

The Dynamic Capabilities of Social Media : Contribute to Librarian Efficiency

Haslina Husain¹, Mad Khir Abdullah Sani^{1,*}, Tamara Adriani-Susetyo Salim²

¹Faculty of Information Management, Universiti Teknologi Mara (Puncak Perdana), Section U10, 40150, Shah Alam, Selangor, Malaysia

²Department of Library and Information Studies, Faculty of Humanities, Universitas Indonesia, 16424, Depok, Indonesia

*Corresponding Author: madkhirjohari@uitm.edu.my

Copyright©2023 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Received: 30 March 2023; Revised: 15 April 2023; Accepted: 05 May 2023; Published: 30 June 2023

Abstract: Social media play a vital role in libraries today. This study aims to explore the capabilities have in social media and its effect on librarians' efficiency. This article briefly explains the dynamic capabilities of social media that contribute to librarian efficiency. Four capabilities have been identified from the literature review: (i) information processing capability, (ii) relationship capability, (iii) service innovation capability, and (iv) tools capability. Each of the capabilities has its criteria and characteristics. All the capabilities support the libraries to fulfill their user's needs. The dynamic capabilities of social media contributed to librarians' efficiency in many aspects such as literacy skills, reference, and user services. This article also shared the experience of academic libraries in Western Uttar Pradesh, New Zealand, Ghana, Sri Lanka, and Malaysia in using social media for librarians' efficiency. This study will contribute to the effectiveness and efficiencies of the librarians in organizing the libraries.

Keywords: social media, capabilities, libraries, librarian

1. Introduction

Social media has been discussed in many disciplines, such as in business [1,2,3,4,5,6], education [7,8,9,4,10], and library [8,12,13,14,15,16,17]. Social media brought the capability to the areas. The capabilities such as innovation, tools, information processing, and relationship. An article study by Wahyuningrum, Bustari, and Rahmawati [18] noted that the skills of librarians are badly needed with the advancement of information technology and the wealth of information on various social media and other facilities that can support school activities. The study found that most of the respondents (77.70%) had a good ability to find/collect information to complete the library inventory, 89.96% of the respondents were rated as very capable of library information use/use, 79.73% of them had a good ability to evaluate information and 81.62% of the respondents had a good ability to communicate the

information received. The respondents were school librarians and conducted descriptive-qualitative research.

Social media offers users, managers, and developers new capabilities to act and interact in difficult or impossible ways in previous online or offline settings [19]. They also enable ongoing collaborative learning either online or offline. However, these novel capabilities require researchers to adapt to social media settings or develop new ones [19]. Laaksonen and Peltoniemi [20] contended that dynamic capabilities are specific and identifiable processes such as product development, strategic decision-making, and alliance. As a result, [21] noted that dynamic capabilities as having an impact on operational capabilities, which has a significant impact on performance. Librarians in the social media environment need to be aware of this emerging technology, understand the social paradigm and information contexts emerging within Web 2.0, and play an

Corresponding Author: Mad Khir Abdullah Sani, Faculty of Information Management, Universiti Teknologi Mara (Puncak Perdana), Section U10, 40150, Shah Alam, Selangor, Malaysia. Email: madkhirjohari@uitm.edu.my

active role in facilitating online resources available through social media [22]. The most popular social media platforms are Facebook and Twitter [23] due to their ability to syndicate and share news. According to a study by Amuda, and Adeyinka [24], social media use by library staff includes Facebook, Twitter, Blog, YouTube, LinkedIn, Delicious, MySpace, and Flickr.

Social media is used by libraries to provide a mix of user service, news, and updates, content/collection promotion, disseminating the institution's research, providing educational tools and resources, and building relationships inside and outside the institution [25]. The use of social media channels is wide-ranging, but their use is still limitedly differentiated. Facebook and Twitter are still dominant, but visual channels like YouTube are quickly increasing. It is clear that the sophistication of the social networking tools used and the frequency of updates are important factors for a strong online presence, but many agree that it is more the quality and type of content published, the goals and objectives defined plans, as well as alignment, are the needs and expectations of library users that lead to successful engagement [25]. AlAwadhi and Al-Daihani [11] found that academic librarians have a positive perception of social media use. Social media is now seen as an essential way for users to identify and address information needs, interact with users to recognize information needs, and meet these requirements [11]. As a result, academic libraries start incorporating social media to encourage sharing of information and bring services closer to their users [26].

Public libraries around the world have reacted quickly to the pandemic Covid19 by transforming existing services and implementing new ones to remain in touch with their communities. To inform changes in operations and to promote their library services that included e-Reading, streaming media, virtual programming, virtual storytelling, and online knitting groups, they have used a wide range of social media [27,28,29].

2. Dynamic Capabilities In Social Media

2.1. Information Processing Capability

Information Processing Capability (IPC) is one of the dynamic capabilities in social media. In contrast, the ability of an organization to combine and mobilize resources in a way that enables it to gain competitive advantages is referred to as capability [20,30,31,32]. Chuang [33] determined IPC as a social-information processing capability that enables companies to fast process data and insights to provide network partners [34] with excellent sources of resources, which has also been defined by [33] as a functional skill within the company. To create successful innovation within an organization, large retailers are developing new capabilities [35].

A lot of literature relates information processing capability with the Internet of Things (IoT) [36,37,38]. To

enable companies to respond quickly and rapidly to market changes, a study by Chuang [33] examined the use of emerging social media. With the rise of social media platforms, companies will be able to benefit from a much larger pool of outside knowledge and ideas without relying on collaboration [39].

2.2. Relationship Capability

The second capability identified was relationship capability. It is often related to customer relationship management [40,41,42,43,44,45]. The intrinsic function of social media as a forum for users to communicate and interact with one another is more directly influencing brand cultures than traditional higher response rates and stronger customer loyalty [42]. The effect of information technology use, customer orientation, organizational capacity, and knowledge management on Customer Relationship Management is described by Soltani, Zareie, Milani, and Navimipour [46]. CRM is well-known in marketing. The advantages of using social media include improving user trust [47], and increasing customer satisfaction and responsiveness [48], according to the other side of marketing management. With the help of social media, businesses are increasingly using it to reach customers with their products and brands [49].

Soltani, Zareie, Milani, and Navimipour [50] mentioned that information technology use influenced customer relationship management (CRM) between the company and the customer. Because of the technological and social changes that are taking place as a result of developments in social networking applications like Facebook and Twitter, it is necessary to provide libraries with customer relationship management approaches and quality relationships [40].

2.3. Service Innovation Capability

Service innovation capability was the third capability that was identified as a dynamic capability in social media. New service design and development, innovation in processes, and organizational innovation may be used as a reference for service innovation [51,52]. It can be related to changes in the concept of a service, the client interface, the delivery system, or technological options [51,53,54]. It's good for business performance as well as improving behavior in people [55]. In particular, service innovation is differentiated from product innovation due to the specific characteristics of services [56,57,58].

Innovation as a result of production includes product innovation, process innovation, marketing innovation, business model innovation, and supply chain innovation [59]. Services are immaterial, and perishable and are produced for each consumer in real-time at the point of use. Examples of service innovation include new service designs, growth, innovative processes, or operation [51]. Mbambo-Thata [60] found out the library had gone from an

on-site to a digital service library. Because of the sharing nature of social media, it's all about partnerships, often between friends, but even between organizations and clients, there's an unmissable opportunity to form systemic and social relationships with consumers [61,62]. Bhimani, Mention, and Barlatier [63] stated that social media is an enabler and driver of innovation. The performance of customer relations and profitability were directly and significantly related to social media marketing implementation capabilities [31].

2.4. Tools Capability

Tools capability one of the dynamic capabilities and it is was the fourth capability. Social media tools such as Facebook, Wiki, YouTube, bulletin boards, LinkedIn, blogging, and Twittering become advanced in modern technology which accommodates the needs of people, especially the younger generation [64]. Results According to the study by Navarro, Moreno, and Zerfass [64], Facebook, Wikipedia, and YouTube are four of the main reasons that people use social media as a tool for engagement, direct communications, rapid feedback, and relationship building. Venciute [65] indicated that social media tools could turn to capability. To share research findings and obtain knowledge, social media tools have also been used and will thus support collaboration between researchers in this field [66].

Social media is represented in various forms such as discussion forums, blogs, wikis, and podcasts, and each tool has a special kind of social technology [67]. Millennials use social media tools as their main means of communication [68], and they don't differentiate between online and offline social experiences [69]. Enakrire and Fasae [70] have recognized that libraries are now using digital technologies to operate efficiently and effectively in the performance of their tasks. To promote knowledge availability and the information needs of customers, as well as choose the best sources of information which can be found in a library population while saving time for users through social interactive media technologies, [71] said libraries could use library services with Web 2.0 or social media capabilities.

Doiron [72] noted that with social media, librarians can generate agility and exploit it for many purposes. Arumugam and Balasubramani [73] have stated that to promote library programs and facilities, while also enhancing the visibility of libraries, use of the social media tools is a key objective [74].

Mathar et al. [75] indicated the use of social media tools by Indonesian academic libraries is expected to be welcomed on the following grounds; (i) increasing user numbers, (ii) interacting with users, and (iii) an active learning atmosphere. Studies suggest that to attract more library users, social media is being used for the marketing and promotion of library services [76]. Library in Pakistan used social media to create awareness through public health

education, give support to medical staff, and researchers, and provide traditional services to library patrons [77].

3. Contribute To Librarians' Efficiency

3.1 Librarians' Efficiency

The efficiency of librarians' influence by the dynamic capabilities of social media was identified in literacy skills, reference, and user services. Benitez, Castillo, Llorens, and Braojos [78] said the role of social media has been to be a constructive moderator: information ambidexterity was made possible by merging IT infrastructure with social media capabilities. For librarians, learning how to use social media to develop their media literacy skills has been a challenge [79]. A new study by librarians and library professionals in Western Uttar Pradesh has shown that librarians' knowledge of internet use influences the adoption of social media [80]. The use of social media and Web 2.0 technology among librarians in New Zealand was influenced by educational levels and occupational status [81]. Librarians are also using social media to share information and recruit new library users, as well as provide up-to-date information through campus [82].

A positive model between technology use and community engagement in the Southern and Central Appalachian region has been developed to overcome the digital divide [74]. The digital divide is between those who have access to computers and digital and internet technologies, and those who do not. Using social media has enabled librarians to engage their colleagues more closely than they might otherwise be able to do [77]. Librarians will have the power to collect data analysis of things like how many likes are out there, how many posts per week, and engagement in a given week as social media administrators. Analytic types are found in various social media channels used and explained by libraries to provide these types of analytics [83]. Librarians are also helping decision makers to understand how users react to issues put on the site and what they do about it, by providing them with live dashboards from their social media tools. Kurnia and Suharjo [84] have proposed a social media dashboard, with multiple metrics for the performance of these networks; such an approach could help managers to increase their company's strategic capacity and resources.

Many academic libraries use Facebook, Instagram, and Twitter to promote their services, for example, the University of Malaya Library (UML). Many prior adopters have started experimenting with technology such as RSS feeds, wikis, chat tools, podcasting, video sharing, and bookmarking [86] since the beginning of 2008 when library social media was introduced to Malaysia. Yavorska, Prihunov, and Syerov [87] librarians actively use Internet communities' capabilities (social), social networks, and blogging for their positioning. The feedback and comment from a user will help libraries improve their services. Saxena [88] mentioned that librarians can use social media

in enhancing library capability. The study by Mensah and Onyancho [89] indicates that academic libraries in Ghana used varieties of social media platforms in disseminating library services to create engagement with their users.

In Ghana, [90] examined the use of social media in reference and user services by academic librarians at public and private universities and showed that most academic librarians are knowledgeable and use social media for personal and professional purposes. In several activities that support the library service and are aimed at stimulating users' engagement, Usman Noor [91] has maintained that there is scope for the use of social media in this way.

Twitter is a valuable channel and valuable communication tool, and libraries recommend producing a tweet at least once a day. Twitter expands the functions of libraries and attracts its users [92]. Blogs are an innovative way for libraries to interact with their users and a wider audience, giving them the possibility of extending traditional services [93]. According to Bresnick [94], TikTok the app is more creative than a social media platform and acts as a virtual playground. For instance, the hashtag #librariansoftiktok will direct you to videos of libraries and librarians in public, academic, and educational settings. Twitter is used for interaction and to strengthen bonds with people [95].

Social media is also used in Sri Lanka to raise awareness of library services among college students [96]. Librarians should be more concerned with marketing strategies as well as user expectations when designing social media platforms [97].

According to Dossena, Mochi, Bissola, and Imperatori [98], social media is used efficiently in restaurants to acknowledge their usage of technology and the internet. The majority of early adopters started experimenting with technologies like RSS feeds, wikis, chat tools, podcasting, video sharing, and bookmarking [100]. Malaysians prefer to use mobile phones for internet browsing and reading [99]. Short surveys that illustrate how these tools are utilized in academic libraries have since been done in arbitration [101].

According to [101], university libraries in the state Edo and Delta States should provide enough internet access as well as social media and emerging technology training for their librarians. According to a survey, library staff members prefer to utilize Facebook (81.9%) and LinkedIn (69.1%) to maintain a social media presence [89]. When Paul Miller explained what Web 2.0 and social media were and how they could be used in a library setting, the first phase of the project got underway in 2005. According to [102], two-thirds of Asian university library websites have Web 2.0 integration. The popular Web 2.0 applications were Facebook (61.3%), RSS (53.3%), Twitter (46.7%), and YouTube (37.3%).

According to Ogunbodede and Iwighreghweta [101] social media use improved library services and gave librarians a new platform. Williams [103] discovered that the concept of "ease of use" affected how frequently academic libraries in South Africa used Web 2.0 apps. To

guarantee that people were reached on a platform that was convenient for them, they utilized multiple social media platforms. According to Gmiterek [23], the type of library did not affect the amount of social media participation. Gmiterek [23] further stated that organizations used Facebook to interact with customers, advertise library and information services, and promote other library activities. To engage with their customers, university libraries in Hong Kong embraced Facebook as a marketing tool [104].

Once the material is shared via social media libraries, [105] observed that two-way communication with users and other stakeholders will be established. According to Istiana [106], social media enables more people to be reached and also enables individuals who are unable to attend libraries to become accustomed to that. Additionally, it interacts with library patrons and improves the quality of services provided to customers. Facebook by Istiana [106] permits notification of services like prolonged book lending by the Gadjah Mada University Yogyakarta, namely the Faculty of Geography Library, Faculty of Social and Political Sciences Library, and the Library of the Faculty of Agriculture (ISOPOL) Faculty Library, from which a sizeable number of student benefits. The ISOPOL library is aware that its customers have a predominance in using gadgets. The analysis clarifies [107] how academic librarians plan to increase the credibility of social media content and direct their actions as information specialists toward establishing social media authority. The inclusion of posts and materials from all library units increases diversity and, as a result, the likelihood of participation in numerous customer classes, according to Ramsey and Vecchione [108].

More positive feedback when using Facebook right now. Other than that, it is the most efficient method of accessing social media, such as Facebook. Researchers [109,110,111] look into this and discovered that users had positive opinions of book drop services and were generally satisfied with the service. In order to meet the changing needs of their patrons, many university libraries are creating mobile technology systems [112,113]. The foregoing is some of what has been done:

- a) The online library catalog and mobile interfaces. Libraries are developing mobile versions of their websites so that their users may access information. Links to their locations, catalogs, collection, subject guides, e-journals, and mobile library hours can be easily retrieved [113,114].
- b) Databases and smartphone set. The mobile version of their application is gradually being launched by database publishers to assure consumers may access via their mobile devices to their e-books and e-journals [112].
- c) Another example of this method of access is Google Books (via Google mobile), which can be connected to the online catalog of the library, allowing consumers to instantly access abstracts and full text of books of interest on their mobile device [114].

- d) Mobile reference services are another tool libraries use to increase services. Reference questions may be submitted to a reference librarian via Short Message Service (SMS), email, text messaging, audio, or video chat, and the answer is provided by the same means [112,115]. Although not all search queries can be addressed in this manner, mobile reference systems not only facilitate the extension of the service points and outreach possibilities of the library but also have the added advantage of easily and conveniently making synchronous research transactions [113].
- e) Databases and smartphone sets. Databases are phasing out electronic versions of their databases so that users can access their e-books and e-journals from their mobile devices [112]. As a result, libraries also provide mobile access to their digital collections, allowing customers to remotely access library services [114].
- f) Another sample of this variety of entry is Google Books (via Google mobile), which can be linked to the online catalog of the library, allowing clients to directly access abstracts and full text of books of interest via their mobile devices [114,115]
- g) Another tool that libraries use to enhance services is mobile reference services. Reference questions can be sent to a reference librarian via Short Message Service (SMS), e-mail, instant messaging, or audio or video chat, and the feedback can be provided by the same means [112,115]. While not all reference issues can be addressed in this way, mobile reference opportunities of the library, but also have the added benefit of enabling synchronous reference transactions in a fast and convenient manner [113].
- h) Mobile teaching and mobile library tours. Educational services such as library orientation, information literacy, and other outreach programs are also services provided by libraries using mobile devices. For example, libraries may use YouTube to offer clients library visits and podcasts to allow remote users to access library content [114]. Other packages that increase and add value to existing resources are services like “self-service” library directories [114] and “Guide by call” services [115].
- i) The Short Message Service (SMS) is also used by libraries to deliver quick updates to their customers. Using the database of SMS update devices, their clients have access to instant advertisements and quick responses to general questions [116].

Catalano et al. [117] addressed the issue of librarians who are particularly focused on staying current and utilizing new technology to meet users’ demands. “Social media is a very powerful medium to reach people, even to target customers, such as our alumni or someone out there who wants to read seriously and wishes to use the

university library,” according to one of the respondent research projects examined [89]. “This is why we [Facebook library page] have more library fans than most libraries”. Social networking effectively encourages customers to interact with the brand more rapidly and to voice their opinions, giving businesses access to and visibility into the wants and needs of their clients [118]. According to Mehra, Sikes, and Singh [74], technology use has an impact on community engagement and behavior.

4. Rationale of The Study

The rationale of the study is to demonstrate the diversity of social media capabilities and how the effectiveness of librarians was influenced by these capabilities. The dynamic of social media will lessen the workload of librarian positions.

5. Conclusion

By making it possible for anybody to communicate with people or groups outside of a physical setting, media technology has increased the reach of communication across space and time and improved social interactions. Before the development of information and communication technology (ICT), humans used conventional methods of communication, such as mailing letters, to stay in touch. The internet revolution has altered how individuals behave. Nowadays, the majority of us have accounts on Facebook, Instagram, Twitter, LinkedIn, and TikTok. Different persons and organizations used each of these social media tools for various objectives. Even while social media give benefits to libraries especially but they need the policy to standardize it and make it more manageable. In an era of user-generated media content, libraries can better serve their customers and meet the challenges that best to them by leveraging the growing capabilities of social media tools.

REFERENCES

- [1] Hollebeek, L.D. (2019). Developing Business Customer Engagement Through Social Media Engagement-Platforms: An Integrative S-D Logic/RBV-Informed Model, *Ind. Mark. Manag.*, vol. 81, no. September 2017, pp. 89–98. (DOI: 10.1016/j.indmarman.2017.11.016).
- [2] Gavino, I., Williams, M.C., Jacobson, D.E., & Smith, D. (2019). Latino Entrepreneurs And Social Media Adoption: Personal And Business Social Network Platforms, *Manag. Res. Rev.*, vol. 42, no. 4, pp. 464–494.
- [3] Jin, S.H., & Choi, S.O. (2019). The Effect Of Innovation Capability On Business Performance: A Focus On It And Business Service Companies, *Sustain.*, vol. 11, no. 19, pp. 1–15. (DOI: 10.3390/su11195246).
- [4] Bharucha, J. (2018). Exploring Education-Related Use Of Social Media: Business Students Perspectives In A Changing India, *Educ. Train.*, vol. 60, no. 2, pp. 198–212. (DOI: 10.1108/ET-07-2017-0105).
- [5] Pourkhani, A., Abdipour, Kh., Baher, B., &

- Moslehpour, M. (2019). The Impact of Social Media in Business Growth and Performance: A scientometrics analysis, *International of Data and Network Science*, vol. 3, pp. 223–244.
- [6] Hariandja, E.S. (2016). The Interaction Between Dynamic Marketing Capability and Service Innovation Capability on Performance. Online available from <https://www.atlantis-press.com/proceedings/gcbme-16/25865946>.
- [7] Davis III, C.H, Dell-Amen, R., Rios Aguilar, C., & Gonzalez Canche, M.S. (2012). Social Media In Higher Education: A Literature Review And Research Directions, 2012.
- [8] Al-Rahmi, W.M., Othman, M.S., & Musa, M.A. (2014). The Improvement Of Students' Academic Performance By Using Social Media Through Collaborative Learning In Malaysian Higher Education, *Asian Soc. Sci.*, vol. 10, no. 8, pp. 210–221. (DOI: 10.5539/ass.v10n8p210).
- [9] Fedock, B.C., McCartney, M., & Neeley, D. (2019). Online Adjunct Higher Education Teachers' Perceptions Of Using Social Media Sites As Instructional Approaches, *J. Res. Innov. Teach. Learn.*, vol. 12, no. 3, pp. 222–235. (DOI: 10.1108/jrit-02-2018-0005).
- [10] Dagli, A., Altinay, F., Altinay, Z., & Altinay, M. (2021). Evaluation Of Higher Education Services: Social Media Learning, *Int. J. Inf. Learn. Technol.*, vol. 38, no. 1, pp. 147–159. (DOI: 10.1108/IJILT-03-2020-0032).
- [11] AlAwadhi, S., & Al-Daihani, S.M. (2019). Marketing Academic Library Information Services Using Social Media, *Libr. Manag.*, vol. 40, no. 3–4, pp. 228–239. (DOI: 10.1108/LM-12-2017-0132).
- [12] Chugh, R., & Ruhi, U. (2018). Social Media in Higher Education: A Literature Review of Facebook, *Education and Information Technologies*, vol. 23, pp. 605 – 616.
- [13] Oyedipe, W.J., & Popoola, S.O. (2019). Influence of Age, Job Status, ICT Literacy Skills and ICT Use on Task Performance of Library Personnel in Public Universities, *Int. Knowl. Content Dev. Technol.*, vol. 9, no. 3, pp. 43–61.
- [14] Arumugam, J., & Balasubramani, R. (2019). Impact Of Social Media Tools In Promoting The Library Services In Engineering Colleges In Tamilnadu, *Libr. Philos. Pract.*, pp. 1–8.
- [15] Tella, A., Ukwoma, S.C., & Kayode, A. I. (2020). A Two Models Modification For Determining Cloud Computing Adoption For Web-Based Services In Academic Librarianship In Nigeria, *The Journal of Academic Librarianship*, vol. 46, no. 6, pp. 102255.
- [16] Chatten, Z. (2017). Making Social Media Work: Finding A Library Voice, *Insights*, vol. 30, no. 3, pp. 51–61.
- [17] Madu, A., & Haruna, B. (2019). Impact Of users' Characteristics In The Intention To Use The Library; An SEM Approach, *Int. J. Libr. Sci.*, vol. 17, no. 1.
- [18] Wahyuningrum, H., Bustari, M., & Rahmawati, T. (2019). The Librarian Capability To Implement Information Literacy In Senior High School Of Bantul District, *KnE Soc. Sci.*, vol. 2019, pp. 438–446. (DOI: 10.18502/kss.v3i17.4669).
- [19] Glaser, P., Liu, J. H., Hakim, M.A., Vilar, R., & Zhang, R. (2018). Is Social Media Use For Networking Positive or Negative? Offline Social Capital and Internet Addiction as Mediators For The Relationship Between Social Media Use and Mental Health, *New Zealand Journal of Psychology.*, vol. 47, no. 3, pp. 12–18.
- [20] Laaksonen, O., & Peltoniemi, M. (2018). The Essence of Dynamic Capabilities and Their Measurement, *International Journal of Management Review.*, vol. 20, no. 2, pp. 184–205.
- [21] Schoemaker, P.J.H., Heaton, S., & Teece, D. (2018). Innovation, Dynamic Capabilities, and Leadership, *California Management Review*, vol. 61, no. 1, pp. 15–42. (DOI: <https://doi.org/10.1177/0008125618790246>).
- [22] Kumar, V. (2019). Social Media To Social Media Analytics: Ethical Challenges, *International Journal of Technoethics*, vol. 10, no. 2, pp. 14.
- [23] Gmiterek, G. (2023). Use of Facebook Fan Pages In Polish Academic Libraries. *The Journal of Academic Librarianship*, vol. 49, no. 2, pp. 102678.
- [24] Amuda, H.O., & Adeyinka, T. (2017). Application Of Social Media For Innovative Library Services In South-Western Nigerian University Libraries, *J. Balk. Libr. Union*, vol. 5, no. 2, pp. 10–16. (DOI: 10.16918/bluj.08376).
- [25] Prabhakar, S. V. R., & Manjula Rani, S. V. (2017). Influence Of Social Networking Sites On Library And Information Centers, *Int. J. Libr. Inf. Sci.*, vol. 6, no. 1, pp. 83–87. Online available from <http://www.iaeme.com/IJLIS/index.asp83http://www.iaeme.com/IJLIS/issues.asp?JType=IJLIS&VType=6&IType=1JournalImpactFactor%0Awww.jifactor.comhttp://www.iaeme.com/IJLIS/issues.asp?JType=IJLIS&VType=6&IType=1>.
- [26] Quadri, G.O., & Idowu, O.A. (2016). Social Media Use By Librarians For Information Dissemination In Three Federal University Libraries In Southwest Nigeria, *J. Libr. Inf. Serv. Distance Learn.*, vol. 10, no. 1–2, pp. 30–40.
- [27] Micaela. (2020). Libraries Initiatives During Social Distancing, *Princh*. Online available from <https://princh.com/libraries-initiatives-during-social-distancing/>
- [28] Perrine, A. (2020). Libraries Go Virtual Through COVID-19 Pandemic. *Two River Times*. Online available from <https://tworivertimes.com/libraries-go-virtual-through-covid-19-pandemic/>
- [29] Public Library Association. (2020). How Public Libraries Are Responding To The Pandemic. *American Libraries Magazine*. Online available from <https://americanlibrariesmagazine.org/blogs/the-scoop/public-libraries-responding-pandemic/>
- [30] Harigan, P., Miles, M.P., Fang, Y., & Roy, S.K. (2020). The Role Of Social Media In The Engagement And Information Processes Of Social CRM. *International Journal of Information Management*, vol. 54.
- [31] Tarsakoo, P., & Charoensukmongkol, P. (2020). The Role Of Social Media In The Engagement And Information Processes Of Social CRM. *Journal of Asia Business Studies*, vol. 14, no. 4, pp. 441–461.
- [32] Teece, D.J. (2018). Dynamic Capabilities As (Workable) Management System Theory. *Journal of Management & Organization*, vol. 24, no. 3, pp. 359–368. (DOI: 10.1017/jmo.2017.75)
- [33] Chuang, S.-H. (2020). Co-creating Social Media Agility To Build Strong Customer-Firm Relationships. *Ind. Mark. Manag.*, vol. 84, no. June 2019, pp. 202–211. (DOI: 10.1016/j.indmarman.2019.06.012).
- [34] Marino, V., & Presti, L. L. (2018). From Citizens To Partners: The Role Of Social Media Content In Fostering Citizen Engagement. *Transforming Government: People, Process and Policy*, vol. 12, no. 1., pp. 39–60. (DOI: <https://doi.org/10.1108/TG-07-2017-0041>)
- [35] Patroni, J., Briel, F. V. & Recker, J. (2022). Unpacking

- The Social Media Driven Innovation Capability: How Consumer Conversations Turn Into Organizational Innovations. *Information & Management*, vol. 59, no. 3, pp. 103267.
- [36] Birkel, H. S. (2020). Internet Of Things – The Future Of Managing Supply Chain Management. *Supply Chain Management*, vol. 25, no. 5, pp. 535–548. (DOI: <https://doi.org/10.1108/SCM-09-2019-0356>)
- [37] Uden, L. & He, W. (2017). How the internet of things can help knowledge management: a case study from the automatic domain. *J. Knowl. Manag.*, vol. 21, no. 2, pp. 275–294.
- [38] Akhtar, P., Khan, Z., Tarba, S. & Jayawickrama, U. (2018). The Internet Of Things, Dynamic Data And Information Processing Capabilities, And Operational Agility. *Technol. Forecast. Soc. Change*, vol. 36, pp. 307–316.
- [39] Kumar, N, Baskaran, E., Konjengbam, A. & Singh, M. (2021). Hashtag Recommendation For Short Social Media Texts Using Word-Embeddings And External Knowledge. *Knowledge and Information System*, vol. 63, pp. 175–198.
- [40] Kim, H-G., & Wang, Z. (2019). Defining And Measuring Social Customer-Relationship Management (CRM) Capabilities. *Journal of Marketing Analytics*, vol. 7, pp. 40-50.
- [41] Foltean, F.S., Trif, S.M., & Tuleu, D.L. (2019). Customer Relationship Management Capabilities And Social Media Technology Use: Consequences On Firm Performance. *J. Bus. Res.*, vol. 104, pp. 563–575.
- [42] Zhan, W. & Hyun, G.K. (2017). Can Social Media Marketing Improve Customer Relationship Capabilities And Firm Performance? Dynamic Capability Perspective. *J. Interact. Mark.*, vol. 39, pp. 15–26.
- [43] Jermsittiparsert, K., Sutdewan, J., & Sriyakul, T. (2018). Social Customer Relationship Management Capabilities And Customer Relationship Performance: Moderating Role Of Social Media (Face-book) Usage Among Indonesian Firms. *Opcion*, vol. 34, no. 86, pp. 1257–1273.
- [44] Wali, A. F., & Andy-Wali, H.A. (2018). Students As Valuable Customers: Integrating A Social Media Marketing Platform Into Customer Relationship Management Capabilities For Marketing Higher Education Services. *Paradigm*, vol. 22, no. 1, pp. 1–16.
- [45] Bhatti, M.A., Farhan, M., Ahmad, M.J., & Sharif, M.N. (2019). The Impact Of Social CRM Capabilities And Customer Engagement On The Firm Performance: Mediating Role Of Social Media Usage. *Pakistan J. Humanit. Soc. Sci.*, vol. 7, no. 3.
- [46] Soltani, Z., Zareie, B., Milani, F.S., & Navimipour, N.J. (2018). The Consumer Relationship Management Process: Its Measurement And Impact On Performance. *J. Mark. Res.*, vol. 41, no. 3, pp. 293–305.
- [47] Agnihotri, R., Dingus, R., Hu, M. Y., & Krush, M.T. (2016). Social Media: Influencing Customer Satisfaction In B2B Sales. *Ind. Mark. Manag.*, vol. 53, pp. 172–180.
- [48] Chang, S. E., Shen, W.-C., & Liu, A.Y. (2016). Why Mobile User Trust Smartphone Social Networking Service? *J. Bus. Res.*, vol. 69, no. 11, pp. 4890–4895
- [49] Mangold, W.G., & Faulds, D.J. (2009). Social Media: The New Hybrid Element Of The Promotion Mix. *Bus. Horiz.*, vol. 52, no. 4, pp. 357–365.
- [50] Soltani, Z., Zareie, B., Milani, F.S. & Navimipour, N.J. (2018). The Impact Of The Customer Relationship Management On The Organization Performance. *The Journal of High Technology Management Research*, vol. 29, no. 2, pp. 237–246.
- [51] Ndubisi, N.O., Dayan, M., Yeniaras, V., & Al-hawari, M. (2020). The Effects Of Complementarity Of Knowledge And Capabilities On Joint Innovation Capabilities And Service Innovation: The Role Of Competitive Intensity And Demand Uncertainty. *Industrial Marketing Management*, vol. 89, pp. 196–208.
- [52] Islam, M.A., Agarwal, N.K., & Ikeda, M. (2015). Knowledge Management For Service Innovation In Academic Libraries: A Qualitative Study. *Libr. Manag.*, vol. 36, pp. 40–57, (DOI: 10.1108/LM-08-2014-0098).
- [53] Mendoza-Silva, A. (2021). Innovation Capability: A Systematic Review. *European Journal of Innovation Management*, vol. 24, no. 3, pp. 707–734.
- [54] Saura, J. R., Palacios-Marques, D., & Ribeiro-Soriano, M. (2023). Exploring The Boundaries Of Open Innovation: Evidence From Social Media Mining. *Technovation*, vol. 119, pp. 102447.
- [55] Tajeddini, K., Martin, E., & Altinay, L. (2020). The important of human-related factors on service innovation and performance. *International Journal of Hospitality Management*, vol. 85, pp. 102431.
- [56] Oppazo-Basáez, M., Vendrell-Herrero, F., & Bustinza, O. F. (2022). Digital Service Innovation: A Paradigm Shift In Technological Innovation. *Journal of Service Management*, vol. 33, no. 1, pp. 97-120. (DOI: <https://doi.org/10.1108/JOSM-11-2020-0427>)
- [57] Tseng, M-L, Wu, K-J, Chiu, A.S.F., Lim, M.K., & Tan, K. (2019). Reprint Of: Service Innovation In Sustainable Product Service Systems: Improving Performance Under Linguistic Preferences. *International Journal of Production Economics*, vol. 217, pp. 159–170.
- [58] Verdu-Jover, A.J., Alos-Simo, L., & Gomez-Gras, J-M. (2018). Adaptive Culture And Product/Service Innovation Outcomes. *European Management Journal*, vol. 36, no. 3, pp. 330–340.
- [59] Khan, K. B. (2018). Understanding Innovation. *Business Horizons*, vol. 61, no. 3, pp. 453–460.
- [60] Mbambo-Thata, B. (2021). Responding To Covid-19 In An African University: The Case The National University of Lesotho Library. *Digital Library Perspective*, vol. 37, no. 1, pp. 28–38. (DOI: <https://doi.org/10.1108/DLP-07-2020-0061>)
- [61] Hwang, K., Sivaratnam, S., Azeredo, R., Hashemi, E., & Jibb, L.A. (2022). Exploring The Use Of Social Media And Online Methods To Engage Knowledge Users In Creating Research Agendas: Lessons From A Pediatric Cancer Research Priority-Setting Partnership. *Medrxiv The Reprint Server For Health Science*, (DOI: <https://doi.org/10.1101/2022.12.12.22283382>)
- [62] Yasmeen, H., Wang, Y., Zameer, H., & Waheed, A. (2019). Service-Innovation Capability Founded On Knowledge From Customers. *Human Systems Management*, vol. 38, no. 1, pp. 29–41.
- [63] Bhimani, H., Mention, A-L., & Barlatier, P-J. (2019). Social Media And Innovation: A Systematic Literature Review And Future Research Directions. *Technological Forecasting And Social Change*, vol. 144, no. 4/5, pp. 251–265.
- [64] Navarro, C., Moreno, A., & Zerfass, A. (2018). Mastering The Dialogic Tools: Social Media Use And Perceptions Of Public Relations Practitioners In Latin America. *Journal of Communication Management*, vol. 22, no. 1. (DOI: <https://doi.org/10.1108/JCOM-12-2016-0095>)
- [65] Venciute, D. (2018). Social Media Marketing – From Tool To Capability. *Organ. Vadyb. Sist. Tyrim.* (DOI: <https://doi.org/10.1515/mosr-2018-0009>)
- [66] Deaken, A.Y., Mukhopadhyay, S., & Jiang, X. S.

- (2020). Social Media in Academics And Research: 21st Century Tools To Turbocharge Education, Collaboration, And Dissemination Of Research Findings. *Histopathology*, vol. 77, no. 5, pp. 688–699.
- [67] Ahmed, W. (2021). *Using Twitter As A Data Source An Overview of Social Media Research Tools*. Impact of Social Science Blog(18 May 2021). Blog Entry. Online available from <https://blogs.lse.ac.uk/impactofsocialsciences/>
- [68] Briandana, R., Doktoralina, C.M., Shahir Akram Hasan, & Wan Norhaniza Wan Hasan. (2020). Da'wah Communication And Social Media: The Interpretation Of Millennials In Southeast Asia. *International Journal of Economics And Business Administration*, vol. 8, no. 1, pp. 216–226.
- [69] Dabbous, A., & Barakat, K.A. (2020). Bridging Online Offline Gap: Assessing The Impact of Brands' Social Network Content Quality On Brand Awareness And Purchase Intention. *Journal of Retailing And Consumer Services*, vol. 53, pp. 101966.
- [70] Enakrire, R.T., & Fasae, J.K. (2022). Infusion Of Digital Technologies In The Sustainability Of Academic Libraries: Opportunities And Threat. In *Innovative Technologies For Enhancing Knowledge Access In Academic Libraries*, Massenya, T.M. (Ed.) pp. 13.
- [71] Sumadevi, S., & Kumbar, M. (2019). Use Of Social Media To Promote Library Services In Digital Age. In *Social Media And Libraries*.
- [72] Doiron, R. (2021). WorldReaders Young Readers Reading The Word-Teacher-Librarians Using Social Networking To Promote Reading Interest. *International Association Of School Librarianship, Conference Proceedings*. Online available from <https://journals.library.ualberta.ca/slw/index.php/iasl/article/view/7685>
- [73] Arumugam, J. & Balasubramani, R. (2019). Impact Of Social Media Tools In Promoting The Library Services In Engineering Colleges In Tamilnadu. *Libr. Philos. Pract.*, pp. 1–8.
- [74] Mehra, B., Sikes, E.S., & Singh, V. (2020). Scenarios of Technology Use To Promote Community Engagement: Overcoming Marginalization And Bridging Digital Divides In The Southern And Central Appalachian Rural Libraries. *Information Processing & Management*, vol. 57, no. 3.
- [75] Mathar et al. (2021). The Role Of UIN Alauddin Makassar Library In Supporting “MBKM” Program, In *Proceedings of The International Conference On Social And Islamic Science 2021*, pp. 215-224.
- [76] Choi, N., & Joo, S. (2021). Understanding Public Libraries' Challenges, Motivators, And Perceptions Toward The Use Of Social Media For Marketing. *Library Hi Tech*, vol. 39, no. 2, pp. 352-367. (DOI: <https://doi.org/10.1108/LHT-11-2017-0237>)
- [77] Ali, M. Y., & Gatiti, P. (2020). The Covid-19 (Coronavirus) Pandemic: Reflections On The Roles Of Librarian And Information Professionals. *Health Information And Libraries Journal.*, vol. 37, no. 2, pp. 251-269.
- [78] Benitez, J., Castillo, A., Llorens, J., & Braojos, J. (2018). IT-Enabled Knowledge Ambidexterity And Innovation Performance In Small U.S. Firms: The Moderator Role Of Social Media Capability. *Inf. Manag.*, vol. 55, no. 1, pp. 131–143. (DOI: 10.1016/j.im.2017.09.004).
- [79] Fatmawati, E. (2017). Dampak Media Sosial Terhadap Perpustakaan. *Libr. J. Perpust.*, vol. 5, no. 1, p. 1. (DOI: 10.21043/libraria.v5i1.2250).
- [80] Tyagi, S. (2012). Use Of Web 2.0 Technology By Library Professionals: Study Of Selected Engineering Colleges In Western Uttar Pradesh. *DESIDOC Journal of Library And Information Technology*, vol. 32, no. 5, pp. 5.
- [81] Chawner, B. (2008). Spectators, Not Players: Information Managers' Use Of Web 2.0 In New Zealand. *Electronic Library*, vol. 26, pp. 630-649.
- [82] Omini, E.U., & Osulale, K.A. (2019). Utilization of Social Media Platforms By Librarians For Promoting Library Resources And Services In Nigerians' Tertiary Institutions In Cross-River State. *Global Journal of Education Research*, vol. 18, no. 1, pp. 1–8. Online available from [file:///C:/Users/USER/Downloads/189618-Article%20Text-481466-1-10-20190910%20\(1\).pdf](file:///C:/Users/USER/Downloads/189618-Article%20Text-481466-1-10-20190910%20(1).pdf)
- [83] Shin, G.D., Jeon, K., & Lee, H-K. (2022). Public Library Needs Assessment To Build A Community Based Library: Triangulation Method With A Social Media Data Analysis. *Library & Information Science Research*, vol. 44, no. 1, pp. 101142.
- [84] Kurnia, P.F., & Suharjo (2018). Business Intelligence Model To Analyze Social Media Information. *Procedia Computer Science*, vol. 135, pp. 5–14.
- [85] Edzan, N. (2010). Are You On Facebook? We Are. In *Emerging Trends And Technologies In Libraries And Information Services*.
- [86] Rafidah Abdul Aziz, Zuraidah Arif, Ruzita Ramly, Che Zainab Abdullah, & Haslinda Husaini (2011). The Implications Of Library 2.0 Tools In Malaysian Academic Libraries Towards Reference Services. In *Asia-Pacific Conference On Library & Information Education & Practice 2011(A-LIEP2011): Issues, Challenges and Opportunities, 22–24 June 2011*.
- [87] Yavorska, T., Prikunov, O., & Syerov, Y. (2020). Libraries In Social Networks: Opportunities And Presentations.
- [88] Saxena, R. (2019). Role Of Social Media In Library. *Research Review International Journal of Multidisciplinary.*, vol. 4, no. 4, pp. 1633-1635.
- [89] Mensah, M., & Onyancho, O.B. (2022). Building And Enhancing Library Services: Patrons Awareness Of, And Engagement With Social Media In Academic Libraries In Ghana. *Journal of Librarianship and Information Science*, vol. 54, no. 4, pp. 604–621. (DOI: <https://doi.org/10.1177/09610006211036>).
- [90] Ahenkorah-Marfo, M. & Akussah, H. (2016). Being Where The Users Are: Readiness Of Academic Librarians To Satisfy Information Needs Of Users Through Social Media. *Library Review*, vol. 65, no. 8-9, pp. 549–563.
- [91] Usman Noor, M. (2018). User Participation In Social-Media Based Library Services In The State Academic Library In Indonesia. In *The 2nd International Conference On Vocational Higher Education (ICVHE) 2017 The Importance On Advancing Vocational Education To Meet Contemporary Labor Demands*, KnE Social Sciences, pp. 347-355
- [92] Alsuhaibani, R.A (2020). One Hundred Tweets From Library Land: A Case Study Of RMIT University Library (Academic Library) And State Library Of Victoria (Public State Library) In Australia. *J. Librariansh. Inf. Sci.*, vol. 52, no. 1, pp. 197–207. (DOI: 10.1177/0961000618792367).
- [93] Acharya, H. (2021). Blogs: Type And Use Of Blogs In Libraries. *EPRA International Journal Of Research And Development*, vol. 6, no. 4, pp. 177–179, (DOI: 10.36713/epra2016)
- [94] Bresnick, E. (2019). Intensified Play: Cinematic Study Of TikTok Mobile App. *Research Gate*. Online

- available from
https://www.researchgate.net/publication/335570557_Intensified_Play_Cinematic_study_of_TikTok_mobile_app.
- [95] VanScoy, A., Hicks, D., & Cavanagh, M. (2018). What Motivates Twitter Users To Engage With Libraries? *Information Research*, vol. 23, no.4. Online available from <https://informationr.net/ir/23-4/istic2018/istic1807.html>
- [96] Diep, K.C., & Nahl, D. (2011). Information Literacy Instruction In Four Vietnamese University Libraries. *The International Information & Library Review*, vol. 43, no. 4, pp. 198–206.
- [97] Athukorala, A.W.V. (2021). Modeling A Social Media-Based Solution For Marketing Library Services In Sri Lanka: A User Librarian Collaborative Model (ULCM). *Int. J. Res. Innov. Soc. Sci.*, vol. 05, no. 07, pp. 319–326. (DOI: 10.47772/ijriss.2021.5713).
- [98] Dossena, C., Mochi, F., Bissola, R., & Imperatori, B. (2020). Restaurants And social Media: Rethinking Organizational Capabilities And Individual Competencies. *J. Tour. Futur.* (DOI: 10.1108/JTF-06-2019-0050).
- [99] Arifah Fasha Rosmani, Ariffin Abdul Mutalib, & Siti Mahfuzah Sarif. (2020). The Evolution Of Information Dissemination, Communciation Media And Technology In Malaysia. *Journal of Physics: Conference Series*, vol. 1529. (DOI: 10.1088/1742-6596/1529/2/022044)
- [100] Patel & Bhatt (2019). The Application Of Web 2.0 Tools In University Libraries Of India. *DigitalCommons@University of Nebraska*, vol. September 2019.
- [101] Ogunbodede, K.F. & Ivwighrehweta, O.A. (2020). Librarian Use Of Social Media For Effective Library Service Delivery In University Libraries In Edo And Delta States. *DigitalCommons@University of Nebraska – Lincoln*, vol. Winter 11-14-2020.
- [102] Balaji, B.P., Vinay, M.S., Shalini, B.G., & Mohan Raju, J.S. (2019). Web 2.0 Use In Academic Libraries Of Top Ranked Asian Universities. *The Electronic Library*, vol. 37, no. 3, pp. 528-549.
- [103] Williams, M.L. (2020). The Adoption Of Web 2.0 Technologies In Academic Libraries: A Comparative Exploration. *Journal Of Librarianship And Information Science*, vol. 52, no.1, pp. 137-149.
- [104] Lam, E.T.H., Au, C.H., & Chiu, D.K.W. (2019). Analyzing The Use Of Facebook Among University Libraries In Hong Kong. *The Journal Of Academic Librarianship*, vol. 45, no. 3, pp. 175-183.
- [105] Divya, V. & Subaveerapandiyam, A. (2019). Use Of Social Media In Libraries And Higher Education. *National Conference On Innovative Librarianship: A Foresight On Technology, Practice & Services*, pp. 197-212.
- [106] Istiana, P. (2017). Penggunaan Media Sosial Oleh Perpustakaan [The use of social media by library]. *Libraria*, vol. 5, no. 1, pp. 69–86.
- [107] Magoi, J.S., Yanti Idaya Aspura, Mohd Khalid, & Abrizah Abdullah. (2019). Social Media Engagement In Developing Countries: Boon Or Bane For Academic Libraries? *Inf. Dev.*, vol. 35, no. 3, pp. 374–387. (DOI: 10.1177/0266666917748985).
- [108] Ramsey, E., & Vecchione, A. (2014). Engaging Library Users Through A Social Media Strategy. *J. Libr. Innov.*, vol. 5, no. 2, pp. 1–13.
- [109] Siswanti, A. (2015). Pemanfaatan Layanan Perpanjangan Masa Peminjaman Koleksi Melalui Media Sosial Facebook Di Perpustakaan Fakultas Ilmu Sosial Dan Ilmu Politik Universitas Gadjah Mada Yogyakarta. *Ilmu Perpust. dan Inf.*, vol. 11, no. 2, pp. 1–7.
- [110] Harisanty, D. (2019). Level Of User Satisfaction On The Facebook Library. *Library Hi Tech News*, vol. 36, no. 3, pp. 708. (DOI: <https://doi.org/10.1108/LHTN-10-2018-0066>)
- [111] Khan, A.U., Rafi, M., Zhang, Z., & Khan, A. (2022). Determining The Impact Of Technological Modernization And Management Capabilities On User Satisfaction And Trust In Library Services. *Global Knowledge, Memory and Communication*. (DOI: <https://doi.org/10.1108/GKMC-06-2021-0095>)
- [112] Gupta, B.M., & Dhawan, S.M. (2019). Electronic Books: A Scientometric Assesment Of Global Literature During 1993-2018. *DESIDOC Journal Of Library & Information Technology*, vol. 39, no. 5, pp. 251–258. (DOI: 10.14429/djlit.39.5.14573)
- [113] Mansouri, A., & Soleymani Asl, N. (2019). Assessing Mobile Application Components In Providing Library Services. *The Electronic Library*, vol. 37, no. 1, pp. 49–66. (DOI: <https://doi.org/10.1108/EL-10-2018-0204>)
- [114] Llerena-Izquierdo, J., Procel-Jupiter, F., & Cunalema-Arana, A. (2021). Mobile Application With Cloud-Based Computer Vision Capability for University Students' Library Services. In: Botto-Tobar, M., Zambrano Vizuete, M., Díaz Cadena, A. (eds) Innovation and Research. CI3 2020. Advances in Intelligent Systems and Computing, vol 1277. Springer, Cham. (DOI: https://doi.org/10.1007/978-3-030-60467-7_1)
- [115] Ocran, T.K., Underwood, E.P.G., & Arthur, P.A. (2020). Strategies For Successful Implementation Of Mobile Phone Library Services. *The Journal of Academic Librarianship*, vol. 46, no. 5, pp. 1–9.
- [116] Khanim S.G., & Ahmed, F.Y.H. (2018). Utilization Of Text Message Service (SMS) For Library Notification System. *International Journal of Applied Engineering Research*, vol. 13, no. 9, pp. 6503–6513.
- [117] Catalano, et al. (2018). An Analysis Of Academic Libraries' Participation In The 21st Century Library Trends. *Evidence Based Library And Information Practice*, vol. 13, no. 3, pp. 4-16.
- [118] Koivisto, P., & Matilla, E. (2018). Extending The Luxury Experience To Social Media-User Generated Content Co-Creation In A Branded Event. *J. Bus. Res.*