic management in general and the degree of neutral (3), the mean (3.99) is ranged from 3.41 to 4.20 describe of individuals sample are agree for statements of the strategic management

Hypothesis 2 (System thinking)

Table 4 hypothesis 2 test

	p-value	Mean	SD	comment
Managers embrace system thinking concept by running the company as a whole system rather than parts.	0.000	3.61	0.790	Agree

Company has a clear strategic plan to benefit from organization learning philosophy?	0.000	3.63	0.913	Agree
Company responses fast to market changes and make the best out of it?	0.000	4.00	0.697	Agree
Company's departments are interdependent on each other to achieve goals?	0.000	3.97	0.854	Agree
Company always expands their capacity to create the results desired?	0.000	4.03	0.822	Agree
System thinking	0.000	3.85	0.655	Agree

SD \equiv standard deviation, The T-test was used for one sample

The p-value of system thinking is 0.000 is less than 0.05 significant level that means there is a significant different between mean of system thinking in general and the degree of neutral (3), the mean (3.85) is ranged between (3.41 to 4.20) describe that the sample individuals are agree for statements of the system thinking.

Hypothesis 3 (Mental models)

Table 5 hypothesis 3 test

	p-value	Mean	SD	Comment
Company highly interested on how employees see it and always working on how to improve their mental models` vision?	0.000	3.68	0.809	Agree
Company highly interested on creating an excellent mental model and entrench it on employees' mind?	0.000	3.76	0.786	Agree
Company always working on increasing employees' awareness to adapt to any changes while working?	0.000	3.87	0.665	Agree
Company across all department shares it's thinking with employees and let them share theirs too?	0.000	3.61	0.823	Agree
Company always anticipate changes on business and activities and always has the ability to adopt to those	0.000	3.84	0.495	Agree
Mental models	0.000	3.75	0.638	Agree

SD \equiv standard deviation, The T-test was used for one sample

The p-value of mental models is 0.000 is less than 0.05 significant level that means there is a significant different between mean of mental models in general and the degree of neutral (3), the mean (3.75) is ranged between 3.41 to 4.20 describe that the sample individuals are agree for statements of the mental models.

Hypothesis 4 (Personal mastery)

Table 6 hypothesis 4 test

	p-value	Mean	SD	Comment
As a part of personal mastery axis, company has clear realistic goals?	0.000	3.84	0.638	Agree
Company has a clear understanding of its current reality?	0.000	4.03	0.753	Agree
Company induces its employees to have the	0.000	3.68	0.904	Agree

capacity to get what they want?				
Company learns from employees on how they see the company?	0.000	3.79	0.704	Agree
Company focuses on results while seeing the current reality?	0.000	3.89	0.509	Agree
Personal mastery	0.000	3.85	0.557	Agree

SD \equiv standard deviation, The T-test was used for one sample

The p-value of personal mastery is 0.000 is less than 0.05 significant level that means there is a significant different between mean of personal mastery in general and the degree of neutral (3), the mean (3.85) is ranged from 3.41 to 4.20 describe that the sample individuals are agree for statements of the personal mastery.

Hypothesis 5 (Shared vision)

Table 6 hypothesis 5 test

	p-value	Mean	SD	Comment
The whole company has a clear shared vision of its position currently and on the future?	0.000	3.76	0.852	Agree
Company makes everyone involve on creating that vision and plant it in their minds?	0.000	3.55	0.795	Agree
Company's vision is totally adopted by its employees and also its shareholders?	0.000	3.61	0.823	Agree
Company's employees are totally committed to its vision?	0.000	3.95	0.613	Agree
Company's vision always flexible to change and company always ready to adopt it?	0.000	3.82	0.834	Agree
Shared vision	0.000	3.74	0.677	Agree

SD \equiv standard deviation, The T-test was used for one sample

The p-value of shared vision is 0.000 is less than 0.05 significant level that means there is a significant different between mean of shared vision in general and the degree of neutral (3), the mean (3.74) is ranged from 3.41 to 4.20 describe that the sample individuals are agree for statements of the shared vision

Hypothesis 6 (Team learning)

Table 8 hypothesis 6 test

	p-value	Mean	SD	comment
Company facilitates the process of collective team learning to its employees?	0.000	3.63	0.913	Agree
Company has an excellent communication channels among its employees?	0.000	3.92	0.673	Agree
Company's employees are opening minded to learn from each other?	0.000	3.84	0.823	Agree
Company`s employees fully understand that team learning is better than individual learning?	0.000	3.95	0.804	Agree
Company has a considerable role inducing employees to learn from each other?	0.000	3.82	0.896	Agree
Team learning	0.000	3.83	0.727	Agree

SD \equiv standard deviation, The T-test was used for one sample

The p-value of team learning is 0.000 is less than 0.05 significant level that means there is a significant different between mean of team learning in general and the degree of neutral (3), the mean (3.83) is ranged from 3.41 to 4.20 describe that the sample individuals are agree for statements of the team learning.

4.8 Results and discussions

Tables 3,4,5,6,7 and 8 indicates that overall result from the study shows encouraging level of the effectiveness of the strategic management as a quality criteria in organizational learning processes , most of the participants agreed to most of the questions of the questionnaire.

The company did very well in many areas such as resources management, collecting and analyzing information about the markets it operates in, fast responding to the market changes, expanding capacity to create desired results, clear understanding of its current reality.

On the other hand company did poor in some areas such as: company does not have a clear strategic plan to benefit from organizational learning philosophy, company does not work on creating mental model and entrench it on employees` mind, it also does not share thinking with employees, and finally company does not facilitate the process of collective team learning to its employees.

4.9 Recommendations

In order to reach the ultimate benefits of strategic management as a quality criteria in organizational learning process there are several steps the Sudatel group need to take, some of these steps are:

- Company should have a clear strategic plan to benefit from organizational learning philosophy.
- Developing communication channel between employees and management in order to entrench a mental model on to employees` mind.
- Company need to put more attention on sharing thinking with its employees to increase the effectiveness of their understanding to company`s goals.
- Company need to activate the team learning philosophy by facilitating the process and nourish it so it would be easier for team members to learn together.
- company have to be more learning oriented in their internal structures.

References:

(Asa Loof 2004).

Dess, G.G. & Miller, A. 1993 Strategic management. Mc Grow-Hill book Co. New York.

Hunger D.J, Wheelen T.L, 2006 Concepts in Strategic Management and Business Policy. 10th ed. Pearson Education, Inc. New JerseyDess and Miller (1993).

Lamb, R. 1984 Boyden Competitive strategic management. Englewood Cliffs, NJ, Prentice-Hall.Pedler, Boydell and Burgoyne YEAR: 6; Senge 1990:7

Masudi Nadushan, E., & Javan Shargh, H. (2005). Organizational learning and the strategy of learning organization, The quarterly of Modiriati-efarda, 3(9&10), 76-79

P. Senge, The Fifth Discipline: The Art and Practice of the Learning Organization, Century Business, London(1992)

Senge, P. M. (1990a). The fifth discipline: The art and practice of the learning organization. New York, NY: Doubleday.

Zepeda, J. S. 2011. Professional Development: What Works. 2nd ed. Eye On Education.

About Sudatel Group (online) <https://www.sudatel.sd/about-us/overview/2020>

EFQM model (online) PrintRawhey Dabagh, 2019
<https://www.averroesadvisory.com/blog/efqm-model-2020/>
Process of strategic management (online) <https://theintactone.com/2018/12/23/smu1-topic-5-process-of-strategic-management/> 2020
EFQM model (online) <https://www.efqm.org/index.php/efqm-model/2020>
Strategic planning with ISO (online) <https://qms-certification.com/blog/strategic-planning-with-iso-90012015/.2020>
<https://www.wikipedia.com/2020>
Lifelong learning. 2013.[Online].Available through:<<http://radiographics.rsna.org/content/29/2/613.full>>. [Accessed on 27th March 2015].