



What Makes a Social Media Manager? Insights from the Content Analysis of Job Advertisements in India

Ruchika Pharswan^{1(✉)}, P. Vigneswara Ilavarasan²,
and Arpan Kumar Kar²

¹ Bharti School of Telecommunication Technology and Management, Indian
Institute of Technology, Delhi, New Delhi 110016, India

ruchil996pharswan@gmail.com

² Department of Management Studies, Indian Institute of Technology, Delhi,
New Delhi 110016, India

vignes@iitd.ac.in, arpan.kumar.kar@gmail.com

Abstract. With time, advent in technology and a sharp increase in internet penetration in India, there has been a dramatic change in the way we use social media from merely utilizing it for entertainment to businesses. As things currently stand in India, we cannot subvert and ignore the significant role social media is playing in developing and promoting the businesses. Consequently, the organizations either big or small trying to maintain their online presence over the various social media platforms in order to create customer base or communities across the platforms, brand awareness, customer engagement, promotions, and expanding their customer reach hence try to understand the various insights related to customer behaviour. For managing social media profile for an organization, a particular designation is purported as “Social Media Manager”. In today’s scenario with every company going digital, the requirement for social media managers has spiked in the last half-decade in every sector. As we go deeper, various questions arise then: what skillsets and prerequisite do a Social media manager requires? What specifically Social media manager do? To gain a better insight into current Social media manager status, our study reports on results obtained by performing content analysis over 200 Indian market job advertisements entailed “social media manager” keyword in the job title. Our finding indicates that there is an evolving requirement of Social media managers with great emphasis on Social media analytical skills followed by strategizing and promotional skills. Besides, customer management and content management also seem to be in demand. These findings may be valuable for fine-tuning Social media manager workability and also updating educational courses according to the current market trends.

Keywords: Content analysis · Social media manager job · Skillset · Job advertisements

1 Introduction

Lately, there is exponential growth in social media (SM) user base, and it has extensively emerged as a primary platform for communication, creating networks, news and information diffusion, endorsing activities and exchanging ideas and opinions for customers as well as businesses [1]. Consequently, the online social networks are currently so well established, and it has become a necessary piece of the way businesses works today. Social media was bound to change the world, and the Indian market is no exception. In India, The number of internet users had expanded throughout the years. As of 2019, there were approximately 560 million Internet users in India. As of now, India has a total population of over 1.36 billion people, and 70% of that or 230 million individuals are social media users [2]. These Statistics indicates the window of opportunities for potential businesses for taking their business to the next level. Presently, social media has become even more critical and innovative business marketing tool for the organization for greater understanding of their customer and eliminating the publicity since it has enabled active customer and company conversation. Apart from customercompany communication, it has a significant impact on the company's reputation hence also increases the brand reputation [3]. It allows an organization to engross, collaborate, promote and interact with the customers in order to gain customer confidence and improve brand loyalty. Because of this fact, social media has entirely embraced by businesses either small firms or large ones, over 92% businesses considered social media having significant importance achieving their business objectives, near about 96% businesses are already into managing their online social portfolio [4]. Thereupon, it is increasingly essential to define the skills and prerequisite and qualities a Social media manager should have for assisting the organization in achieving their business goals.

This study entails content analysis of Social media manager job advertisements across with over 200 job ads for the designation of the social media manager. Referring to the qualitative research study as these job ads can often be reviewed as significantly important information for analyzing the skillset requirement and making hiring decisions [5]. Specifically, 200 job ads are examined that are extracted from job portals like naukari.com, indeed.com, freelancer.com and Google jobs. Data were gathered of various organizations and industry types like IT firms, marketing companies, and manufacturers, clothing brands and hotels and many more. Thus we have analyzed approximately 12000 words out of which 9137 words indicate the skillset and rest were eliminated [6]. We have distributed these 9138 words or can say keywords under eight broad categories depending upon the skills required for a particular theme [7]. So basically complete analysis is compressed into eight broad skills category, and under each of them, there are several subcategory keywords whose frequency is noted. Since this study focuses on Social media manager job ads in various businesses across the Indian market, geographical localization can be a significant factor. Other considerable factors can be the nature of industry posting the job ads or online or offline job boards, size of the firm [8]. This report has been developed without taking these factors into account. The objective of the study is to identify the skills that are presently in demand in the Indian business market for a Social media manager job. Therefore, the outcomes

of our study can be relevant and beneficial for business for tabulating its requirement in the advertisement as well education industry for more closely linking their offering education according to the current business requirements. To determine what current Indian market expects from a Social media manager, our report on the skillset can be of great assistance for any business, either big or small. Our study attempts to answer the following questions [9]:

- What is the desired skillset for a Social Media (SM) Manager profile in current Indian businesses?
- Which skills are more significant and in demand for employability?

Numerous studies and reviews have analyzed the job skills that are required in different domains like IT, BPO, Operations. However, there are a limited amount of studies that have explored job like social media manager [10]. Since social media picked up popularity and found to be a potential marketing platform, just a couple of years back. A short while ago, designations like social media manager, assistance social media manager have been paid attention to, and job advertisement analysis is considered to be a great way to get significant bits of insights about the skills, education and years of experience that are required in a particular sector or job [11]. So our study will try to identify the similar significant bits of insights for the newly emerging prominent jobs for social media which will add up value to industry, universities and the individual job aspirant as well. This paper is structured as follows [12]. First, we explore prior literature regarding the content analysis performed over various job advertisements and social media role in businesses. The methodology used by the study follows it. Then the findings are presented. The paper ends with and findings and ending with implications of the study.

2 Prior Literature

Numerous research has been carried out over the past several years to inspect the role and seek the skillset required for various designations like an analyst, librarian, O.R manager and many more. The objective of these studies, more or less, is to examine the skills, prerequisite and knowledge that is required by different job designations varying from analyst to managers. Prior researches are evidence that there is always a need for keeping the industry either educational or business up-to-date according to the market demands [13]. However, there are a handful of pieces of literature that focus on analyzing the job of Social media manager. Most of this literature perform analysis over the job ads or announcements online or offline. As the social media landscape and social media applications are evolving, the content of the job description of a Social media manager's duties is also changing accordingly. Hence a critical factor of the content analysis is to analyze the currently open job profiles of social media managers and reviewing the changing roles [14]. Content analysis is one of the most often used research approaches that accentuate particular words, concepts or themes within the given data. This data can be verbal as well as written messages comprise of text which is then synthesized by content analysis to gain insights. Authors suggest the intention behind using the content analysis, is to "obtain a compressed and comprehensive

description of any event or fact and the result of the content analysis would be various categories or notion expounding that event [15].

Questions like what are the skills and knowledge a business agency expects from a Social media manager? What kind of educational background and years of experience is needed? For what kind of roles organizations are hiring Social media manager? Answers to these questions can be determined by analyzing the job ads from various business agencies as the requirements they mentioned would be those they are willing to pay for [16]. The diffusion of online platforms for various job ads engendered readily available and easily accessible data pool for conducting research. Most of these researches include content analysis either by manually coding the variable and keywords or by using various available software. In our study, we focus on the designation of Social media manager only and attempt to find out the question discussed in this section previously [17]. Thus, aim to determine various skills that are expected from a Social media manager to meet current Indian market demands. Table 1 depicts the extent of prior research that has been conducted over various job ads with the same objective:

Table 1. Conclusion of prior research on job advertisement analysis.

Literatures	Job role, number of ads and duration
Benjamin, Youngseek and Jeffrey [18]	Content analysis on eScience professionals on 200 ads over 6 month time period
Laurel A Clyde [19]	Librarian, 200 ads over 3 month time period
Youngok Choi and Edie Rasmussen [20]	Digital librarian on 363 ads over 9 year time period. Electronic and Digital librarian on 223 ads over 10 year time period
Karen S. Croneis and Pat Henderson [21]	Electronic librarian on 78 ads over 10 year time period
Gail L. Heimer [22]	
Adrian Gardiner, Cheryl Aasheim, Paige Rutner & Susan Williams [23]	Big data professionals on 1216 ads over 5 month time period
Peter A. Todd, James D McKen and R. Brent Gallupe [24]	Information System on 1634 ads over 20 year time period
Jung Eun Hong [25]	Geographic Information System on 946 ads over 7 year time period
Amit Verma, Kirill M. Yurov, Peggy L. Lane & Yuliya V. Yurova [26]	Business and data analytics on 1235 ads over 3 month time period
M S Sodhi & B-G Son [27]	Operation Research on 1056 ads over 7 year time period
Roger Bennett [28]	Transferable personal skills on 1000 ads over 1 year time period

3 Research Methodology

This section will describe how the content analysis is done over the Social media manager job advertisements. It will include the procedure from data collection to data analysis. After going through prior works of literature, specific steps have been emphasized that are common in almost every literature, but the methods various authors have used can differ. The approach that we have utilized in this study is depicted in Fig. 1.

LINKS	DESIGNATION	SKILLS	EXPERIENCE	LOCATION	PREREQUISITE	SALARY	INDUSTRY TYPE
https://www.linkedin.com/jobs/view/3456789012/	Social Media Manager	Content Management, Social Media Strategy, Analytics, Customer Engagement	2-3 yrs	Chennai	Good understanding of social media trends, needs through team work	7.50 Lakhs p/Annum	IT & Software
https://www.linkedin.com/jobs/view/3456789013/	Social Media Manager	Facebook, Instagram, LinkedIn, Twitter, YouTube, Content Creation, Copywriting	2-3 yrs	Chennai	Strong understanding of Content Management & Engagement Social Media Platforms	5.00 Lakhs p/Annum	Software Development
https://www.linkedin.com/jobs/view/3456789014/	Social Media Manager	Content Management, Social Media Strategy, Analytics, Customer Engagement	2-3 yrs	Chennai	Good understanding of social media trends, needs through team work	6.00 Lakhs p/Annum	IT & Software
https://www.linkedin.com/jobs/view/3456789015/	Social Media Manager	Facebook, Instagram, LinkedIn, Twitter, YouTube, Content Creation, Copywriting	2-3 yrs	Chennai	Strong understanding of Content Management & Engagement Social Media Platforms	5.00 Lakhs p/Annum	Software Development
https://www.linkedin.com/jobs/view/3456789016/	Social Media Manager	Content Management, Social Media Strategy, Analytics, Customer Engagement	2-3 yrs	Chennai	Good understanding of social media trends, needs through team work	6.00 Lakhs p/Annum	IT & Software
https://www.linkedin.com/jobs/view/3456789017/	Social Media Manager	Facebook, Instagram, LinkedIn, Twitter, YouTube, Content Creation, Copywriting	2-3 yrs	Chennai	Strong understanding of Content Management & Engagement Social Media Platforms	5.00 Lakhs p/Annum	Software Development
https://www.linkedin.com/jobs/view/3456789018/	Social Media Manager	Content Management, Social Media Strategy, Analytics, Customer Engagement	2-3 yrs	Chennai	Good understanding of social media trends, needs through team work	6.00 Lakhs p/Annum	IT & Software
https://www.linkedin.com/jobs/view/3456789019/	Social Media Manager	Facebook, Instagram, LinkedIn, Twitter, YouTube, Content Creation, Copywriting	2-3 yrs	Chennai	Strong understanding of Content Management & Engagement Social Media Platforms	5.00 Lakhs p/Annum	Software Development
https://www.linkedin.com/jobs/view/3456789020/	Social Media Manager	Content Management, Social Media Strategy, Analytics, Customer Engagement	2-3 yrs	Chennai	Good understanding of social media trends, needs through team work	6.00 Lakhs p/Annum	IT & Software

Fig. 1. Extracted 200 social media manager jobs advertisement

In content analysis, the primary task would be extraction and accumulation of textual data, and for that, we have explored various job advertisements sites like indeed.com, naukari.com, freelancer, Google jobs and MonsterIndia.com. We have utilized a web scrapping method for extracting the jobs and 200 jobs profiles that include Social media manager as designation are finally extracted [29]. The data we got includes the links from where they are extracted, and prerequisite, experience required, salary, locations and industry type depicted in Fig. 1. Our primary motive of extraction is to perform content analysis over these jobs ads and identify the skills that are required to be a Social media manager. Job ads were searched between the period of 3 months and phrases that are used for searching the relevant jobs are like “social media manager”, “social media assistance manager”, “social media associate manager”, “social media lead manager”. All these jobs advertisements are limited to various locations of India as we have only considered the Indian market [30]. We have broad categories the list of skills into eight crucial skills that are: designing, customer management, analytics, communication skills, strategy, promotion, content management, management and organization [31]. Content analysis is then performed over these extracted jobs ads, and then the data set is categorized into various subcategory skills keywords under the broad skills categories [32]. In result, we will get a structured form of data having broad and subcategories with the counts depicting the frequency of occurrence of that particular skill in the content. So based on prior studies, the data is classified into broader skills categories manually and further decomposed into keywords that are used within the particular category with the frequency of its occurrence [33].

4 Result and Interpretation

Two hundred jobs advertisements meeting our criteria were extracted from various job portals for 4 months from 18 January to 18 March 2020. These job ads were specific to various locations across India. We examine the skill set that is required for a Social media manager following the current Indian business needs. The Eight most mentioned skills selected and represented in Fig. 2, with the value they hold concerning the required skills [34]. Next, aggregate data is then decomposed into subcategories of skills and includes the keywords with the word count of the frequency of its occurrence depicted in Table 2.

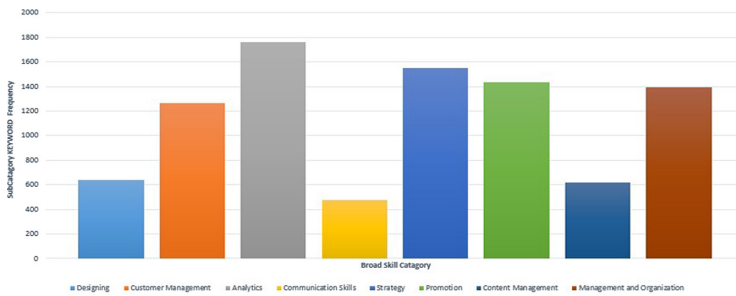


Fig. 2. Eight broad skills categories for social media manager job position

These skills, as mentioned above, are required for a Social media manager to stand in the current Indian market scenario. In conclusion, a Social media manager has to multitask efficiently. We have also observed that Social media manager designation required relevant work experience. One must have skillset as mentioned above and experience in well versed with various social media platforms in India, search engine optimizations of multiple platforms to make the content to reach more number of users in the social media space effectively [35, 36]. From our analysis, we have concluded for a medium, or big organization in Indian market mapped a minimum of 2 years’ experience for a social media manager job depicted in Fig. 3. It represents the range of experiences mentioned in the job description of 200 advertisements. It can be seen that very few organization referred to a fresher or 0–1 year of experience. These organization can either be small firms or startups. Most of them prefer 2–3 years of minimum experience, and these can either be medium size or developed firms [37].

We have observed, companies preferring 4–5 years of experience are lesser than those who have referenced 2–3 years of experience. So it is more likely to say as the maturity of organization increases they seek for more experience personals. There is only one firm who mentioned 7 years of experience; it can be quite mature, and big firm [38, 39].

Table 2. Decomposition of broader skill categories into Subcategories

Broader skill category	Subcategory & keywords	Keywords frequency
Designing	Designing	189
	Creativity	21
	Innovative	96
	Page	53
	Video	19
	Logo	87
	Media management	138
Customer management	Customer engagement	158
	CRM	181
	Client support	177
	Consumer insights	132
	Reputation	76
	Social platform	189
	Customer satisfaction	171
Analytics	Analytical skills	169
	Tools	182
	SEO	187
	SMO	158
	Forecasting	91
	Optimization	184
	Reports	179
	Positioning	35
	Research	137
	Google analysis	142
	WebMaster	159
	Social research	135
Communication skills	Communication skills	126
	Writing skills	160
	Interpersonal skills	139
Strategy	MS-OFFICE	48
	Planning	162
	Engagement	178
	Management	181
	Start-ups	122
	Product	117
	Insights	96
	Initiative	67
	Awareness	78
	Networking	53
Media strategies	157	

(continued)

Table 2. (continued)

Broader skill category	Subcategory & keywords	Keywords frequency
	Channel knowledge	186
Promotion	Online marketing	178
	Commerce awareness	98
	Campaign management	164
	Branding	182
	Social content calendar	187
	Brand engagement	153
	Channel knowledge	174
	Advertising	167
Content management	Content writing	173
	Copy writing	168
	Creative content	151
	Trend savvy	96
	Passionate	33
Management and organization	Team work	130
	Time management	157
	Campaign management	164
	Community management	123
	Multitasking	154
	Decision making	160
	Experience	187

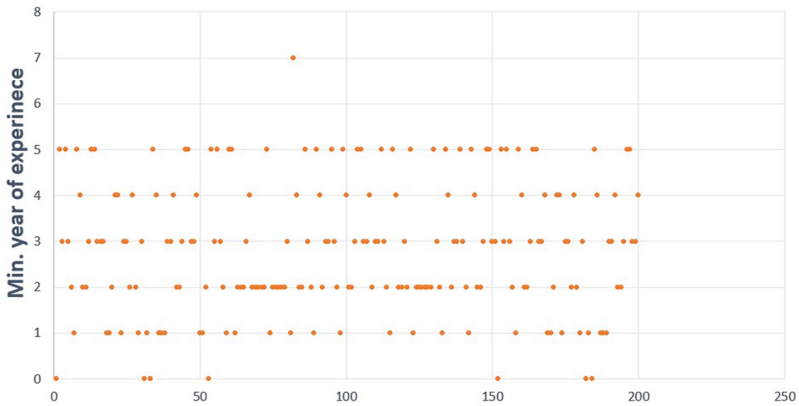


Fig. 3. Range of experiences mentioned in advertisements

5 Implications

No doubt, changes in any job requirements are directly or indirectly reflects on its job advertisements. As being recognized in our analysis of the social media manager's roles and responsibilities, we observe that there can be numerous profile or role a social media manager can play in line with the need of the organizations. There are three-fold implications of our study. First is job aspirants. This report can be beneficial for a job aspirant who is seeking a social media manager or related job as this report has provided a comprehensive view of the current market scenario. Job aspirants can have useful insights and prepare accordingly. Second is educational implication where our study can be helpful to understand better the skills and roles required for social media manager. So various institutions can get better insights into market trends and needs, and they can design, align or modify their courses to comply with the market demands. The third is a business recruitment implication where the outcomes can be valuable for recruiting managers who are looking for a contender for the Social media manager with a suitable skill set. In parallel, by providing a short and well-structured set of required skills, this study has made Social media manager job description more clear as well saved various assets and time for figuring prerequisites and requirements. Every job combines multiple tasks and skills under one umbrella. Similarly, a social media manager need to perform various task like designing, developing strategies, customer management and many more. In our report, we have presented various skillsets and perquisite in line with the current market demand and expectation. We have categorized the skills into eight sections and have shown a clear picture of what are the requirements for each category. We have also spotlighted the experience required for a social media manager to join an organization. Our study can be quite valuable for the social media manager or related job aspirants. They can find the skillset and prepare accordingly to meet the current market expectations and needs. If this study can be modified and performed periodically, it can be an excellent source for the fresher's especially and other job aspirants. Content analysis of current job ads provides a bigger picture of current trends in the marketplace and expectations of recruiters.

In this fast-growing world, everything industry is undergoing rapid changes, and the educational industry is no exception. Universities and training institutes both government and private sector are trying their level best to provide the best educational courses to incorporate with market and hiring. Trends and expectation are likely to change with time and to provide the best, and universities need to adopt these changes by reconfiguring and modifying their courses accordingly. Our study can be one of the useful sources that can provide insights on the latest trends, requirements, experience and skills set to social media manager or related courses. We think that the changing requirements of social media manager professionals can be bright prospects and educational industry expected to produce graduates with more focused skills and excellent knowledge by re-structuring and aligning their programs according to the current market requirements. Nowadays, to find information regarding any job is just one click away, there is numerous job portal where thousands of job have been searched in a single day. One of the aims of an organization is to keep developing and undergo changes according to current market demands and expectation to become a fierce

competitor. Many types of research have been performed for analyzing the current market status, trends, expectation and demands, which assists organizations to enhance their job portals accordingly. In light of this, our study also facilitates the convenience of searching the current skill set, roles and experience required in the domain of social media manager position. This study can be valuable for the organization to tailor and modify their job descriptions to hire the best talent and respond to the demands effectively.

6 Conclusion

The key objective to conduct this study is to determine what the desired skillset for a Social Media (SM) Manager profile in current Indian businesses are? And which skills are more significant and in demand for employability of Social media manager position in current Indian businesses? This study has a present comprehensive view of the Social media manager designation concerning with its skills, roles, worker competencies, tasks by analyzing the job advertisements. With most and each business expecting to build up their online presence to participate in today's hyper-connected consumer buying process in India, it is in the organizations' interests benefits to employ the best talent and keep tabs on their continuous development. After all, organizations' online reputation and future deals will rely upon it. The interpretation of the outcomes of our study is exhibited by analyzing the content of the latest job description for Social media manager designation over the period from 15 January to 15 March 2020 in India. To rank the skills mentioned in those job ads, we applied content analysis and find that Social media analytics and strategy development are the two most highly valued skills followed by promotional techniques. Our study has examined eight skills and ranked them depending upon how frequently and commonly they are mentioned in job ads.

There are some potential limitations to our investigation. Recognizing that jobs related to social media are fast evolving its requirements, goals and work expectations simultaneously are also quickly developing. We have to recall that our examination is for a particular period, results and findings may differ if the same analysis would be performed in a different timestamp. In our analysis we have manually categorized the various skills based on prior studies however in the near future we can use machine learning for classifying the job advertisement using supervised learning and can likewise form clusters of various skills under the broad categories that can reduce the redundancy of skills under different categories which is the limitation of manual categorization for the time being. Specifically, an expansion in Social media related jobs is most likely. This study will contribute to designing and modifying, giving knowledge into the more extensive view of the educational courses that are related to jobs includes social media aspects. And also this is valuable for industry or business recruitments to align and tailor their job ads description according to the current Indian business trends. Furthermore, this study can be extended by categorizing the skills sets based on various location of the Indian market, type of industry posting the job ads, size of organizations, type of industry and age of organization.

References

1. Humphreys, L., Wilken, R.: Social media, small businesses, and the control of information. *Inf. Commun. Soc.* **18**(3), 295–309 (2015). <https://doi.org/10.1080/1369118X.2014.989249>
2. Smith, K.N.: Chancellor's Honors Program (2011)
3. Hudson, S., Roth, M.S., Madden, T.J., Hudson, R.: The effects of social media on emotions, brand relationship quality, and word of mouth: an empirical study of music festival attendees. *Tour. Manag.* **47**, 68–76 (2015). <https://doi.org/10.1016/j.tourman.2014.09.001>
4. P. P. Control P. M. Performance and D. Contexts: Project Portfolio Control and Portfolio. *Proj. Manag. J.*, **39**(October) 28–42 (2008). <https://doi.org/10.1002/pmj>
5. Melancon, J.P., Dalakas, V.: Consumer social voice in the age of social media: segmentation profiles and relationship marketing strategies. *Bus. Horiz.* **61**(1), 157–167 (2018). <https://doi.org/10.1016/j.bushor.2017.09.015>
6. Cortez, M.A., Tu, N.T., Van Anh, D., Ng, B.Z., Vegafria, E.: Fast fashion quadrangle: an analysis. *Acad. Mark. Stud. J.* **18**(1), 1–18 (2014)
7. Lemish, P., Caringer, K.: The civil society organization media manager as critical communicator. *Nord. Rev.* **33**(Special-Issue) 189–203 (2013). <https://doi.org/10.2478/nor-2013-0035>
8. Jones, N., Borgman, R., Ulusoy, E.: Impact of social media on small businesses. *J. Small Bus. Enterp. Dev.* **22**(4), 611–632 (2015). <https://doi.org/10.1108/JSBED-09-2013-0133>
9. Chikandiwa, S.T., Contogiannis, E., Jembere, E.: The adoption of social media marketing in South African banks. *Eur. Bus. Rev.* **25**(4), 365–381 (2013). <https://doi.org/10.1108/EBR-02-2013-0013>
10. Dawson, N., Rizioi, M.A., Johnston, B., Williams, M.A.: Adaptively selecting occupations to detect skill shortages from online job ads. In: Proceedings of 2019 IEEE International Conference on Big Data, Big Data 2019, pp. 1637–1643 (2019). <https://doi.org/10.1109/bigdata47090.2019.9005967>
11. Ward, A., Baruah, B., Gbadebo, A.: How universities and employers specify competence in generic skills findings from an analysis of job advertisements. In: 2017 16th International Conference Information Technology Based High. Educ. Training, ITHET 2017 (2017). <https://doi.org/10.1109/ithet.2017.8067829>
12. Azahar, D., Manaf, N.A., Dharmarajan, N., Adnan, W.A.W.: Malaysia IT career opportunity analysis based on classified advertisement in the new straits times (2000–2008). In: Proceedings of 2010 International Conference on Information Retrieval & Knowledge Management CAMP 2010, pp. 348–352 (2010). <https://doi.org/10.1109/infkrm.2010.5466889>
13. Khaouja, I., Rahhal, I., Elouali, M., Mezzour, G., Kassou, I., Carley, K.M.: Analyzing the needs of the offshore sector in Morocco by mining job ads. In: IEEE Global Engineering Education Conference EDUCON, April 2018, pp. 1380–1388 (2018). <https://doi.org/10.1109/educon.2018.8363390>
14. Zeng, D., Chen, H., Lusch, R., Li, S.H.: Social media analytics and intelligence. *IEEE Intell. Syst.* **25**(6), 13–16 (2010). <https://doi.org/10.1109/MIS.2010.151>
15. Baird, C.H., Parasnis, G.: From social media to social customer relationship management. *Strateg. Leadersh.* **39**(5), 30–37 (2011). <https://doi.org/10.1108/10878571111161507>
16. Bergström, T., Bäckman, L.: Marketing and PR in social media : how the utilization of instagram builds and maintains customer relationships. *Media Commun.* **56** (2013)
17. Hays, S., Page, S.J., Buhalis, D.: Social media as a destination marketing tool: its use by national tourism organizations. *Curr. Issues Tour.* **16**(3), 211–239 (2013). <https://doi.org/10.1080/13683500.2012.662215>

18. Addom, B.K., Kim, Y., Stanton, J.M.: eScience professional positions in the job market. In: ACM International Conference Proceeding Series, pp. 630–631 (2011). <https://doi.org/10.1145/1940761.1940846>
19. Clyde, L.A.: An instructional role for librarians: an overview and content analysis of job advertisements. *Aust. Acad. Res. Libr.* **33**(3), 150–167 (2002). <https://doi.org/10.1080/00048623.2002.10755195>
20. Choi, Y., Rasmussen, E.: What qualifications and skills are important for digital librarian positions in academic libraries? A job advertisement analysis. *J. Acad. Librariansh.* **35**(5), 457–467 (2009). <https://doi.org/10.1016/j.acalib.2009.06.003>
21. Croneis, K.S., Henderson, P.: Electronic and digital librarian positions: a content analysis of announcements from 1990 through 2000. *J. Acad. Librariansh.* **28**(4), 232–237 (2002). [https://doi.org/10.1016/S0099-1333\(02\)00287-2](https://doi.org/10.1016/S0099-1333(02)00287-2)
22. Heimer, G.L.: Defining electronic librarianship: a content analysis of job advertisements. *Public Serv. Q.* **1**(1), 27–43 (2002). https://doi.org/10.1300/J295v01n01_05
23. Gardiner, A., Aasheim, C., Rutner, P., Williams, S.: Skill requirements in big data: a content analysis of job advertisements. *J. Comput. Inf. Syst.* **58**(4), 374–384 (2018). <https://doi.org/10.1080/08874417.2017.1289354>
24. Todd, P.A., Mckeen, J.D., Gallupe, R.B.: Job skills : a content analysis of is job, vol. 19, no. 1, pp. 1–27 (2016)
25. Hong, J.E.: Identifying skill requirements for GIS positions: a content analysis of job advertisements. *J. Geog.* **115**(4), 147–158 (2016). <https://doi.org/10.1080/00221341.2015.1085588>
26. Verma, A., Yurov, K.M., Lane, P.L., Yurova, Y.V.: An investigation of skill requirements for business and data analytics positions: a content analysis of job advertisements. *J. Educ. Bus.* **94**(4), 243–250 (2019). <https://doi.org/10.1080/08832323.2018.1520685>
27. Sodhi, M.S., Son, B.-G.: Content analysis of O.R. job advertisements to infer required skills. *SSRN Electron. J.* (2012). <https://doi.org/10.2139/ssrn.1640814>
28. Bennett, R.: Employers’ demands for personal transferable skills in graduates: a content analysis of 1000 job advertisements and an associated empirical study. *J. Vocat. Educ. Train.* **54**(4), 457–476 (2002). <https://doi.org/10.1080/13636820200200209>
29. Kang, Y., Ritzhaupt, A.D.: A job announcement analysis of educational technology professional positions. *J. Educ. Technol. Syst.* **43**(3), 231–256 (2015). <https://doi.org/10.1177/0047239515570572>
30. Cho, J., Park, D.J., Ordonez, Z.: Communication-oriented person-organization fit as a key factor of job-seeking behaviors: Millennials’ social media use and attitudes toward organizational social media policies. *Cyberpsychol. Behav. Soc. Netw.* **16**(11), 794–799 (2013). <https://doi.org/10.1089/cyber.2012.0528>
31. Rahhal, I., Makdoun, I., Mezzour, G., Khaouja, I., Carley, K., Kassou, I.: Analyzing cybersecurity job market needs in Morocco by mining job ads. In: IEEE Global Engineering Education Conference (EDUCON), April 2019, pp. 535–543 (2019). <https://doi.org/10.1109/educon.2019.8725033>
32. Elo, S., Kyngäs, H.: The qualitative content analysis process. *J. Adv. Nurs.* **62**(1), 107–115 (2008). <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
33. Daneva, M., Wang, C., Hoener, P.: What the job market wants from requirements engineers? An empirical analysis of online job ads from the Netherlands. In: International Symposium on Empirical Software Engineering and Measurement (ESEM), 2017 November, pp. 448–453 (2017). <https://doi.org/10.1109/esem.2017.60>
34. Sodhi, M.S., Son, B.G.: Content analysis of or job advertisements to infer required skills. *J. Oper. Res. Soc.* **61**(9), 1315–1327 (2010). <https://doi.org/10.1057/jors.2009.80>

35. Abuhashesh, M.Y.: Integration of social media in businesses. *Int. J. Bus. Soc. Sci.* **5**(8), 202–204 (2014)
36. Mishra, P., Rajnish, R., Kumar, P.N.: Sentiment analysis of Twitter data: case study on digital India. In: 2016 International Conference on Information Technology InCITe 2016 - Next Generation IT Summit Theme - Internet Things Connect your Worlds, pp. 148–153 (2017). <https://doi.org/10.1109/incite.2016.7857607>
37. Wright, D.K., Hinson, M.D.: How blogs and social media are changing public relations and the way it is practiced. *Public Relat. J.* **2**(2), 1–21 (2008)
38. Ramanathan, U., Subramanian, N., Parrott, G.: Role of social media in retail network operations and marketing to enhance customer satisfaction. *Int. J. Oper. Prod. Manag.* **37**(1), 105–123 (2017). <https://doi.org/10.1108/IJOPM-03-2015-0153>
39. Thackeray, R., Neiger, B.L., Hanson, C.L., Mckenzie, J.F.: Enhancing promotional strategies within social marketing programs: use of web 2.0 social media. *Health Promot. Pract.* **9**(4), 338–343 (2008). <https://doi.org/10.1177/1524839908325335>