Social Media Usage for Communication and Information Dissemination by Universities



The burst in use of social media has changed the way we make social connections and this change of trend had been well captured by business around the globe. This change of trend has been well adapted by universities to reach students for communication and information dissemination. Various research studies had also supported the use of social media for the said purpose. The existing studies were lack in quantitative measures in use of social media for communication and information dissemination by universities. An effort has been made in this paper to identify prominent factors in use of social media for communication and information dissemination by universities to reach the students. For the study data was collected from sciences and humanities stream students of universities in state of Punjab in India. The data was collected on Likert scale and factors were identified using techniques of factor analysis. These factors will help universities in design of strategies and policy framework for better use of social media for making communication and information dissemination.

Keywords: Social Media, Social Networking, Higher Education, Communication, Information Dissemination, Factor Analysis

Introduction

The universities now a day had recognized the importance of social media marketing channels. The social media marketing is second generation internet application known as web 2.0 which allow one to one communication, interaction and customer engagement. Social media have influenced the way, the current generation of students communicates, gather knowledge and make decisions. Therefore, universities are adopting these channels along with traditional ones to reach out the students. A study done by statistice Netherlands (2011) shows 91% of Dutch students aged between 16 to 25 years are on social media. It is perceived that social media provides more trustworthy information than corporate sponsored communications, customer engagement and increased brand loyalty have been identified as outcomes of this form of marketing.

Students are also turning away from traditional mode of communication and relying more on social media communication due to perception that it provides more trustworthy information then corporate sponsored communication. Prospective college students perceive students written blogs to be authentic especially when student disclose personal details and feelings about campus. As with many technologies, adoption of the internet especially for its social uses has seen its highest levels of usage among young college students in India. The majority of current college students have had access to the Internet and computers for a large percentage of their lives. These digital natives see these technologies as a logical extension of traditional communication methods, and perceive social networking sites as often a much quicker and more convenient way to interact (Manjunath 2013) [2].

Research studies have produced a lot of content on how the use of social media can enhance communication process. Research has been made to examine how universities are using social media to achieve the goal of reaching students. Research also suggest that universities have struggled in past to use these new technologies due to lack of know how or staff to create content and monitor feedback. There is also need to identify dominating factors that influence communication and information dissemination between universities and students. In this paper an effort has



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been made to identify influencing factors in information dissemination. The study will help universities to strategize information dissemination for better reach to students and make it affective.

Review of Literature

Due to the popularity of social media, many studies have emerged in times related to the use and applications of social media. Few of these studies are presented here, which will work as guiding studies for the present work.

Gretzel, Ulrike et.al. (2008) [3] finds that people joined online platforms for many reasons like searching for and sharing information, discussing issues, and making inquiries. These online activities are being performed via a new form of communication technology known as social media or Web 2.0.

Rachel Reuben (2008) [13] found Colleges and universities had adopted social media and using it as a component of marketing mix. A survey from 148 colleges and universities in United States, Australia, Canada and New Zealand found them using social media to reach their target audiences, and discuss best practices, recommendations and considerations for higher education marketers. Of those 148 surveved. around half (53.79%) of the college's/university's reported having an official Facebook Page for their campus and most of them were using it as a tool for communicating with current students, to reach out to alumni, and for recruitment.

Barnes et al (2010) [7] in their study revealed high usage of social media sites by institutions of higher education and higher education institutes were outpacing the more traditional Fortune 500 companies as well as the fast-growing Inc. 500 companies in their use of social media to communicate with students. At that time, 8% of the Fortune 500 companies were blogging compared with 19% of the Inc. 500 while 32% of colleges and universities were using this tool. The study shows higher education institutes were early adopters and high users of social media.

Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010) [11] made a study to compare college faculty and student adoption and use of social media and its use in comparison of email. The survey results revealed differences in use of social networking sites by faculty and students due to perceived role. Students seem more open in using Facebook for instructions and communication than faculty.

Retta Guy (2012) [10] had reviewed literature on use of social media for academic practices by students and faculty in traditional as well as distance learning environment and the pros and cons of using social media for academic practice. The study results revealed the top four reasons of social media use social students are engagement, direct communications. speedy feedback/results and relationship building.

Davis, Charles et al (2012) [6] conducted a poll titled "Getting Connected" to find out extent of use of social media with the focus on perception of the value social media could add to the institution. It was found that most of the colleges saw value in the use of social media and social media and the greatest value attributed to social media was in the marketing and in the delivering of information about the college to students. The poll finds that social media is mostly used for marketing and information sharing and education.

Brandon Waite, Darren Wheeler (2014) [9] mention in their study that online social networking sites are changing the very nature of organizational communication and higher education institutes are increasingly using facebook as a means to engage with students, faculty, and alumni.

James Kelly (2014) [12] researched to discover how higher education institutions use social media to connect university offices and students in new ways. This study explored trends being used by various institutions to reach constituent populations by surveying 24 institutions from the state of Georgia. Survey results reveal that all of the institutions in the sample use some form of social media to communicate with both their internal and external stakeholders and Facebook followed by youtube and twitter came out as most commonly used social media platform. Study found that institutions are using an array of social media platforms as each platform provides a unique means to communicate with their stakeholders. The most commonly reported uses were related to campus updates, news about alumni, campus photos and facts, upcoming events and opportunities for students.

Anandita Bose (2016) [5] finds in her study that students of today have also become technologically savvy and pro-active users of ICTs. Of late many universities and education service providers have reportedly increased use of social media marketing to promote their courses and attract students. Many faculties had realized the fact that 75% of students are on social media on an average of five hours a day.

Zachos, Georgios, Kollia and Anagnostopoulos (2018) [8] finds that social networks have penetrated many fields of educational practices and processes. A review study by authors consisting 77 articles, published from 2010 onwards to highlight the use of social networks in higher education and identify some factors involved. The study found almost complete agreement on positive contribution of social media to the communication and cooperation of students for educational purposes. It was also found that researchers are facing many difficulties in achieving empirical data on possible enhanced academic performance by the use of social media. The study highlighted lack of empirical data to enhance research enrichment.

From above studies we can found that the universities understand the use of social media for information dissemination and using it as a tool of communication. We can also that need of more research in the area for better result to make communication affective with better outcome. **Objectives of the Study**

From the study of literature we can say that there is high usage percentage of social media sites by universities and students for information dissemination purposes. Therefore use of social P: ISSN NO.: 2321-290X

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media is win-win situation for both universities and customers. Studies also emphasize on need of more research in this area to make use of social media more effective. These facts offer a scope and potential for universities to explore and tap this phenomenon to approach students.

Unfortunately, there are very little studies on influencing factor that affect the use of social media for information dissemination. Existing research studies also lack in quantitative analysis and effectiveness in use of social media for information dissemination purposes. In this paper, an effort has been made to identify key factors which influence the process of information dissemination through the use of social media. These factors will help university administrators in designing strategies to connect with students.

Research Methodology

Research methodology is methods to be adopted in the study to achieve the research objectives. The research methodology adopted for this work is described below.

Sample selection

The present study has collected data from the university students of sciences and humanities streams in the state of Punjab.

Design of Questionnaire

To fulfill the objective of the study a well structured questionnaire was used for data collection. Websites and social media sites of the institutes were visited to draw the questionnaire so that the validity of the study could be enhanced. A pilot survey was conducted with 30 respondents to analyze the content validity of questionnaire. Likert scale was used to collect data. Reliability of statements has been tested using cronbach alpha. Statements having low alpha value (<0.5) has been dropped to improve the reliability of the statements.

Data collection

Final questionnaire get filled from 238 students in Punjab on random basis. To collect data personal visits and gentle follow up were made. 192 questionnaires were selected for final analysis after data cleaning, review of questionnaire and removing half-filled questionnaires. Data was collected in the period of Aug- Nov 2018 from various universities in state of Punjab in India.

Testing of internal reliability

To check the internal reliability of observed variables Cronbach's alpha is used. Literature revealed the acceptable range of Cronbach's alpha coefficient is 0.7-1.0. In the present work, this value comes out 0.877, which was acceptable.

Data analysis

We will first examine the appropriateness of factor analysis by running Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic measure indicating sampling adequacy and the proportion of variance in our variables that might be caused by underlying factors. High values (more than 0.5) generally indicate that a factor analysis may be useful with our data. Bartlett's test of sphericity tests the hypothesis that our correlation matrix is an identity matrix, which further indicates that our variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful with our data.

The Kaiser-Meyer-Olkin measure of sampling adequacy

Table 1: KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy866				
Bartlett's Test of	Approx. Chi-Square	1358.646		
Sphericity	Df	171		
	Sig.	.000		
Courses CDDC Output				

Source: SPPS Output

Kaiser-Meyer-Olkin (KMO) and Bartlett's test results as in following table (table 1) gives KMO value of 0.866 (>0.5) imply sampling adequacy. Bartlett's test of sphericity is significant (p<0.05) indicates that factors are highly correlated and suitable for factor analysis.

Exploratory Factor analysis

The exploratory factor analysis has been applied to identify the various influencing factors prospective students look out for admission purposes. Principal Component analysis method was applied for extracting factors and orthogonal rotation with varimax was employed. Communalities show the amount of variance that a variable shares with other variables. Extraction communalities are the estimates of the variance in each variable accounted for the factor in the solution. Small value less than 0.5 indicate variable those do not fit with factor solution, and such statements are dropped from the analysis. In our case, following statements had extraction value less than 0.5 has been dropped for analysis purposes.

- 1. Trust in social media communities (Communality 0.444)
- 2. Sometimes feel annoyed by comments (Communality 0.474)
- 3. Filters and controls should be there (Communality 0.479)

After dropping these variables, factor analysis was again applied on the remaining variables. The results are shown in following tables.

Table 2:	Communalities	and anti	image	correlation

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	Extraction	Anti Image correlation			
Obtain real time information	.639	.886			
Obtain up to date univ information	.714	.812			
Obtain up to date course information	.708	.840			
Provide useful information to other members	.548	.874			
I post on social media with great enthusiasm	.686	.850			

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Active participation by university administration	.595	.912			
Communicate with group members	.537	.920			
Communicate more effectively on social media	.614	.847			
More detailed, in depth conversation	.545	.907			
Express my thoughts more clearly and openly	.649	.921			
Conveniently communicate with others	.529	.821			
Efficiently communicate with others	.634	.870			
Important for me to feel socially connected	.510	.827			
Helps in developing alumni connections	.579	.858			
Social media is distracting	.791	.684			
Lead to inappropriate content sharing	.728	.782			
Extraction Method: Principal Component Analysis. (Source: SPPS Output)					

Anti image correlation values indicate KMO values for individual statements and should be more than 0.5 for each statement. It is observed from results that each individual statement has value more than 0.5 and results of factor analysis fit to be relied upon.

Factor Extraction and Rotation

Eigen values greater than one or only the factors having latent roots were measured significant; all other factors with latent roots less than one have to

be considered insignificant. In present study four factors were considered as significant for analysis. Eigen values for these four factors were 3.644, 2.757, 2.171 and 1.435 respectively as evident from table 3. The "% of Variance" column gives the percent of variance accounted for by each specific factor or component, relative to the total variance in all the variables. The "Cumulative %" column gives the percent of variance accounted for by all factors or components up to and including the current one.

Table 3: Total Variance Explained by Extracted Factors after Rotation

Component	Rotation Sums of Squared Loadings				
	Total	% of Variance	Cumulative %		
1	3.644	22.775	22.775		
2	2.757	17.230	40.005		
Dimension 3	2.171	13.570	53.575		
4	1.435	8.968	62.544		

After removal of weak loading factors, 4 strong factors loading were left. From the rotated component matrix, it is clearly seen that 4 factors were liable for 62.544 per cent of the overall variance. In a good factor analysis, there are a few factors that explain a lot of the variance and the rest of the factors explain relatively small amounts of variance. Therefore, we can leave all those remaining factors which account for a very small amount of cumulative variance.

Naming of Factors

In the present study four major factors or decision variables found affecting the communication between university and students on social media. All these factors have been given appropriate names according to the variables that have been loaded in each of the factors. The various factors have been shown in Table 4 along with the factor loading of each variable.

The reliability of each of the factor was tested using chronbach alpha test. The table 4 shows that all the factors have chronbach alpha values more than 0.6 and thus are reliable.

Reliability

Factor	Factor Name	Statements	Factor loading	(Cronbach Alpha)
		I post on social media with great enthusiasm	.810	
		Communicate more effectively on social media	.748	.867
	- · ·	Provide useful information to other members	.689	
F1	Communicative	Active participation by university administration	.673	
		Express my thoughts more clearly and openly	.634	
		Communicate with group members	.625	
		More detailed, in depth conversation	.551	
	F2 Connecting	Helps in developing alumni connections	.721	
F2		Efficiently communicate with others	.704	.743
		Important for me to feel socially connected	.677	.743
		Conveniently communicate with others	.668	
F3	Informative	Obtain up to date univ information	.823	.680

Table	4: Perce	eived fac	ctors and	d Cronbac	h Alpha
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		Obtain real time information	.789	
F4	Concerning	Social media is distracting	.875	.627
F4	Concerning	Lead to inappropriate content sharing	.784	.027
				· · · · · ·

Findings

From above discussions and results we can conclude that university students like to use social communication media for and information dissemination. There are few factors which support students' use of social media for communication and information dissemination. Students believe that social media provide them real time and up to date information. Students also like to connect with their others' and alumni on social media. There also concern in use of social media as students believe that information and communication on social media may be distracting and involve sharing of inappropriate content. Therefore it is required to control the communication and information dissemination on social media by university administration.

Future work

The study is an effort to identify leading factors in use of social media for communication and information dissemination by universities. For further studies can be made with collection of more comprehensive data like demographic profile and social media sites surfing pattern to get more insight. Further demographic characteristics and family profile of the participants can be studied to establish relationship with factors outcome. The relationship can be established using ANOVA or other appropriate statistical techniques. The outcome of relationship will further insight in use of social media and will help the institute in drafting the policy framework towards content and use of social media. This will further result in better outcome of social media use for students as well as universities. More such studies can also be planned for other streams of specialization and with varied and extensive respondent profile in other parts of the country or world

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