

Web Intelligent Information Systems: A PGF-mediated Social Media Evaluation Perspective

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ABSTRACT

Social networking site or social media is an online platform which people use to build social relations with other people. The social networking services in these sites vary in the format and the features/elements it contains. Web information system, or web-based information system, is an information system that provides information and service to the users as well as other systems or applications by using the web technologies and those multimedia technology elements/features. The multimedia elements considered in this paper are text, image, audio, video and graphics. An IWIS (Intelligent Web Information system) is an information system that is comprised of specialized functionality-oriented components, along with information components as well as other non-web components. In this paper we grouped the networks into some categories based on their functional capabilities (Twitter for short text content, YouTube for video, and so on). Then we have described various features of the IWIS websites. We have tabulated a comparison feature study of variety of IWISs websites. We present the significance of degree of social media considering a computational perspective of a few illustrative high degree value websites.

KEYWORDS

Degree of Social Media (SMD), IWIS (Intelligent Web Information Systems), PGF (People's Governance Forum), Web Intelligence.

1. INTRODUCTION

Web provides rich medium for communication. The rapid growth of Web technology has made the World Wide Web an important and popular application platform for disseminating and searching information as well as for conducting business. Web information system thus goes far beyond the conventional communication media. Social media as a part of web, is an internet based communication media for sharing of ideas and information. The most popular social media sites are Facebook, Twitter, Whatsapp, Instagram, Youtube, Google+, Pinterest etc. They offer easy way of communication of personal information, videos, photos etc.

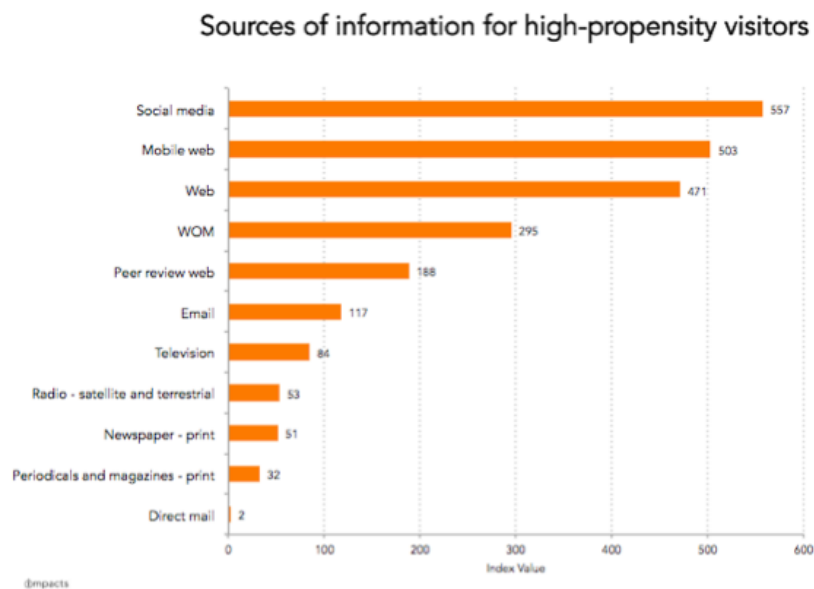
For every organization's its website is most important online communication asset. Whether it is a person or organization, possessing a website has become very common in today's connected world as websites are that important. Of course, they certainly benefit by having their own websites, but social media is our audience's primary source of information and key online influencer. Data suggest that social media is both a more important source of information AND a more effective landing environment than an organizations own website.

1.1 Social media campaigning

A social media campaign is a coordinated effort to reinforce or assist with a goal, using one or more social media platforms. Social media is an opportunity to tell your story, engage with supporters and get results. Common goals for a social media campaigns include getting feedback from users, building email marketing lists, increasing website traffic, improving overall brand engagement, directly driving sales.

Social media, the primary and most used source of information for visitors.

Mobile web and web are the second and third most important sources of information for audiences. This includes not only your website, but information gathered from any online source that is not a social media channel or peer review site. The following is the figure taken from a source where study on social media was made. It indicates that social media is the source of information that has highest propensity of visitors.



Social media, the most effective online environment to inspire action

Today's social media become the online advertising campaigns of one's own organization. social media channels are the most effective sites to land visitors in order to motivate action. Social media usage among organizations is growing tremendously. Organizations are now building and maintaining social media public pages to improve their social network salience, enhance interest in their organizations, and build relationships with the online public.

1.2 SM-linked websites.

Linking of social media to web-applications or web-sites is prominently increasing these days in order to achieve the goals mentioned in section 1.1.

To increase the success rate, for any organization social media and owning a great website can be the deciding factor. With the world now full of technology and the advancements, signing up to social media and linking it to our website is incredibly important and a must do for every organization. By including social share and follow buttons onto our website, we're providing the opportunity for our content to become shareable, with viral potential. This can increase awareness to our company, and provides a free marketing tool to utilize as shareable content is a great way to keep audience entertained and up-to-date. Facebook used to introduce ourself or our products, Twitter used to encourage interaction or

engagement, Instagram to build awareness. Thus Social media marketing is a crucial part of any brand. To boost your efforts – and improve organic traffic to your website – a solid linking strategy is your best tool.

2. RELATED WORK

The details of the literature review conducted related to our research work are presented as follows:

In a paper entitled Multimedia Information Systems: A Comparison Perspective of Social Web Sites, the authors have tabulated a comparison feature study of a variety of MMIS websites. They concluded that most of the modern web sites use maximum degree of multimedia support.

The research work in [9, 16, 17, 18, 21, 25, 26, 29] focuses attention on a cyber remedial forum against the cybercrimes case study to campaign and spread awareness. Social networking sites could provide solutions to ICT problems as demonstrated in [30, 31]. In this paper, we present a research methodology in order to come up with positive results such as awareness about cybercrimes, national spirit [19, 20, 22], and Mother India Consciousness (MIC). The research work in [26] is that they made use of 6 social media such as YouTube, Twitter, Facebook, ISSUU, Google+, and SoundCloud. Students focused on the MIC generation. The main objective of conducting such a study was to achieve Social Media Intelligence (SMI) for the students of JNTUH. The participants of the survey are the present post graduate students of School of Information Technology (SIT) of JNTUH University. The participants' performance is illustrated in that paper and it was verified that the Social Media Intelligence (SMI) of these students is considerably high which is very much impressive.

3. MOTIVATION

We have come up with A peoples' Governance Forum Webpage with the intention to disseminate national integration among the students and provide basic awareness of how to use internet positively. It is awareness creation remedial forum. The motivation to this paper is to make campaigning of 'A PGF' through social media and compare it with social media usage of some other prominent websites mentioned in section 4.

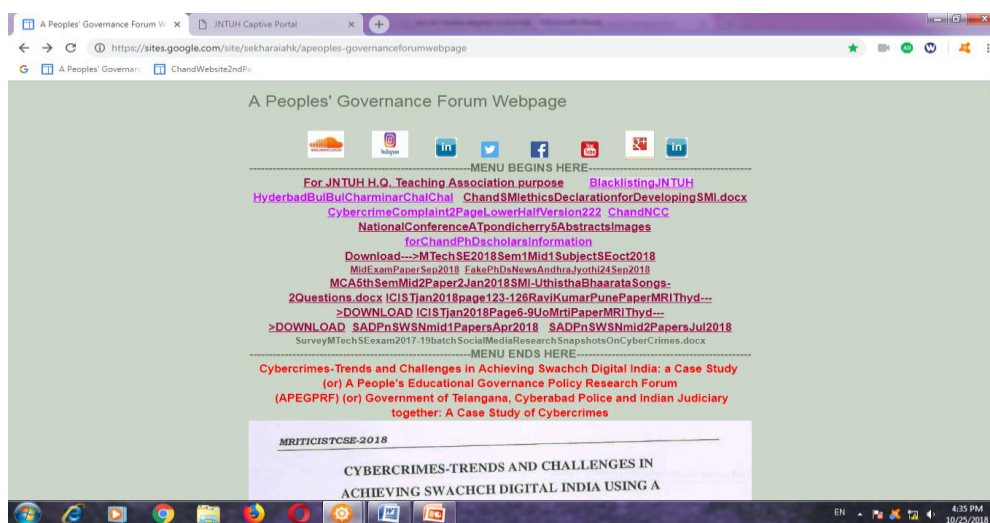


Fig 3.1 Snapshot of A Peoples' Governance Forum Webpage: It has the highest SMD Value

4. FEATURES OF IWIS: SOCIAL MEDIA

In the beginning of the web, web sites were formed by static pages, this means contents were created usually by the owner of the web sites, or the web masters. These contents usually did not change very much through time since it required effort from administrators. The web that we have today is a new paradigm, a participative Web. The web has evolved to the point that it is composed by dynamic contents created by millions of users collaborating one to each other. Sites like, YouTube, Blogger, Twitter, Facebook, Instagram, LinkedIn, Orkut, flickr, among many other, are part of the social web sites' phenomenon.

From an application perspective, many websites dedicated to social media are among the most popular—Wikipedia (collective knowledge generation), Facebook (social networking), YouTube (social networking and multimedia content sharing) and Twitter (social networking and microblogging), to name just a few. Instagram, a visual platform designed for customers to post, share, comment and engage through digital media as the old saying goes, a picture is worth a thousand words. LinkedIn is regarded as the professional social networking site.

5. APPLICATIONS OF IWIS: ILLUSTRATIVE WEBSITES AND THEIR SMD VALUES

Because social media is already a critical part of the information ecosystem and as social media platforms and applications gain widespread adoption with unprecedented reach to users, consumers, voters, businesses, governments, and nonprofit organizations alike, interest in social media from all walks of life has been skyrocketing from both application and research perspectives. For politicians, political parties, and governments, social media represents the ideal vehicle and information base to gauge public opinion on policies and political positions as well as to build community support for candidates running for public offices.

For many individuals, social media has become a unique information source to deal with information- and cognitive-overload problems, find answers to specific questions, and discover more valuable opportunities for social and economic exchange. In addition, it has become a platform for them to network and contribute to all kinds of dynamic dialogues by sharing their expertise and opinions. It is safe to claim that social media has already penetrated a spectrum of applications with remarkable impact. Given the continued interest and the ever-growing information and meta-information generated through social media, it is expected to continue enabling new exciting applications and revolutionizing many existing ones.

We have considered websites mentioned below in the table and compared the degree of social media in their websites. The criteria for choosing the websites in table is on the basis of minimum SMD=1 value randomly. This motivated us to make campaigning of 'PGF' through social media with the best possible SMD value as compared to the SMD values of some other prominent websites.

Table 5.1 Websites and their SMD values

Website Id	Website Name	Website URL
WS1	Ramakrishna Math	https://rkmath.org/
WS2	A Peoples' Governance Forum	https://sites.google.com/site/sekharaiakh/a-peoples-governanceforumwebpage
WS3	PGF Founder Prof. Chandra Sekharaiah K	https://sites.google.com/site/chandraksekharaiakh/chandwebsite2ndpage-html
WS4	Prime Minister of India	http://www.pmindia.gov.in/en/
WS5	President of India	https://presidentofindia.nic.in/
WS6	Governor of Telangana	https://telangana.gov.in/governor
WS7	Chief Minister of Telangana	https://cm.telangana.gov.in/
WS8	Chief Minister of AP	https://ncbn.in/
WS9	TS Police department	https://www.tspolice.gov.in/
WS10	LIC	https://www.licindia.in/
WS11	TSRTC	http://www.tsrtcsonline.in/
WS12	APSRTC	http://www.apsrtcsonline.in/oprs-web/
WS13	Passport office	https://portal1.passportindia.gov.in/
WS 14	Central Board of Indirect taxes and customs	http://cbic.gov.in/
WS15	Income Tax dept	https://www.incometaxindia.gov.in/

Table 5.2 Websites and their SMD values (contd.)

Website Id	Facebook	Twitter	Google +	Instagram	Youtube	LinkedIn	Sound Cloud	SMD value
WS1	Yes	Yes	Yes	No	Yes	No	Yes	5
WS2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
WS3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
WS4	Yes	Yes	No	No	Yes	No	No	3
WS5	Yes	Yes	No	Yes	Yes	No	No	4
WS6	Yes	Yes	No	No	Yes	No	No	3
WS7	Yes	Yes	No	No	Yes	No	No	3
WS8	Yes	Yes	Yes	Yes	Yes	Yes	No	6
WS9	Yes	Yes	No	No	No	No	No	2
WS10	Yes	Yes	No	No	Yes	No	No	3
WS11	Yes	Yes	No	No	No	No	No	2
WS12	Yes	Yes	No	No	No	No	No	2

WS13	Yes	Yes	No	No	Yes	No	No	3
WS 14	Yes	Yes	No	No	Yes	No	No	3
WS15	No	Yes	No	No	No	No	No	1

7. CONCLUSION

Based on the comparison made on the SMD values of illustrative websites we conclude that the SMD is very significant in modern media campaign. This motivated us to exploit the social media for our campaign about PGF and the realization of its goals. Hence, we followed SM approach for PGF and achieved SMD =7 value which is the highest we have noticed ever so far. In fact, the high SMD value has increased our campaign benefits and results in the sense that there is more awareness generation about the cybercrimes case study and the PGF-initiated remedial approach. We have used the high SMD value PGF for awareness generation among the stakeholders of academics such as the students, teachers, academic authorities in JNTUH academic environment etc. This has enabled us to sensitize the academic stakeholders accordingly such that the recurrence of similar cybercrimes is prevented, thus promoting the values of national integrity, national integration, academic ethics, respect for the constitution, national solidarity and national consciousness. The work has given us a sense of pride for shouldering the national responsibility in this manner because we have undertaken this work justly for the national cause without an iota of personal benefit.

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