Impact of Social Media and Voice of Customer (VOC) in Decision Making Process an Empirical Study of Higher Education Institutions of Pakistan.

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Abstract: Social media has spread in our lives from home to school and work place. So as it is it is effecting our decision related to product, business and even choice of career. The study was conducted by collecting data from 126 respondents working in higher educational Institutes (HEI,s) of Pakistan either as a management staff or faculty member. Data was collected through a structuredquestionnaire to the effect of social media (Creativity, information sharing and criticism) on decision making. Finding reveals that decisions are influenced by social media through criticism and information sharing. Creativity work on social media have little effect on decision making.

Key words: Creativity · Criticism · Decision making · Information sharing · Social media

INTRODUCTION

One of the major and crucial functions of managers is decision making which is the process of identification and solving of a problem [1]. The 1st part is identification of the problem by studying the situation and environment and in second phase to find the solution of the problem, that is selection of a suitable choice from alternative option available. Manager have to do a cost benefit analysis of all the alternatives and select the best one [2]. In other words decision making is an activity of problem solving and come to an end where problem is solved [3].

Managers are normally faced with two types of decision (i) Programmed decision (ii) None programmed decision. The former are repetitive and will define while the later are novel and ill-defined and no specific procedure exists for it [4].

According to [5]," the SMDP can be defined as a composite of the concept of strategic gap and the managerial decision,where the former is determined by comparing the organization's inherent capabilities with the opportunities and threats in its external environment", while the later is composed by a set of decision-making functions logically connected, that begins with the setting of managerial objective, on the basis of start the search of information to develop a set of alternative, that are consecutively compare and evaluate, until decide which alternative is the best choice. Afterward, the selected alternative is implemented and, finally, it is subjected to follow-up and control". The decisions are effect by organization, manger position and environment. It is also effected the by formal and informal ways of communication. In 21st century computer, mobiles social media gained tremendous importance. Even Patients are consulting web for their problems and diseases [6]. Technology has made the time, space and distances unimportant for interaction and communication. Organizations are connected with their customers electronically. A survey shows that over 85% of top 1000 US firms interact electronically with their customers. web-1 is an old fashion where contents were received unidirectional. These days web-2 interact by creating and disseminating their own content and shifted from passive to active communication. It is also known that there are more than hundred different platforms which provide different interactive process like social networking, text messaging, shared photos etc [7]. people communicate differently on different medias and it is a great challenge for organizations to deal with new trends as traditional management practices are not suitable to deal with reserved customers who no longer want to be called Rather they expect the organizations to listen to their voices and respond appropriately [8] they are transforming from passive spectator to active participator who control the interaction as the management may listen to them through social media [9].

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Research Problem: The Impact of social media and voice of customers on decision making process of HEIs of Pakistan.

Objectives of the Study:

- Objective of the study is to know how student related decisions by management are influenced by social media.
- To know how the characteristics of social media like creativity, group information sharing, criticism affect decision making in HEIs of Pakistan.

Purpose of the Study: Social media is influencing every part of life. So the study is trying to find out whether the social media may be used as permanent source of decision making criteria. And whether the student or employee may use it raise their voices. This study will also find answer to the question if the students should spend this much time on social media to play a part in decision making?

Significance of the Study: Whatever might be the results of the study it will be significant in time allocation by student and rest of the people spend on social media. The study will also be significant by considering its due value in future decision making by officials and policy makers.

Main Question: Does social media significantly impact Organizational decisions?

Sub Questions: a. Creative work on social media significantly affect decision making.

- Information sharing by students on social media significantly influence decision making in HEIs.
- Criticism on social media significantly affects decision making in HEIs.
- Open discussion on social media act as source of feedback for managers.
- Conversation and information sharing on social media keep managers well informed of the environmental changes

Literature Review: Choice of decision making approach depends upon the situation manager faced within normal circumstances in routine decision rational decision making approach is followed in which eight steps criteria is applied starting from environmental analysis,

definition of problem, specification of objectives, diagnosis of problem, developing alternative solutions, alternative evaluation and at the last selection of best alternative [4] 276/77).

Decision making is not always a simple process of selection from a predetermined set of solution. It depends upon situation, time, resources and information available about the subject matter and on the personal traits of the manager. The main purpose of decision making should be the value which ones get from decision not the alternative which one opt [10].

Major barrier to rationality is being relative as we compare everything with our past experience. It is an ad to decision but an obstacle to innovation [1]. The study also analyzed that being stucked in a psychological trap which may be a particular farm or Idea results into poor decision. Decisions requireinformation, planning and opinion of other people. Decisions are also trapped by some other things like Trap of anchoring or value attribution (1st impression), trap of overconfidence and trap of recent experience also effect the decisions. Decision making is also effected by characteristics of decision maker [11]. In this study 77 SMEs were examined. They divided the characteristics in four groups (1) competencies (it includes rationality, intuitions/guts feel and experience) (2) personality characteristics (includes need for achievement, Risk attitude) (3) socio demographic characteristics (formal education and language), (4) decision maker topology either manager or entrepreneur. A positive relationship was found between decision maker education and decision making process. Study also found that managers are more rational than entrepreneur. Competencies of managers like rationality, intuitiveness are not significantly related to International decision making process. But found that some intuition become the only option for decision making and bring results when based on extensiveexperience [3]. The other approaches include Rules, importance weighing and value analysis. Manager do not always take decision individually rather in most of the organizations group decision making is followed. In collaborative group decision making participants select the best among the available alternatives and give different results than that from individual decision making [12]. Organization decision making process largely depends on three dimensions (a) Information processing (b) Collaboration (c) Initiatives.

Decision making is also effected by communication in and outside the organization. in case of teams member in teams who previously each other from past experience

show openness and trust irrespective of the medium used to interact but face to face meeting shows more information sharing than on other media [13].

Social Media: As defined by Wordwed online social media is "Internet and mobiletechnologies for interactivesocialnetworking". Web and related application which make the user to create and disseminate and share his own contents with other people on network, examples are Facebook (2004), twiter 2006, myspace (2006), you tube (2005) etc [14]. Young as well as older people are also sharing information on social sites. survey shows that older people become the target of social media sites [15].

But most of the people beyond 55 year are not spending much of their times on social webs like younger who spend their times on web and social media. Yet another study found surprising results that ratio of blogging has declined among teenagers since 2006 and raised among older ones [16]. Study of [17] found that 50% of students are active users of social in form of social networking, text messaging and streaming videos and are attached with social media in five tiers which are not mutually exclusive. These groups are (I) Spectators who read and are happy with others to create and disseminate contents. They constitute 80% of student traffic on social media. (ii) Creator/ joiner are those who publish and upload their own contents constitutes 42 %.

(iii) Connect & Unite are people who use social media for interaction with others are also 42% of the students on social media. (IV) people in Collector group are 40% who only save and share information on social media. (v)Critics comprise of only 31% of population and they criticise the other's people work. The study concluded that majority of the participants on social media are creators and create new ideas which may be used by others. Blogsare important community platform for students on social media [7]. People suppose a positive relation between information and better decision, But information overload may drown the people and distract their attention from information that are important for decision making [1]. Information are the source of learning for people but if it is not processed, organized and available at a right time for decision it become burden. (William pollard 19th century). manager also have to interact with many people. study shows that public relation managers feel empowered in enhancing their role and its raise their status in organization [18]. empowerment mean the capacity of individual actors to exert their well [19]. He also elaborated four types of

decision making powers. (I) Structural Power depict his position in organization. (II) Owner ship power shows manager's share and access to Top management. (III) Expert Power shows his importance to be consulted by society for decision making. (IV) Prestige power means his public relationship which helps him in decision making. Managers who manage their client through web gain reputation as results raise in their prestige power [18]. A study concluded [20] that practitioners who are frequent users of social media sites feel empowered with all four types of decision making powers. They also found that such managers think that they can use the information gained from social media in decision making which give them the position of leader in organization. The study also concluded that by knowing the use and relevance of information, managers can use it to listen to the voice of their customers. This also increases their external relationship in society. Manager consider social media as a best network to be influential on followers in case of prestige power. The manager think their followers as their social capital [13]. Decision making largely depends upon communication which its self depends upon Openness/trust, exchange relationship among team members and information sharing [13] and social media have all the characteristics. Social media work like honey comb consist of seven dimensions Presence, Relationship, Reputation, Groups,conversation, sharing and Identity in the centre of the web. These honey combs are interrelated with each other and have links. Customers are transferring from passive bystanders to active hunters who control the interactivity and expect the managers to listen to their voice. Blogs is an important platform in social media [7] this and other platforms can be used as a best source by education institutes to listen to the voice of their students. Social media affect both individual and organizational decision but it is still to be found that which application in particular have more effect [21].

Information Sharing: Group shows better results because of their synergy and better decisions, But those groups who use shared information in decision making show excellent results [22]. Similar results with a little addition in another study were found that information sharing and leadership style have positive affect quality of decision. Information sharing is necessary for good decision making, these information are of value when these are relevant, timely and accurate. In group decision information sharing works only when they are shared and received with attention and which create brainstorming effect [23].

Creative people find new ways of problem solving, that's why creativity of managers significantly influence their decisions [24].

Theoretical Framework: By reviewing the existing literature and knowledge about the decision making and social media following theoretical framework has been designed.

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Social media

Creativity                      Decision making

Information
Sharing

Criticism
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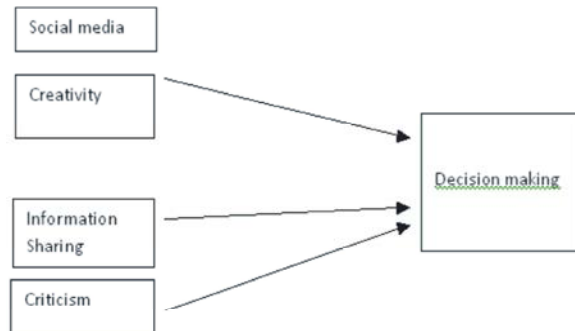
Hypothesis: To test the relationship following hypothesis were developed.

H1: There is no significant difference between males and females in use of social media.
H2: There is no significant difference between members of public and private organization in use of social for creativity, information sharing, criticism and decision making
H3: All age groups use social media in same way for creativity, information sharing, criticism and decision making.
H4: There is no significant relationship between time spent on social media and its use.
H5: People use social media irrespective of Title they keep.
H6: Decision making is significantly influenced by creativity, information sharing and criticism over social media by the participants.

MATERIALS AND METHODS

As it is a quantitative analysis of social media influence on decision making. A structured questioners distributed among the participant. The questionnaire consist of two portions the demographics and the variable section. Five items measuring information sharing are adopted from [25] with a little adjustment. Three out of sixitems to measure creativity are adopted from [26]. Population of my study is all the Private Higher education institutes. Due to certain limitation random sampling is not possible therefore area sampling is used to collect the data from different parts of the city which will be a true representative of the population. A total of 300 hundred questionnaire were distributed in which 200 personally by hand and 100 by email using personal and reference contacts. 116questionnaire distributed by hand returned in which 27 were incomplete with a response rate of 44. 5% and39 questionnairewere returned by email with only 2 incomplete questionnairewith 37 % response rate. This give us 126 usable question for further analysis with 42% overall response rate.

Validity and Reliability: Validity is the measure of degreeof an instrument to measure what it is supposed to measure [27]. To access the validity of the scale content validity was used. It is to subjectively assess the appropriateness by expert of the field [28].   The questionnaire was examined by two professors of the academic and management field. They validated it after applying some corrections.

Reliability is the measure of an instrument to consistently yield same results over time.   Different methods are used to measure it [27].   To check the reliability of the measure Cronbach's alpha value was calculated that is frequently applied to measure internal consistency. Alpha value of scales range from 0. 705 to 0. 835 which is above 0. 7 bench mark value for alpha [29]. Alpha value for all measures is given in Table I.

Demographics: Demographics data shows that the percentage of male female is 68% and 32% respectively. majority of respondents 52. 5% are middle aged 33 to 40 years old, followed by 25 to 32 age bracket. 54% of respondents have 5 to 10 years of experience, second in place (45%) are people with more than 10 years of experience in the field. 76% of our population are from public institutes and 24% are from private. Title of the respondents 38%, 35% and 29% for teaching staff, management and both respectively. 52% of people use social media for less than an hour a day, 31% use it more than an hour a day. And very few people 4-5% use it for more than 4hrs a day. See Table 2.

Table 1:

Reliability Statistics			
Scale	Cronbach's Alpha	Item deleted	N of Items
Infromation sharing	.782	No	4
Creativity	.835	No	6
Criticism	.783	No	4
Decision making	.705	No	4

Table 2:

Gender			
male		86	68.3
Female		40	31.7
Total		126	100.0
Age			
25 to 32		36	28.6
33 to 40		66	52.4
41 to 48		21	16.7
49 to 56		3	2.4
Total		126	100.0
Title			
Teaching		48	38.1
Management		36	28.6
Teaching+management		42	33.3
Total		126	100
Experience			
less than 2 years		3	2.4
2<>5		24	19.0
5<>10		54	42.9
10<		45	35.7
Total		126	100.0
Institute Type			
Public		96	76.2
Private		30	23.8
Total		126	100
Daily Use			
less than an hour/day		66	52.4
more than 2 hours/day		39	31
more than 3 hours/day		15	11.9
more than 4 hours/day		6	4.8
Total		126	100

RESULTS

To check the first and second hypothesis independent sample t-test was applied. The results shows that the significance value levene's test of information sharing and creativity is less than 0. 05 so we reject the null hypothesis that male and female use the creativity and information sharing differently. in case of criticism and decision making there is no significant difference in use of social media. to check the second hypothesis same tests were applied shows that there is significant difference in use of creativity in social media between people working in public and private institutes. For the rest of three items information sharing, criticism and decision making the significance value is more than 0. 05 so we accept the null hypothesis and conclude that there is no significant difference between public and private members of institute. to test H3, H4 and H5 the variances among the groups One way ANOVA test was performed.

It is evident from the test result that there is significant difference among different age groups in use of social media for decision making and also creativity, information sharing and criticism. People with different Title or designation use creativity of social media differently whereas there is no significant difference among people is bearing different title as the significance value is more than 0. 05. So we accept the null hypothesis. The table also shows that people with different experience level use SM for information sharing differently while there is no significant difference between people with different experience level in use of social media for criticism, creativity and decision making. Use of social media is significantly influenced by daily time spent on social media. as the significance value for all the parameters is less than 0. 05 so we reject the null hypothesis.

Correlation and Regression: Results of correlation analysis are summarized in Table 3. the value of correlation between information sharing and decision making is 0. 566 which is shows a positive and moderate correlation between these two. Correlation between

Table 3:

Correlations		info share	creativity	criticism	decision
info share	Pearson Correlation	1	.437**	.602**	.565**
	Sig. (2-tailed)		.090	.000	.050
	N	126	126	126	126
creativity	Pearson Correlation	.437**	1	.391**	.424**
	Sig. (2-tailed)	.090		.000	.110
	N	126	126	126	126
criticism	Pearson Correlation	.602**	.391**	1	.973**
	Sig. (2-tailed)	.000	.000		.180
	N	126	126	126	126
decision	Pearson Correlation	.565**	.424**	.973**	1
	Sig. (2-tailed)	.050	.110	.180	
	N	126	126	126	126

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975[a]	.951	.950	.20108

a. Predictors: (Constant), criticism, creativity, info share

Table 5:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.179	.103		1.737	.085
	criticism	.959	.025	.980	38.521	.350
	creativity	.079	.027	.065	2.878	.120
	info share	-.064	.031	-.053	-2.047	.043

a. Dependent Variable: decision

creativity on social media and decision making is positive and moderate. There is exist a strong positive correlation between criticism and decision making.

Regression analysis (table 4 &5) depict that decision making is mainly influenced by social media. Value of R square is. 951 which shows that 95% of decisions are influence by use of social media. Values of B -in coefficient table confirm that decision making is mainly influenced by criticism [30].

DISCUSSION

Finding of the study are consistent and in some cases contradict with previous results. First The demographics of population shows more percentages of males than females. The reason behind is that data is from public higher education institutes of Pakistan where ratio of female Staff is less than the men. Secondly most of the people are from middle and older age which is quite consistent with previous results [16]. Another fact is most of the people use social media for lesser time, Reason may be mature behaviour of middle and older aged people. Third theresults shows that male and female are same in use of criticism over social media is not consistent with study of [30] which says that men and women use and react differently to criticism. Fourth this study shows no significant relationship between Title of people and decision making where as in other study [11] found relationship between managers title and decision making. The study also found significant relation between experiences, age, creativity and intuition on decision making, same is repeated in this study. Another result is inconsistent with previous study of [17]

which found greater percentage of people us for creativity, followed by information sharing and very least for criticism. But in this study it is found that it is mostly used for criticism and information sharing.

CONCLUSION

Social media is playing its role in every part of our life and same is the case with our decision making. People who interact over social media want them to be liked so their decisions are mostly influenced by criticism made on their wrong decision over social media and especially if they are some celebrity. Information sharing is needed for decision making but to find relevant information is a matter of concern.

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