



## “IMPACT OF SIX THINKING HATS TECHNIQUES ON THE LEGITIMATE DECISION-MAKING SKILLS OF MANAGERS”

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**Abstract:** *Six Thinking Hats is a way to think differently and create solution. Day by day all the companies are facing very complex situations and they want a productive solution for their problems. The solution should be such that it should benefit manager, employees and organization as a whole. The Six Thinking Hats gives various angles of thinking to a particular problem, situation or issue and thus more prominent solutions are generated. As managers hold the responsible position in the companies where their decisions impact the organization either positively or negatively depending upon the quality of decision and the decision making skills of the managers. The six thinking hats concept gives the ability to the manager to think in a totally different and logical way for a particular situation. The main goal of the study is to find out the role of Six Thinking Hats in sharpening the decision making skills of the managers. Does six hat thinking has any influence over the manager in improving and taking good decisions for the companies. Total 100 managers from all over the banks, IT, services, manufacturing and retail sectors across India are considered for the study. Multiple regression analysis and ANOVA tools are used for analysis of the data and hypothesis. Six thinking hats factors such as Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking and White Hat Thinking are considered as independent factors and manager's decision making skills are considered as dependent factor. From the research study it has been found out that the six thinking hats technique had impact on the decision making skills of the managers.*

**Keyword:** *Impact, Six Thinking Hats, Decision- Making, Skills, Managers*

### INTRODUCTION

The Six Thinking Hats approach was created by Edward de Bono, a Maltese physician, psychologist and philosopher. He used it in his work for advising government agencies, but he also wanted it to be a practical tool for everyday problem solving.

"Six Thinking Hats" is a way of investigating an issue from a variety of perspectives in a clear, conflict-free way. It can be used by individuals or groups to move outside habitual ways of thinking, try out different approaches, and then think constructively about how to move forward.

Six Thinking Hats is the perfect technique to look at decision-making from different perspectives. It introduces an organized parallel thinking process and it helps participants to be more mindfully involved and focused during discussion. This technique can be applied in many ways, both in groups and as individuals.

#### The six hats are:

- The white hat: This is the objective hat, which focuses on facts and logic
- The red hat: This is the intuitive hat, focusing on emotion and instinct



- The black hat: This is the cautious hat, used to predict negative outcomes
- The yellow hat: This is the optimistic hat, used to look for positive outcomes
- The green hat: This is the creative hat, where ideas are abundant and criticism spare
- The blue hat: This is the hat of control, used for management and organization

### Six Hats and Decision Making skills

It is a brilliant decision-making technique. Decisions made using the “6 Hats” technique can be more buoyant and based on a holistic perspective. It helps to make a more rounded decision, by looking into the decision in a number of important perspectives, by approaching problems from various angles of facts, emotions and creativity. It helps to make better decisions by having a more holistic and wide ranging view of the problem, and thus allowing us to avoid pitfalls and gaps before committing to a decision.

### Advantages of the Six Thinking Hats

- The Six Thinking Hats method is a properly defined method
- It stimulates parallel thinking
- The Bono method provides structure to a brainstorming session or meeting
- The Six Thinking Hats method motivates a clear thought process and facilitated Decision Making
- The method inspires creative and effective thinking
- The Six Thinking Hats method provides a variety of possible solutions to a problem
- The method stimulates team engagement and performance

### Disadvantages of the Six Thinking Hats

- Applying the method in a team is time-consuming
- In using the method, people can disagree strongly and there can even be conflicts about different perspectives

### Benefits of Six Thinking Hats

As well as improving the quality of your decisions, the Six Thinking Hats technique has some other benefits to offer:

- **More organized thinking.** You can be confident that you've considered every angle, and it helps you to weigh up the information you obtain efficiently and accurately.
- **Improved creativity.** It gets you to step away from your default positions and approaches. And comparing or combining different perspectives can sometimes spark novel thoughts .
- **Better thinking skills.** It's a great way to strengthen important skills such as curiosity and critical thinking.
- **Stronger interpersonal skills.** It encourages you to practice listening , questioning and answering . So it can also make you more persuasive, better at spotting when others need support, and more confident to resolve conflicts when they arise.
- **Greater inclusivity in teams.** It requires people to set aside any preconceptions and to focus on seeing things from the same perspective for a while. Debate still happens, but it's based on shared understanding - which can help everyone to feel included.

The Six Thinking Hats provide a useful framework for group discussions, as they provide a clear structure for discussions. Inevitably the concept does have a few limitations, namely the problem that inexperienced users may confuse the different roles resulting in a certain amount of overlap between the hats, but this does depend on the habits and attitudes of the participants involved. In this context, there may be, for example, some overlap between the green and the yellow hat and similarly the choice whether a fact belongs to the white or black hat category is not always straightforward. Furthermore, even though the hats are claimed to represent defined modes of



thinking, their use may still be subject to interpretation by the participants. However, once individuals are familiar with the different hats, the Six Thinking Hats provides a very useful tool for problem solving.

## LITERATURE REVIEW

“Forming Students' Motivation for Creativity by Means of Edward De Bono's "Six Thinking Hats" Technique” (2017). The paper aims to reveal the peculiarities of forming future specialists' motivation for creativity with the help of Edward de Bono's "Six Thinking Hats" technique during the lessons of the "New Information Technologies in Education" discipline. 32 students took part in the experiment which was aimed at examining the peculiarities of the formation of students' motivation for creativity. The initial results have shown that most of the students were characterized by self-distrust and their motivation for success was low. After implementing the “Six Thinking Hats” technique into the educational process the motivation to succeed increased in most respondents, which means that it is an efficient tool for the development of students' skills of coping with problems and as a result, increasing motivation for creativity.

“Adopting the Six Thinking Hats to Develop Critical Thinking Abilities through LINE” (2018). Nowadays, technology allows easier access to the course activity, increasing motivation in learning. The Six Thinking Hats are, therefore, combined with the use of social media to enhance critical thinking abilities of learners. The framework is considered to be effective in promoting motivation and encouraging interaction between learners and teachers as well as among learner peers. This study was a quasi-experimental research that compared critical thinking abilities and motivation between groups of learners being taught through small group discussions with and without the support of the Six Thinking Hats in social media respectively. The instruments in this study comprised the tests, the questionnaire, and an open-ended question. The findings indicate that students in the experimental group achieved significantly higher critical thinking abilities than those in the control group. Also, motivation was statistically found higher in the experimental group after the intervention. That is, the use of the Six Thinking Hats in LINE was more effective in improving learner motivation. The results from the open-ended reveal that the students were very satisfied with the Six Thinking Hats technique, movie clips, and the use of LINE as a learning tool. However, a few drawbacks mentioned were also useful for the improvement of future courses.

“Effect of Six Hats Thinking Technique on Development of Critical Thinking Disposition and Problem Solving Skills of Nursing Students”( (Morsy\*, 2021,)concluded that the teaching of problem solving and critical thinking has become essential in nursing education today. Individuals who have critical thinking and problem solving skills feel the requirement to improve themselves and revise what they need learned. Individuals who haven't gained this skill remain rigid in respect to what was learned and aren't generally creative and constructive. Consequently, there's a requirement to test the utilization of educational models that may teach creative and constructive thinking in nursing education. For these reasons it absolutely was thought that it might be important in this study to share the experiences gained using the ‘six thinking hats’ model in teaching nursing students and investigating its effect on their critical thinking disposition and problem solving. supported the study results the ‘six thinking hats’ model could be a method of learning that not only improved the students’ creative and critical thinking abilities; it also had a major effect on their problem solving abilities. within the future using this method in several areas of nursing education and sharing the results will have a positive effect on teaching. additionally, the system of thinking employed in the method won't only help the individuals in their professional lives but also will help them make the proper decisions in their personal lives

“Six Thinking Hats: An structural strategy for developing creative thinking (2019)” To provide opportunities to students to move beyond passive recipients of knowledge to knowledge builders, there is need to shift to new instructional strategy. Conventional methods of teaching aim at imparting dead material to the students without offering them opportunity to sharpen their minds.



The power of reasoning, thinking, scientific attitude, understanding and retention are not developed among the students which is the need of digital age. Knowledge gained is useful only if it enhances reactive thinking so that the individuals can solve daily life problems. And one such instructional technique is the Six Thinking Hats technique that helps in the development of creative thinking and problem solving skills. This allow the students to look at a problem from a number of aspects. This technique not only helps the students to think but provides important outputs in ensuring discipline, acquiring desired learning outcomes and behaviours. It helps students to react in difficult situations.

“Using Six Thinking Hats as a Tool for Lateral Thinking in Organizational Problem Solving (2016)”- Six thinking hats is recently introduced technique which outlines different thinking styles required by an individual while analysing a given problem in an effective way. The technique correlates different thinking styles used in a systematic problem-solving procedure with different coloured hats. Alternately, by conceptualizing each type of hat, the person focuses on the style of thinking associated with each colour so that the problem can be analysed from different angles and frame of references. This method supports lateral thinking possibilities and new outcomes during problem-solving session so that the optimum solution can be found out. In this paper, we have discussed how to adopt six thinking hats technique in organizational problem-solving process. Each of the six thinking hats may also be conceived to be an independent entity in the thinking process and such attributes contribute to predominant personality trait distinguishable with various categories of persons. Such for instance, are thinking styles associated with typical administrators, religious leaders, politicians, scientists, and managers. The importance of six thinking hats technique in individual and group thinking in solving organizational problems is discussed. The paper also contains the attitudinal relationship in decision making using six thinking hat technique, personality types associated with thinking hats process, and use of this technique in organizational problem solving methods.

(KAYAA, 2013) This study aimed to assess the effectiveness of six thinking hats technique in teaching subjects related to sustainable development in geography classes. The study was in both a quantitative and qualitative form. The quantitative part of the study was designed according to pre-test, post-test control group research model, and in the qualitative part, answers given by students to interview questions were analyzed according to descriptive analysis method. The population of the study consisted of 650 students studying in Gaziantep Araban High School and the sample consisted of 36 students studying at 11th grade in the same school. The results of the study revealed that teaching techniques based on six thinking hats resulted in more positive results compared to other teaching techniques proposed in the curriculum. The results of the study show that teaching techniques based on both six thinking hats technique and other teaching activities lead to increase in student success and that there was a significant difference in both applications (pre-test and post-test).

(Dr. P. S. Aithal\*, 2016) In this paper, authors analysed six thinking hat technique using our ABCD analysis framework. ABCD analysing technique refers to examining a system, model, or concept through focussing on its advantages, benefits, constraints, disadvantages by narrowing to determinant factors, key factors, and critical constituent elements. Determinant factors form the overall frame of reference while key factors represent the dimensions on which its advantages, benefits, constraints and disadvantages are reflected. We have presented the factor and elemental analysis of Six thinking hat technique using CCE approach through ABCD analysing framework. Critical Constituent Elements (CCE) are elements which are critical to the success of the advantages, benefits, constraints, and disadvantages. The factor and elemental analysis of the concept is attempted here through dividing its advantages, (A-Advantages), benefits (B-Benefits), constraints (C-Constraints), and disadvantages (D-Disadvantages) by means of ABCD analysing technique of segregating determinant issues and key issues. The key issues brought forward namely utility, reliability, validity, practicability addresses the entire dimensions of the core concepts. Such an



analysis has resulted in a number of critical constituent elements (CCE) which are critical to the success of this model of decision making

**OBJECTIVES**

1. To study about the six thinking hats technique such Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking and White Hat Thinking.
2. To study decision making skills of managers under different issues in an organization.
3. To study the role of six thinking hats technique on the decision making skills of the managers in an organization.

**HYPOTHESIS**

The hypotheses of the research study are as follows:

1. H1: Six Thinking Hats factors affected manager’s decision making skills.
2. H2: White Hat Thinking affected manager’s decision making skills.
3. H3: Green Hat Thinking affected manager’s decision making skills.
4. H4: Blue Hat Thinking affected manager’s decision making skills.

**RESEARCH METHODOLOGY**

For investigating the influence of the Six Thinking Hats over the manager’s decision making skills, Exploratory research is done.

*Primary data:* Structured Questionnaire for the research is prepared. Interview from the respondents are taken.

*Secondary data:* Books, Articles, Journals, Newspapers and Magazines.

*Dependent Factor:* Manager’s decision making skills.

*Independent Factor:* Six Thinking Hats factors such as Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking, White Hat Thinking.

Sample Size: - 100 managers.

Multiple regression analysis and ANOVA tools were used to find out the relation between Six Hat Thinking and Manager’s decision making skills.

**DATA ANALYSIS AND INTERPRETATION**

**Regression Analysis**

For finding the impact of Six Thinking Hat techniques on manager’s decision making skills, a regression analysis tool is used. Six Thinking Hats technique factors are Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking, White Hat Thinking. These are independent factors. The decision making skills of the manager is dependent factor.

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 <sup>a</sup>	.527	.497	.744

a. Predictors: (Constant), Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking, White Hat Thinking

As per the statistics given in Table 2, the value of R = 0.725, it reveals that there is a good form of correlation. In the undergoing research study 52.7% variation is good change.



**Table 3: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.530	6	9.588	17.325	.000 <sup>b</sup>
	Residual	51.470	93	.553		
	Total	109.000	99			

- a. Dependent Variable: Decision Making Skills
- b. Predictors: (Constant), Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking, White Hat Thinking

In this study, the data analysis is done on the basis of 0.05 significance level. As we can see the p value is 0.000 (Table 3) and which is lower than 0.05 significant value, so it can be said that the decision making skills of the managers have been significantly predicted by the independent factors.

**Table 4: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.272	.445		-.610	.544
	White Hat Thinking	.422	.107	.367	3.951	.000
	Red Hat Thinking	.155	.059	.218	2.628	.010
	Black Hat Thinking	.112	.058	.156	1.930	.042
	Green Hat Thinking	.282	.076	.297	3.705	.000
	Blue Hat Thinking	.218	.076	.238	2.853	.005
	Yellow Hat Thinking	.018	.092	.020	.199	.843

- a. Dependent Variable: Decision Making Skills

From the above coefficient Table 4, the independent factors (Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking, White Hat Thinking) have significantly impacted the dependent factor which is manager’s decision making skills, except the ‘Yellow Hat Thinking, which had no influence over manager’s decision making skills.

From Table 4, it can be seen that all the Six Thinking Hats Factors except ‘Yellow Hat Thinking’ has affected the Manager’s decision making skills. So, here we accept H1 hypothesis.

‘White Hat Thinking’ has significantly affected the manager’s decision making skills with p value less than .05. So, here we accept H2 hypothesis.

‘Green Hat Thinking’ has significantly affected the manager’s decision making skills with p value less than .05. So, here we accept H3 hypothesis.

‘Blue Hat Thinking’ has significantly affected the manager’s decision making skills with p value less than .05. So, here we accept H4 hypothesis.

**CONCLUSIONS**

Six Thinking Hats technique factors, which were Yellow Hat Thinking, Black Hat Thinking, Green Hat Thinking, Blue Hat Thinking, Red Hat Thinking, White Hat Thinking have been successfully investigated in the study. The main goal of the study was to know the interaction between Six Hat Thinking and the manager’s decision making skills. Different colours hat thinking have different consequences on the decision making skills of the managers. The overall Six Hat Thinking influence



the decision making skills of the managers. The results of the study are very positive and encouraging. All colour hat thinking have influenced the decision making skills of the manager except the yellow hat thinking which were unable to make any influence on the manager's decision making skills. It shows that the managers should be given training on six hat thinking as it improves their decision making skills and which helps organization to grow further. 'White and Green Hat Thinking' had highly influenced the manager's decision making skills. Companies should more focus on educating their managers about Six Hat Thinking concepts, so that they can take good decision which can help employees and companies to progress. The study has got the conclusion that the Six Thinking Hats technique had impact on the decision making skills of the managers.

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