



Evaluating strategic thinking in Sistan and Baloochestan university based on Jean Lidca's model

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Abstract:

Strategic thinking as one of key factors is known in effectiveness of strategic management. Today, having high strategic-thinking management is basically needed for organizations which are competing to be outstanding and developed. And it seems that presence of strategic thinking in managers compiling program is necessary in organization to compile and perform strategic management. So, evaluating strategic thinking as one of key factors in effectiveness of strategic management process needs to more attention. This research aims to evaluate strategic thinking in Zahedan sistan and baloochestan university based on Jean Lidca's model. The research is performed by descriptive and measuring methodology, strategic thinking in university and by 100 managers, supervisors and experts of university who are selected by random sampling and is evaluated by strategic thinking questionnaire based on Jean Lidca's model. The results show that position of using strategic thinking in university is up to average level. Element of hypothesizing and seeking opportunity is in least rate and element of emphasizing on goal is in the most rate among other elements. Finally, regarding research findings some suggestions are presented.

Keywords: Strategic thinking, Systematic thinking, Emphasizing on goal, Intelligent seeking opportunity, Hypothesizing and test, Thinking in time



Introduction:

Workplace with some properties such as complex and non-linear changes, big unconnected transitions makes relatively impossible to anticipate future correctly (Iranzadeh & Sadeqi, 9:2006). If one can use human dynamic properties to move organization toward adaption of external environment, so disturbances of external environment will be mitigated (Stisi, 116:2009). While presenting complex changes people need some instruments which help them to think strategically and adapt changes. They need a way to reduce complexity and change it to comprehensible and controllable categories and understand the quality of relationships between these categories (Fredman, 5:1998). Organizations should consider special properties of their surrounding environment, without losing general and main environment surrounding them. By this interpretation, the main challenge is designing and preservation of effective prospective and making sure about operational components of this perspective. In this area necessity of strategic thinking is so important (Iranzadeh & Sabahi, 19:2009). Successful behavior of strategic managers is full of paying attention to environment, recognizing opportunities on time and orienting along using it (Qafarian & Kiani, 28:2006). Strategic thinking helps managers to compile suitable strategy to survive and achieve success. Making decision by an entrepreneurial approach and preparing environment need a kind of mental flexibility. Strategists who pose have strategic thinking can approach organization to better future by some properties such as leading, creativeness, systematic perception, long-term view, opportunism and many other cognitive-mental capabilities and these mental capabilities are the same thing that is called strategic thinking today (Nazemi & Jaafarian, 9:2011). One reason that leaders find themselves belonged to complex, unclear and turbulent environmental conditions and is that they rely on linear thinking that isn't able to act in complex and unclear conditions (Sunkung pang, 3:2012). Garrat also has a similar idea that strategic thinking is such a process by which top managers top managers can separate themselves from managerial daily crises (Garrat, 1995). From Bernhut's point of view, increasingly ability of strategic thinking is an important instrument for managers in several organizational levels (Bernhut, 2009). Growing correct and exact management methods of strategic thinking is the most important step of a leader and a firm to prevent decline and keep it to grow (Moon 1:2010). University isn't away from this approach and should confront its complex environment changes by profiting this ability. But is university managers'



function resulted from strategic thinking? To answer this paper studies rate of using strategic thinking and its elements in workplace based on Jean Lidca’s model in medical school.

Theoretical literatures

Definition of strategic thinking

Several definitions are presented by authorities about strategic thinking and each one studies and evaluates some dimensions of this problem. Boon (2001) says that there is no agreement on literatures of strategic thinking (Sharifi, 7:2012).

Table1: Definitions of strategic thinking and name of author

Definitions of strategic thinking	Author’s name
Strategic thinking is a mental synthesis process which creates a tight perception of business in mind by creativeness and intuition (Boon 63:2001).	Mints burg(۱۹۹۴)
Considers strategic thinking as recognizing confident strategies and / or business models that lead to create value for customer (Moshbeki & Khazae 107:2009).	Abraham
Strategic thinking includes using several mental frameworks to study and analyze and finally make decision about strategic positions (Stisi, 23:2009).	Ralf Stisi(۱۹۹۲)
Presents strategic thinking in systematic and comprehensive conditions, emphasizing on goal, thinking in time, a hypothesis-centered approach and intelligent opportunism ability which simply incorporates with strategic planning (Moon, 2:2010).	Lidca(۱۹۹۸)
In environmental conditions by characteristics of incredibility, inflexibility, having innovative capacity divergent strategic programming is considered as a center to create and maintain competitive advantage instead of convergent strategic programming. (Moon, 2:2012)	Gortz(۲۰۰۲)
Strategic thinking is a solution for strategic problems which is a combination of logic and convergent approach with approach of creative and divergent thinking. (Moon, 2:2012)	Boon(۲۰۰۵)
Considers strategic thinking from two dimensions: 1-Strategy as a smart machine (an approach based on data and information processing)	Rimond(۱۹۹۶)



2-Strategy as a creative picture from organization active environment

The former is generally called strategic programming and the latter is strategic thinking
(Larence4:1999)

Strategic thinking and programming

Mintzberg is able to distinguish clearly between two definitions of strategic thinking and strategic thinking. He says that strategic programming isn't the same strategic thinking (Mintzberg ۱۰۷ :۱۹۹۴). Mintzberg (1994) believes that strategic programming and strategic thinking are two distinguished mental processes; strategic programming focuses on analyzing and involves interpretation, expanding details and listing present strategies. In other hand, strategic thinking focuses on combining and using evidences and innovation to create perception and a fluent picture of organization. He claims that strategic programming is a process which should be after strategic thinking (Gortz,456:2002). Herakilos (1998) makes a difference between strategic programming and strategic thinking and describe this difference by comparing one-loop and two-loops learning. He considers one-loop learning similar to strategic programming and two-loops learning similar to strategic thinking) (Hirakilos, 482-483 :1998). Studying strategic literature explains five several phases in evolving this paradigm since world war II.

Phase 1: Financial planning, 1950

Phase 2: Prediction-based planning, 1960

Phase 3: External environment -based planning, 1970

Phase 4: Strategic management: 1980

Phase 5: Strategic thinking, middle of 1080 (Shannassy, 1999)



Four approaches to strategic thinking

Table 2: Approaches of strategic thinking

Description	Approach's name
Strategy as a plan	How
Strategy as a position	What-how
Commission-based strategy	What-why-how
Vision-based strategy	Why-what-how

How: Necessary measurements to achieve strategy

What: Defining prosecutable goals and targets

Why: Logic of values based on the relationship between strategic abilities and position

Strategy approach as a plan: points to a set of pre-determined goals and mechanism to achieve them. Final emphasis is on strategic programming. Here question is “how do we achieve mission priorities and lines on which operations should be done.

Strategy approach as position: this approach has different uses, but basically it defines what is in the field of internal and external affairs and then suggest suitable plans and provides supervising system to assure doing works correctly.



Mission-based strategy approach: in this definition strategic thinking about conclusion (based on current knowledge, willing and need), what will happen in future and why will or not they probably happen and the compiling some programs to achieve potential probabilities.

Vision-based strategy approach: strategic thinking often needs to explain competitive hypotheses about future and integrating several visions in a fluent whole. And systematically a relationship will be between several components by future vision (Shaker, 1-11 2012). Strategic thinking includes strategic logic which is naturally multi-dimension. This non-linear and multi-dimension vision is basically why-what-how approach because it provides a vision from presence and future of organizational life while we access a limited set of meaningful values and activities. Understanding “why” completely, reason of social and organizational interactions, and then we can portray a clear picture from what we should, can or can’t do in that field. In fact it is a process of defining values, cultures, organizational paradigms and goals of organization. In relation to “how” it can be claimed that paying attention to quantitative counts and qualitative aspects causes to more logical programming (Fairholm, 17-30, 2009).

Strategic thinking models

Several models are presented for strategic thinking. Every model studies some dimensions of definitions and process of forming strategic thinking. In this study while examining some models in summary, lidca’s model that is the base of this research is described.

Table 3: Strategic thinking model

Model elements	Model author
1-Strategic thinking, 2-Longterm programming, 3-Tactic programming (Iranzadeh et al, 33:2009)	Goergle Mooris (۱۹۹۶)
1-Listen to new voices, 2-Make new conversation, 3- Make new enthusiasm in organization, 4-Welcome to new experiences, 5-Draw new thinking framework for organization. (Qafarian & Kiani, 2006:80	Hamle
A: Strategic thinking in individual level which includes three main elements: 1-General perception of organization and its environment, 2-Creativity and 3-A vision for future. B:Strategic thinking in organizational level: Organizations need to create some structures, processes and systems by which they can first spread strategic conversation among financial systems and second facilitate to use employees’ innovation and creativity one by	Boon(۲۰۰۱)



one (Boon, 63:2001)	
Introduces four factors of conceptual thinking, systematic thinking, farsightedness and opportunism (Nazemi & Jaafari, 43:2011).	Goldman(۲۰۰۵)
1-Flexible inputs, 2- Helicopter vision, 3-Participation of internal and external beneficiaries, 4-Strategic goals and 5-System output (O,shannassy, 7:1999	O,shannassy (1999)
1-Systematic thinking, 2-Concentration on goal, 3-Intelligent opportunism, Hypothesis-driven and testing and 5-Thinking in time (Lidca, 122:1998	Jean Lidca (۱۹۹۸)

Jean Lidca’s model

Jean Lidca (1998) defines five elements which produce strategic thinking in interaction and integration; these elements include: 1- systematic thinking, 2- strategic thinking. Mental model of value chain system should be always remembered from beginning to the end totally and mutual dependency should also be understood in extent of this model completely. (Lidca, 122:1998)

1-Systematic thinking points to leader’s ability to see system completely by understanding characteristics, forces, samples and mutual relationships which form systematic behavior (kargin:2012:131).

2- Concentration on goal: Hamel and Paramald (1994) believe that word of concentration on goal transports a special vision about competitive and long term place in marketplace for which company wills in contemporary decade. However, it includes a kind of guidance and orientation feeling (لیدکا، ۱۹۹۸ : ۱۲۲). Nonlinear thinking is the heart of systematic thinking and provides enough space for transition in organization because people will be evolved in many dimensions. In disturbance finding a linear rout achieve goal is so difficult. In incredibility conditions recognizing rout is more important than goal (Botla, 10:2009).

3- Intelligent opportunism: base of this component from model’s components is accepting new experiences openly that makes one to use several conditions of strategy. In applying intelligent opportunism it is so important that organizations pay much attention to employees’ ideas in low

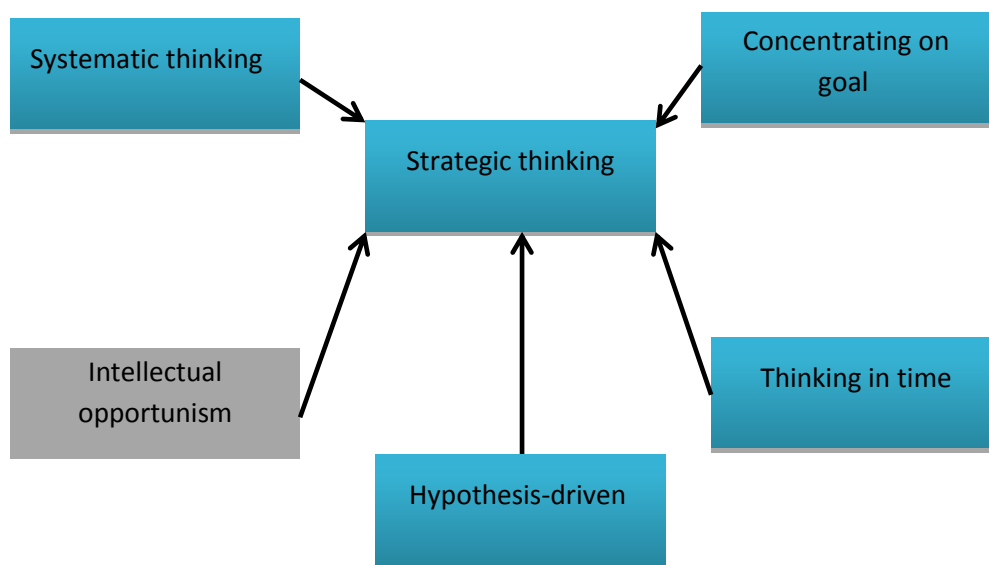


levels or more creative employees who may be effective and useful in several conditions of strategy.

4-Thinking in time: as Hamel and Paramalad (1994) point, strategy isn't merely influenced by future but distance between present fact and future goal is effective to compile it. Charlz Handi (1994) found that we need either to feel being coherent to past or to feel orientation to future; then we can control our position through changing process. (Lidca, 122:1998).

5-Hypothesis-driven: creating hypothesis forwards creative question. (What will happen if...?) Testing hypothesis completes work by an important conditional subject (If.....,so.....) and evaluates data related to analysis. This process allows organization to present several hypotheses during time without scarifying ability of seeking implicit ideas and approaches (Lidca, 122:1998).

Curve 1: Components of strategic thinking, Model applied in this research



Research questions and hypothesis:

1-How much is the rate of applying strategic thinking in Zahedan Medical School?

2- How much is the rate of applying strategic thinking elements in Zahedan Medical School?



3-There is a meaningful relationship between five elements of strategic thinking in Zahedan Medical School.

Methodology

This research is descriptive-measuring from objective point of view and is in operational application, from time dimension it is a sectional research and from the viewpoint of data it is a quantitative research. The main tool of research is a questionnaire. To measure validity of mentioned questionnaire, content validity was used. To measure reliability of questionnaire, a pre-test stage was performed. It is in a way that 30 questionnaires were first distributed in related society and then gathered and after entering data, reliability coefficient (Cronbach alpha) was calculated using spss17 software and coefficient of 0.81 was determined for questionnaires. Statistical society of research includes all key managers, directors and experts of Zahedan medical school. In this research 100 people were selected by random sampling method. Place domain of research is in Zahedan and subject area is Sistan o Baloochestan University and measuring rate of strategic thinking and its elements in workplace. Evaluation measures and components related to every measure (30 components) were determined based on Jean Lidca’s strategic thinking model and using research theoretical principles. Measures’ parameters are provided in frame of five-option questions in Likert scale by researcher.

Findings analysis

Analyzing research questions

Question1: How much is the rate of applying strategic thinking in Zahedan Medical School?

Table 4: Rate of applying strategic thinking in Zahedan Medical School

Standard deviation	Mean	Max grade	Min grade	Numbers	
11/2	13/91	138	30	۱۰۰	Strategic thinking

As observed, average grade of using strategic thinking is 13.91 that is more than normal size.



Q 2- How much is the rate of applying strategic thinking elements in Zahedan Medical School?

Table 5: Rate of applying strategic thinking elements in Zahedan Medical School

Standard deviation	Mean	Max grade	Min grade	Numbers	
29.4	50.18	29	6	100	Systematic thinking
38.4	67/18	29	6	100	Concentrating on goal
45/5	80/17	45	6	100	Intelligent opportunism
49.4	36/18	30	6	100	Thinking on time
39/5	80/17	30	0	100	Hypothesizing and testing

Above table in respect of strategic thinking dimensions explains that the most average relating to systematic thinking is equal to 18.50 and standard deviation is equal to 4.29 and the least average relating to hypothesizing is 17.80 and standard deviation equal to 5.39.

Table 6: Rate of applying strategic thinking and its elements in university

sig	X2	df	Abundance	Variable
020	98/33	20	100	Strategic thinking
0.00	60/80	19	100	Systematic thinking
0.00	69/40	21	100	Concentration on goal
0.00	49/52	20	100	Intelligent opportunism
0.00	53/60	19	100	Thinking in time



۰/۰۰	۷۵/۲۰	۲۳	۱۰۰	Hypothesizing and testing
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According to above table, rate of using strategic thinking in university calculated by Chi 2 is equal to 33.98 and is more than table critical rate in level of 0.95. So it can be concluded that rate of using strategic thinking in university is in a proper level.

Regarding that Chi 2 of 60.80 for variable of systematic thinking is bigger than critical rate of 0.99 level, so it can be concluded that there is rate of using systematic thinking in university meaningfully.

Concentration on goal: Regarding that Chi 2 of 69.40 is bigger than critical rate of 0.99 level, so it can be concluded that there is concentration on goal in university meaningfully.

Intellectual opportunism: Regarding that Chi 2 of 49.52 is bigger than critical rate of 0.99 level, so it can be concluded that there is intellectual opportunism in university meaningfully.

Thinking in time: Regarding that Chi 2 of 53.60 for rate of using thinking in time in university is bigger than critical rate of 0.99 level, so it can be concluded that there is rate of using thinking in time in university meaningfully.

Hypothesizing and testing: Regarding that Chi 2 of 75.20 for variable of hypothesizing and testing is bigger than critical rate of 0.99 level, so it can be concluded that there is variable of hypothesizing and testing in university meaningfully

Table 7: Results of Freedman test about prioritizing of strategic thinking dimensions

Level	Average	Dimensions
۱	۳/۲۷	Concentrating on goal
۳	۳/۱۱	Thinking in time
۵	۲/۶۷	Opportunism
۲	۳/۱۹	Systematic thinking



٤	٢/٧٦	Hypothesizing
X ² =12/76	df=4	sig=0/01

Above table indicates that regarding freedman test level of applying strategic thinking dimensions in university are as following : concentration on goal is in the first level and systematic thinking, thinking in time and hypothesizing and testing are in the next levels respectively.

Data interferential analysis

In this section data is analyzed based on research hypothesis test.

Hypothesis: There is no meaningful difference between applying five elements of strategic thinking in Zahedan medical school.

Hypothesis of the research includes ten subset. To test hypotheses t-test (couples comparing test) is used.

H0: Average grades of factors affecting on strategic thinking are equal.

H1: Min average grades of two factors affecting on strategic thinking aren't equal.

Table 8: Results of t-test and correlation rate among five components of strategic thinking

H0: there is no meaningful	Components	Average difference	Standar d deviatio n	T	R	Meaningfu lness level	Result of test



H01	Systematic thinking-concentration on goal	-۰/۱۷	۲/۶۲	۰/۶۴	۰/۸۱**	۰/۵۱۹	Accepting H0
H02	Systematic thinking-intellectual opportunism	۰/۷۰	۳/۹۷	۱/۷۵	۰/۶۹**	۰/۰۸۲	Accepting H0
H03	Systematic thinking-thinking in time	۰/۱۴	۳/۲۵	۰/۴۳۰	۰/۸۷**	۰/۶۶	Accepting H0
H04	Systematic thinking-hypothesizing	۰/۷۰	۳/۲۵	۲/۱۴	۰/۹۰**	۰/۰۳	Rejecting H0
H05	Concentration on goal-intellectual opportunism	۰/۸۷	۴/۲۰	۰/۰۶	۰/۶۵**	۰/۰۴	Rejecting H0
H06	Concentration on goal-thinking in time	۰/۳۱	۳/۱۱	۰/۹۹	۰/۷۵**	۰/۳۲	Accepting H0
H07	Concentrating on goal-hypothesizing	۰/۸۷	۳/۹۱	۲/۲۲	۰/۶۹**	۰/۰۲	Rejecting H0 صفر
H08	Intellectual opportunism-thinking in time	-۰/۵۶	۴/۴۰	-۱/۲۷	۰/۶۲**	۰/۲۰	Accepting H0
H09	Intellectual opportunism-hypothesizing	۰/۰۰	۴/۱۳	۰/۰۰	۰/۷۰**	۱/۰۰	Accepting H0
H010	Thinking in time-hypothesizing	۰/۵۶	۳/۴۲	۱/۶۳	۰/۷۷**	۰/۱۰	Accepting H0

Above table studies several dimensions of strategic thinking two by two. And as observed in above table H0 indicates that there is no meaningful difference between average of dimensions (averages are equal) and H1 indicates that there is a meaningful difference between averages. Regarding the results of couple t-test it can be concluded that research hypotheses 1, 2, 3, 6, 8, 9, 10 are accepted and hypotheses 4,5 and 7 are rejected. So it can be concluded that observed difference between systematic thinking-hypothesizing, concentration on goal- opportunism and



concentration on goal- hypothesizing is meaningful statistically. However H_0 indicating equality of averages is rejected and H_1 is accepted. So, more attention is needed in the field of institutionalizing strategic thinking in university.

Results and suggestions

Studying recent researches, valid papers and books, this research uses Jean Lidca's five element model to measure strategic thinking. 30 components are extracted to measure elements which were distributed among statistical society in frame of questionnaire. Studying the conditions of these elements in Zahedan medical school shows that strategic thinking in this university is up to average level.

Regarding the results of findings analysis and studying conditions of strategic thinking elements, some suggestions are presented to rise the level of applying strategic thinking:

1-Element of concentration on goal: Regarding the results of findings analysis rate of concentration on goal is in a suitable level. From Lidca's point of view all resources of organization should be concentrated along with achieving organization strategic goals. Recognizing goals and drawing suitable and creative strategies to achieve goals, is one of strategic thinking principles (Feyz, 48:2011). Technique suggested by Lidca for this element is writing story (Lidca, 7:1998). So creating an exact vision, clarity of goals and commitment to it in a way that all people in organization make themselves committed and involve, encouraged and self-controlled is suggested.

2- Intellectual opportunism: according to results, this element is in average level. In strategic thinking exploring opportunities and using them is an important principle. A factor which can lead to weaken this element is lack of cooperative management. From Mintsburg point of view, managers who are equipped by strategic thinking capability can induce other employees to find creative strategies for organization to be successful (Noori shamsabad, 36:2011). From used technique for this element are simulation technique and cooperation technique and comparing them. (Lidca, 7:1998)

So developing cooperative management and using presented technique are suggested to raise this element. In addition making a positive view to interpretations as exploring new-emergent



opportunities, visibility of using employees' ideas in unit under management, optimizing organization power (technologic, human, physical resources and...) can support this element.

3-Systematic thinking: rate of this element is in normal level in statistical society. Weakness of systematic thinking means that managers are in general view or particular view which both are indispensable and they shouldn't be separated in strategic thinking (Noori shamsabad, 35:2011). From presented technique for this element beneficiaries' plan, value system analysis and future researches can be pointed (Lidca, 7:1998). So explaining the importance of systematic view to managers and training them to use this vies are suggested.

4-Thinking in time: using this element is normal in statistical society. It shows that university's managers have an in time thinking. From presented techniques for this element scenario structure, gap analysis and using analogy can be pointed (Lidca, 7:1998). Accepting relationship between organization current weakness and strength points with past operation and profiting relationship between past, present and future time can cause to grow thinking in time.

5-Hypothesizing and testing: Applying this element in statistical society is average. Peter Dracker (1974) believes that asking this question that "What is our main task?" causes to determine goals and compile strategies and make some decisions for which the results will be determined later. (Macki, 4:2008).

6-Presented techniques include (What will happen if.....?) and (If.....,so.....) and studying known and unknowns and hypotheses. (Lidca, 7:1998). Possibility of creative hypothesizing and in organization and using creativeness while making decision can be effective to reinforce this element.

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