

RESEARCH ARTICLE

ANALYSIS OF VARIOUS SOCIAL NETWORK MANAGEMENT SYSTEMS.

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Manuscript Info	Abstract
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Manuscript History	There are many Social Media Management System(SMMS) that are used to maintain multiple accounts in different online social networks.
Received: 24 April 2017	Every system has its own advantages and disadvantages that are
Final Accepted: 26 May 2017	discussed in this paper. In this paper analysis of different SMMS tools
Published: June 2017	is given which are evaluated with some certain evaluating criteria considering the requirements for an ideal SMMS tool.
Key words: -	
Social Media Management	
System(SMMS); Online Social Networks(OSNs)	
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Introduction: -

In this fast-growing world of Technology online social networks (OSN's) have become most important sources of information and communication. These networks have not only affected many individuals but companies and organizations including business, education, health care and politics¹⁻². Now days some people have more than one account in different social media sites like Google+¹⁵, Facebook¹⁶, Twitter¹⁷, Instagram¹⁸. Managing social media accounts can also be easy and much more appreciated at times. For instance, posting something in the news feed is quite straightforward and less time consuming. However, performing the same task in multiple social media sites could be time consuming; it has become a serious issue to manage OSN's in many big organizations for many companies.

Subsequently, it has become very difficult for users to manage different Online Social Networks 's data files without using any tool (which can help users to manage their data with ease) because of many factors where first being the dynamicity of internet social networks, the amount of data being managed regularly (data being added or deleted), It is not possible for a user to monitor his/her data every time and not miss anything. This is where Social Media Management tools comes into role, they provide a platform where a user can login to any Social Networking Site and manage his/her account without missing anything. It saves time and cost by clubbing the different Social networking sites together under one platform.

Some more advantages of SMM tools are listed below: -

- 1. It engages the audience by giving them an urge of being featured on a big screen at an event. For instance, when Instagram wall regulates on-site engagement then it makes many participants to post live update on the event on their timeline.
- 2. Companies can use these tools to monitor their competitors which will help them improve at a much faster rate.

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- 3. It increases internal engagement as employee's can go through different Social networking sites and see what people think about their company and if the reviews are good then it will make them feel better about what they are doing and if the reviews are not so good then, it can inspire them to do something about it.
- 4. It helps companies to stay ahead of trend by following trending hashtags in different Social Networking Sites.
- 5. These tools are very effective in pulling out relevant content existing at the corners of the internet.

Different Social Media Management tools have different advantage that are discussed in the section 4.1 individually.

In this paper, the available work with social management systems and the different SMMS tools are reviewed. The major advantages of this paper are as follows:

- The features of some best and ideal SMMS platform are examined in their different factors.
- There are ten SMMS tools that were considered to be discussed in this particular paper based on their features.

Previous Studies: -

There have been many studies concentrated particularly on SMMS, for selecting the most appropriate SMMS⁵⁻¹⁴, helping to assess these SMMSs which gather information from different OSNs, further enabling users to manage their Social Profiles with greater ease. This research basically concentrates on analyzing features of different SMMS tools.

A present review² characterizes Social Network Aggregation (SNA) as a prudent solution for the above issue. SNA is the way toward grouping, collecting and sorting out information spread over various Social Network Services. In view of this definition, the significant elements of SNA are to coordinate the different friendly information, administrations and exercises absolutely where the client is not important to access every interpersonal organization and independently play out a similar social action. The creators give an audit on various SNAs and informal community mix issues, uncovering criminal practices in online business, PC interruptions id, identifying medical issues, and investigating satellite pictures.

Jason Falls¹⁷ research allowed "The State and Future of Social Media Management Solutions" surveys to analyze multiple number of SMMS tools (exact 30). He did not give a clear definition about the features and functions of the different SMMS tools he also distinguished a Social Media Management tool in eight different criteria that being engagement, customer relationship management, monitoring, organization management, publishing, conversion tracking, social advertising management and measurement. As a piece of the substance, he recommended that clients ought to push the SMMS providers to make SMMSs more total and all-encompassing by making a frameworks and devices where client can deal with all advanced advertising in one place.

By and large, none of the past reviews examine how to pick the privilege SMMS tools with respect to client needs and inclinations

Assessment criteria system:-

For choosing the best and ideal SMMS tools two factors were considered first being, systems were chosen by various components, for example, the quantity of clients, downloads, clients survey, accomplices and report from Altimeter¹¹ alongside the instrument coherence in companies and secondly, the reliability features of the different SMMS tools were checked on six basic properties that are listed in the section 3.2.

Social Media Management Systems:-

There are ten tools reviewed in this section those are: IFTTT⁶, Oktopost⁸, Spredfast¹⁰, SocialFlow⁹, Tweepi¹¹, Netvibes¹², Yoono¹⁴, Hootsuite⁵, Everypost^{13,19} and Buffer⁷.

Evaluating Features:-

There are six fundamental properties in which each SMMS tool is discussed that are:

- The capacity to managing on the web interpersonal organization properties.
- Customer service features is an imperative element to help clients and customers.
- Security characteristics are very much important for maintaining a customer's privacy point of view. Security components are additionally imperative considers this review to contrast between various systems with keep up the uprightness, secrecy of data and client confirmation.

- Operational attributes include concerns regarding system ease of use and its capacity to coordinate with different systems and stages are vital to consider.
- Money related contemplations analyze the quantitative information, for example, the cost.
- Status and experience of the sellers of the different SMMS tools.

Comparative Analysis of Different SMMS Platform:-

This section summarizes the six properties of ten different SMMS based on the section 3

Online Social Network Features:-

Social Flow⁹:-

Social Flow is an online social media platform for driving brands and distributers. It basically predicts when social topics will trend and post them in real time. It was launched in 2009. Its latest technology offers a full detail on how well a user's brand is currently performing in social media. It has OSN's partnerships with Twitter, Facebook, Google+ and LinkedIn etc. It consists of many popular clients and it also supports third party applications. It's user base mainly consists of large enterprises, medium size business, public administrations, small business. It available in Canada, Europe, United States and supports "English" language as main.

Hootsuite⁵:-

Hootsuite is a software platform for different social networking sites which is used by many business companies to improve themselves by applying their social networking strategies. It enables users to manage multiple social media accounts in one place. Hootsuite uses dashboards which are browser based which provide updates on their social networking account. With Hootsuite, companies can post updates, connect with your client base, and review responses on more than thirty-five popular social networks, such as: Twitter, LinkedIn (including Pages, Profiles, and Groups), Foursquare, Facebook (including Events, Groups, Profiles, and Fan Pages), Google+ etc. It consists of many popular clients and it also supports third-party application. It consists of plans for user's like Free, Pro and Enterprise

Tweepi¹¹:-

Tweepi is a simple to use, yet very powerful Twitter tool that helps users to gain more Twitter followers much faster. It uses twitter account information about the number of followers of the account user wants followers from. The basic idea of Tweepi is if you follow someone and if he/she likes the similar content you post he/she might follow you back. Hence, increasing your twitter account followers. It was launched in 2009 and now has about 1+ million users. Though it does not have any official OSN's partnership. It consists of plans for users like free, silver, platinum.

IFTTT⁶(If This Then That):-

IFTTT is a free electronic administration that individuals use to make chains of basic contingent articulations, called applets. An applet is activated by changes that happen inside other web administrations, for example, Gmail, Facebook, Instagram, or Pinterest. IFTTT offers altogether free components to deal with countless administrations. IFTTT uses Google analytics to create reports for clients. It was launched in 2011. It does not have any official OSN's partnership. It consists of plans for users like free, platinum.

IFTTT has more than 110 channels which include both android devices and IOS main applications like google photos and reminders, it also includes some of important SNS like Facebook, Tumblr, Instagram, YouTube and many more.

Oktopost⁸:-

Oktopost is used to manage information and calculate social media marketing business values. It was launched in 2012. It consists of features like scheduling content distribution in advance from one single platform, managing social marketing activities, Discover and share content, being on top of social conversions, it helps in managing bigger and segregated social media teams which are easier to implement. It consists of popular clients and supports third party applications. It consists of plans for users like Basic, Basic+, Business and Enterprise. Oktopost's auto poster feature helps scheduling posts for long-term campaigns and publishes saved messages across your different social networks. Posts can be scheduled to publish just once or multiple times. Oktopost's social listening feature lets you "listen" in real time to what your target audiences are saying about your brand, what makes them tick, and which calls to action resonate with them the most. Oktopost's social analytics feature shows you the direct impact of

your social media activities to the company's sales pipeline. It also allows you to invite as many of them to join social advocacy boards.

Netvibes¹²:-

Netvibes is a website based dashboard publishing tool which can be personalized. Setting it as your program's landing page permits clients to make a tweaked center that manages all things computerized into one focal area. For example, if a user wants to search about "apple" then he/she can go to create new dashboard and enter "apple" which will gather information from different networking sites and display it to the user on that particular platform. Through Netvibes we can manage our Social media accounts (Facebook and Twitter accounts), including friends and followers. It has a RSS reader which is used to stream all the latest feeds. Users can also personalize by creating their own personal dashboard and can track many blogging, live streams and Facebook conversations at a glance. It consists of plans for users like Basic, Premium and VIP.

Yoono¹⁴:-

Yoono is an online social networking aggregating tool or mashup tool, where mashup or aggregator means combining of data from different external sources and putting it in one particular platform. Through Yoono a user can access his/her account information from different Social networking sites as well as update status in all the accounts at once. We can add yoono in a browser tool bar for Firefox and as a desktop application for any operating system such as Mac, Windows and Linux.

It could be added in a browser or even on user's desktop. One important feature of yoono is that it learns based on users liking and viewing and use them to give suggestions for other similar sites or video that the user might like.

Buffer⁷:-

Buffer is an internet-based app intended for managing social media content. Its primary function is for sharing content across today's well-known social media sites. It offers the ability to spread content via a simple approach. The app has the ability to connect to all social media accounts while making it easier to create and schedule posts. Instead of traditionally logging in on Facebook, LinkedIn, Twitter, Google+, and other social media sites, Buffer will do it all at once. It also makes it convenient for users to create posts and have them uploaded with a single click. The app contains a browser extension for seamless integration with WordPress, Chrome, RSS readers, and other important tools for sniffing out content. The app offers the ability to make status updates and create tweets. This can be posted across several networks at the same time, while giving a user the option to decide when the post can be posted. It also provides a browser extension made for Safari, Chrome, and Firefox that allows for content sharing on any web page. It consists of plans for users like Individual, Awesome, Small, Medium, Large.

Spredfast¹⁰:-

Superfast is a social marketing software company which is based in US it provides many features such as community management, content management, social care, and it also provides tools to different brands or agencies. Spredfast is a social media campaign marketing tool used to create, publish and measure content across multiple media platforms. The Spredfast social marketing platform is made up of three core products Conversations, Experiences and Sparks. Spredfast gives businesses with an effective platform with which to manage and improve their presence in social media. It comes with a variety of tools and features, including smart social media management functionalities that smoothen content planning and streamline responses while enabling users to share social insights with their marketing department. Spredfast also offers businesses with a secure platform that helps them reach out, engage and inspire their audience with the best social content published and delivered across any digital property.

Everypost^{13, 19}:-

Everypost is a critically acclaimed social media tool utilized by digital agencies, SMBs, content professionals, and digital-based firms. The app makes it simple for a user to construct, schedule, customize, and post content on popular social media platforms such as Twitter, Google+, Facebook, Tumblr, LinkedIn, and others. Everypost allows user to upload a wide range of videos and images in an easy format. The app also functions to post content or texts without any character restrictions. Unlike a majority of newer social media tools, it doesn't introduce itself. A user will be highlighted with social media networks at the top of the screen, a middle area for inputting text, and list of media format to import from the bottom. Clicking on any social media network will prompt the user to sign in, and if the login is successful, the button will "light up." It's an intuitive process worth exploring.

Online Social Network Customer service features:-

In this section, analysis based on the customer service features for the ten different Social Media Management tools is provided. Overall, the SMMS tool Hootsuite and Oktopost has most of, many of the support features.

Table 1:- Customer service features.

Social network aggregator	Real time user satisfaction score ¹⁹ (10)	24x7support (online)	24x7support (phone)
Social flow	8.8	Ŷ	Y (12 hours only)
Hootsuite	9.0	Y	Y
Tweepi	8.8	Y(E-Mail)	N
IFTTT	9.2	Y(blogs)	N
Oktopost	8.5	Y	Y
Netvibes	8.8	Y	N
Yoono	8	Ν	N
Buffer	8.5	Y	N
Spredfast	8.6	Y	N
Everypost	7.8	Y	Y

Online Social Networks Security Characteristics:-

In this section, analysis based on the security for the ten different Social Media Management tools is provided. It is very much important for a Social Media Management tool to secure because of the sensitive information being managed regularly by social media users. In Hootsuite, the security mechanism is the highest among the other SMMSs.

Table 2:- Security characteristics.

Social network aggregator	MFA (multifactor Authentication)	Encryption	Backup	Privacy awareness
	WI A (Inditinación Addicidentication)		V	V V
Social flow	Y	Y	Y	Y
Hootsuite	Y	Y	Y	Y
Tweepi	Ν	Y	Ν	Y
IFTTT	Y	Y	Y	Y
Oktopost	Y	Y	Y	Y
Netvibes	Ν	N	Y	Y
Yoono	Ν	Y	Ν	Y
Buffer	Y	Y	Y	Y
Spredfast	Ν	Ν	Ν	Y
Everypost	Y	Y	Ν	Y

Online Social Networks Operational Attributes:-

In this section, analysis based on the operational attributes for the ten different Social Media Management tools is provided.

Social network	OS Support	Deployment	Language supported	
aggregator		model		
Social flow	Windows, Android, iPhone/iPad, Mac, Web-based	Cloud hosted	English, Canadian	
Hootsuite	Windows mobile, Android, iPhone/iPad, Web-	Cloud hosted	English, Canadian,	
	based		Chinese	
Tweepi	Windows, Android, iPhone/iPad, Mac, Web-based,	Cloud hosted	English, Canadian	
	Windows mobile, Linux			
IFTTT	Android, iPhone/iPad, Web-based	Cloud hosted	English, Canadian	
Oktopost	Windows, Mac, Web-based	Cloud hosted	English, Canadian	
Netvibes	Web-based	Cloud hosted	English, French	
Yoono	Windows, Web-based	Cloud hosted	English	
Buffer	Windows, Mac, Web-based	Cloud hosted	English, Canadian	

Table 3:- Operational attributes

Spredfast	Windows, Android, iPhone/iPad, Mac, Web-based	Cloud hosted	English, Canadian
Everypost	Windows, Android, iPhone/iPad, Mac, Web-based	Cloud hosted	English, Canadian,
			Spanish

Online Social Networks Seller status and Experience: -

In this section, analysis based on the Seller status and experience for the ten different Social Media Management tools is provided. The analysis was mainly taken into consideration based on popularity, and other factors such as experience of the vendor, online social network partnership of the different SMMS tools, do they provide third-party support or not and lastly how many users does the SMMS tool has.

Social network	No. of users	Popular	OSN'S Official Partnership	Support	Year of
aggregator		Clients	_	Third-party	launch
Social flow	N/A	Y	T, FB, G+, in	Y	2009
Hootsuite	10+Millions	Y	Y	Y	2008
Tweepi	1+ Millions	Y	N/A	Ν	2009
IFTTT	N/A	N/A	N/A	Ν	2011
Oktopost	N/A	Y	T, FB, G+, in	Y	2012
Netvibes	200+	Y	N/A	Y	2012
Yoono	1+ Millions	N/A	Y	Y	2008
Buffer	1+ Millions	Y	Y	Y	2008
Spredfast	N/A	Y	T, G+, inst, FB, IN, Pin,	Y	2008
			TuM		
Everypost	1+ Millions	N/A	T, G+, inst, FB, IN, Pin	Y	2012

Table 4:- Seller status and experience.

Online Social Networks Financial Consideration: -

In this section, analysis based on the financial consideration of the ten different Social Media Management tools. Most of the SMMS tools offer three or more than three plans for the users. All the information is given below. **Table 5:-** Financial consideration

Social network aggregator	Type of plans	Price
Social flow	N/A	N/A
Hootsuite	Free/Pro/Enterprise	Free/9.99\$month/more
Tweepi	Free, Silver, Platinum	Free, 7.49, 14.99\$/m
IFTTT	IFTTT Free/Premium Free, on quote	
Oktopost	Basic, Basic+, Business, Enterprise	55, 123, 339/mo, custom
Netvibes	Basic, VIP, Premium	Free,2\$/m,649\$/m
Yoono	Free	N/A
Buffer	Small/medium/large	50, 100 and 250\$/m
Spredfast	N/A	N/A
Everypost	Personal, Pro, Plus, Advanced, Teams	Free.9.99\$/m,29.99\$/m,49.99\$/m,99.99\$/mw

Conclusion: -

In this paper through the analysis of the different SMMS tools it can be concluded that there isn't a SMMS tool that has all the features/properties that are mentioned, every tool has its own pros and con

Thus, for a tool to be ideal one it should contain all the properties that are mentioned below:

- 1. It should have all the features/properties present in every online social network.
- 2. Gives users a robust privacy and security attributes.
- 3. Have Operation features like platform independent, support multiple language and usability.
- 4. Its vendor should be well experienced.
- 5. Its price plans should be reasonable and well organized.

Acknowledgements: -

We would like to express our thanks of gratitude to Accendere Pvt. Ltd. for providing us the Platform & Opportunity to pursue the research.

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