

THE FUNCTION OF SOCIAL MEDIA AS A SUPPORTING TOOL FOR LECTURER CAREER DEVELOPMENT IN UNIVERSITIES IN THE INDUSTRY 4.0 ERA

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Abstract— Lectures have many duties. The most important one is to implement the tri-dharma of higher education (teaching, research and community service). One of the efforts to support these duties in the Industry 4.0 era is the use of social media to develop professors' careers. A lack of understanding of the role of social media sometimes only sees the dark side of social media, which is actually very useful in developing lecturers' careers. This study uses a qualitative research method with a narrative research design. The subjects of this study were 92 individuals identified through purposive sampling technique. Data collection was done through an online survey. Data analysis in this study used coding techniques consisting of open coding, axial coding and selective coding stages. The findings of this study show that social media is a professional development tool for teachers and can enhance professional competence, which can contribute to teachers' professional development. Professional development that enhances the performance of the Tri Dharma of Higher Education in the areas of teaching, research and community service.

Keywords: social media, career development, lecturers, universities, industry 4.0.

Intisari—Dosen memiliki tugas yang sangat banyak. Tugas utama dosen adalah melaksanakan tri dharma pendidikan tinggi (mengajar, penelitian dan pengabdian kepada masyarakat). Salah satu upaya untuk mendukung tugas di era Industri 4.0 adalah menggunakan media sosial untuk mengembangkan karir dosen. Ketidak samaan pemahaman tentang fungsi dari media sosial terkadang hanya melihat sisi gelap dari media sosial saja yang sebenarnya sangat membantu dalam pengembangan karir dosen. Studi ini menggunakan metode penelitian kualitatif dengan desain penelitian naratif. Subjek dalam penelitian ini mencapai N = 92 ditentukan berdasarkan teknik pengambilan sampel yang disengaja. Pengumpulan data penelitian dilakukan melalui survei online. Analisis data dalam penelitian ini menggunakan coding technique yang terdiri dari tahap open-coding, axial coding, dan selective coding. Hasil penelitian ini menemukan bahwa media sosial berfungsi sebagai alat pengembangan diri Dosen sebagai profesional dan meningkatkan keterampilan kerja yang dapat mendukung pengembangan karir dosen. Pengembangan karir yang meningkatkan kinerja Tri Dharma Perguruan Tinggi dibidang pendidikan, penelitian dan pengabdian kepada masyarakat.

Kata Kunci: media sosial, pengembangan karir, dosen, universitas, industri 4.0.



INTRODUCTION

Lecturer is one of the jobs that requires special skills, because the duties and main functions of a lecturer based on the Thress Pillars of higher education in the Republic of Indonesia are carrying out education, research and community service. Teaching children and adults are two different things. Children are ready to learn whatever is given, but in college, students are usually able to choose whatever is useful for them. Hence the role of the lecturer is likely to teach students to be more interested and aware of the interests and benefits of certain subjects or chapters being taught. A lecturer must be able to act as a leader one time and an executive some other time. They must be a good example for their students, because they see the lecturer as an ideal human being to follow. Lecturers must also focus on learning methods that put an emphasis on "how to learn" not "what to learn" because learning is an initiative that must be done alone and lecturers are more "directing" so that students are motivated to learn [1]. Several studies have been conducted to investigate the role of lecturers in the learning process. Rowais identified twelve roles of lecturers which are grouped into six categories: information provider, role model, facilitator, assessor, planner, and resource developer. However, not all lecturers can understand all of these roles [2].

Sullivan and Baruch defined career as an individual's work associated with experiences inside and outside the organization that produces a unique pattern in the individual's life [3]. This definition distinguishes both physical movement and the interpretation of an individual's perceptions about careers [4]. The Career Development Association of Alberta [5] defined career development as a lifelong process of managing learning, work, leisure, and transitions to move towards the future based on personally determined choices and developments. Career development requires managing a person's growth and progress in their career [6]. Braer, Flexer, Luft, and Simmons [7] argued that an individual's career development is a lifelong process that includes a process of growth and change starting from childhood, formal career education in schools, and a maturation process that continues throughout one's working phase until they enter retirement. The Canadian Standards and Guidelines for Career Development Practitioners describes career development as a lifelong process of managing learning, work, leisure and transition to move towards a personally determined future and develop based on passion [6].

The term industry 4.0 is an abbreviation of the fourth industrial revolution which is defined as

a new level of organization and control of the values of the entire aspects of life, which is directed to customers' individual needs. Industry 4.0 era includes internet of things, industrial internet, smart manufacturing, and cloud based manufacturing. These include integrity which leads to continuous improvement and a focus on added value and avoiding waste [8]. Social media and social networking sites, whether specifically designed for professional purposes or initially focused on social relation purposes such as Facebook, are progressively gaining attention in relation to the academic field. In particular, social media presents complex challenges for educators and policy makers, requiring adjustments in learning and teaching, but also in breaking boundaries and giving new meaning to emerging educational paradigms. From this perspective, social media is seen as capable of profoundly changing teaching and learning practices to become more socially oriented, open and collaborative [9].

Also in the college context, social media has contributed to a radical paradigm shift in pedagogical approaches and teaching practices, although empirical studies of their effectiveness for this purpose are still at an early stage [10], [11]. At the same time, this environment presents new and important opportunities for faculty and colleges for career development and lifelong learning [12]. Lecturers usually use this social media in their professional life for communication with colleagues and others outside academia, with the aim of strengthening relationships, finding collaborators, following research trends, publishing and reflecting on ideas, disseminating information, and discussing issues in open public forums [13]. Based on the phenomenon and discussion above, that this study aims to find out how social media functions for a lecturer in supporting a career? This is important because in the 4.0 era remembering that social media plays a very important role in life

MATERIALS AND METHODS

This research used qualitative research method with narrative research design [14]. The researchers used purposive sampling technique with several subject criteria including: 1) Active lecturers in higher education institutions spread across four provinces in the Republic of Indonesia, namely South Sumatra, Lampung, Bengkulu, Bangka Belitung; 2) Willing to be a respondent in the research. The data collection in this study was done using an online survey through Google Form while the data analysis was conducted using coding technique consisting of the stages of open coding, Axial coding and Selective coding [15]. The data obtained from the questionnaire was descriptive

data that was taken through in-depth analysis to find the main themes of the problems in the research. To analyze the data, the researchers used the ATLAS.ti program: The Qualitative Data Analysis & Research Software [16] and Microsoft Excel to classify them. The flow of the process of implementing this research can be seen in the diagram in Fig 1:

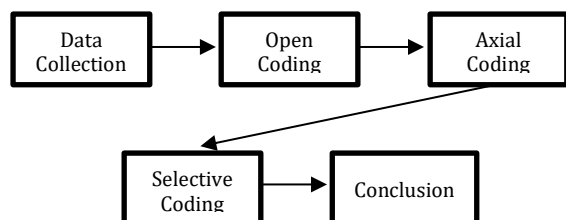
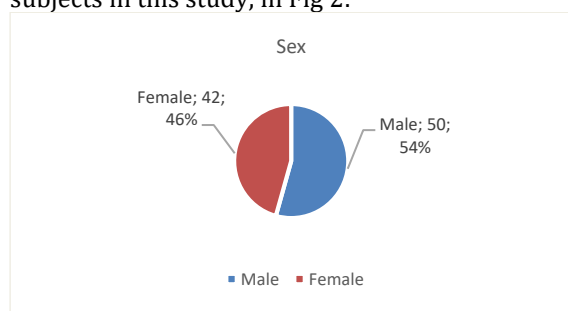


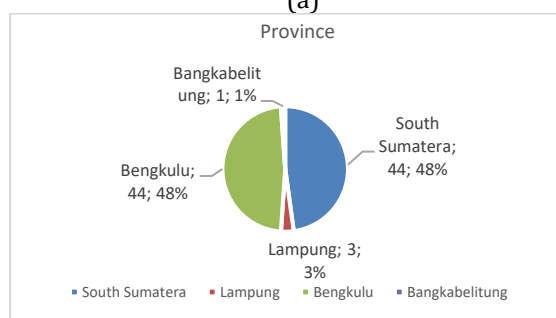
Figure 1. Flowchart of the research

RESULTS AND DISCUSSION

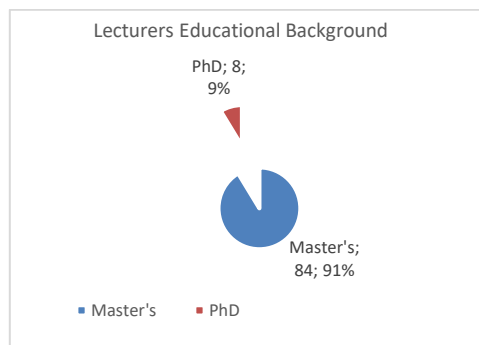
This study involved 92 respondents who were active lecturers at universities spread across four provinces in the Republic of Indonesia, namely South Sumatra, Lampung, Bengkulu and Bangka Belitung. There were 50 male lecturers that accounted for 54% respondents and the remaining respondents were 42 female lecturers (45%). 84 (91%) lecturers graduated from a master's degree program while 8 (9%) of them were doctoral program graduates. 44 respondents (48%) were from South Sumatra and Bengkulu. 3 were from Lampung which accounted for 3 percent and 1 person was from Bangka Belitung (1%). The following graph shows the demographic data of the subjects in this study, in Fig 2:



(a)



(b)



(c)

Figure 2. (a), (b), (c) demographic data

It was found out that the social media accounts that the lecturers mostly had was Facebook (81 respondents). 80 respondents had Instagram account and 53 respondents had Youtube account. 27 lecturers had Twitter account, 18 had LinkedIn, 15 had WhatsApp and 5 lecturers had Pinterest. 2 lecturers had MySpace and 2 lecturers had Flickr account. This can be further seen in the following graph fig 3:

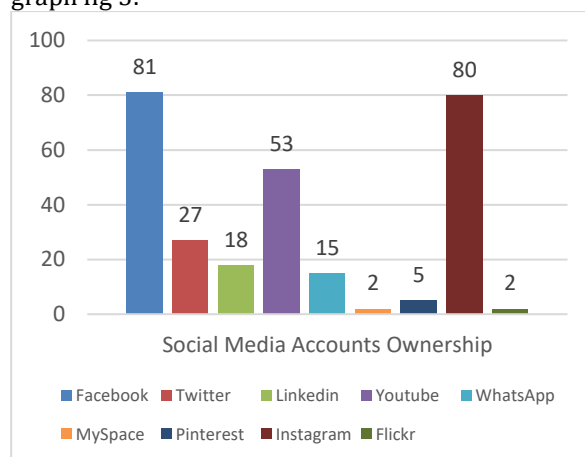


Figure 3. Social Media Accounts Ownership

Facebook and Instagram were the most popular social media websites among the lecturers. A survey conducted by Hampton, Goulet, Rainie, and Purcell (2011) [17] showed that 92% of the research respondents owned Facebook account. Facebook was originally developed by Mark Zuckerberg in 2004. It was originally created for Harvard University students to connect with each other. Facebook was opened to the public in 2006. Since then, it has gathered users around the world to use its services [18]. To date, Facebook has 196.7 million users worldwide. Even though they had social media accounts, most lecturers did not actively use them. Based on the activities of using social media, the researchers grouped them into very active, active, moderately active, and inactive. This can be seen in the following graph, fig 4:



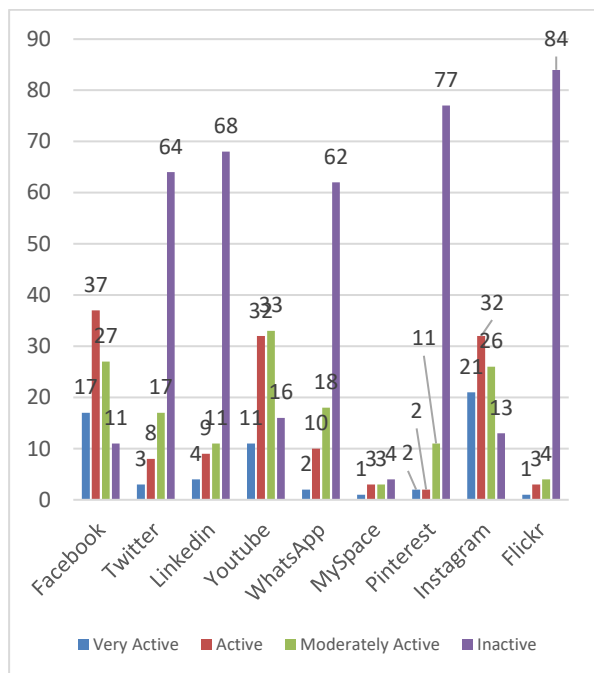


Figure 4. Active Use of Social Media

Of all social media accounts, Facebook, Youtube, and Instagram were the ones that they actively used. Meanwhile, other social media such as Twitter, LinkedIn, WhatsApp, Pinterest, and Flickr were not actively used. Facebook and other social media that were used actively can provide various benefits in the academic field. Facebook has the potential to be a resource that supports educational communication and collaboration between lecturers. This is because Facebook users come from various backgrounds and ages [19]. Facebook is also the most popular social media platform among university students [20]. Ansari and Khan's (2020) [21] research revealed that the active application and use of social media in transferring collaborative learning resources and interactions between teachers can facilitate students to be more enthusiastic and dynamic.

In social theory, Coleman (1994) [22] stated that social media can provide access to valuable resources that could be useful for developing someone professionally and improving one's employability [23], [24]. Moreover, in the specific context of academic careers, informal learning activities in social media has been shown to be a strong determinant for the improvement of academic staff members employability [25]. Miller, Partridge, Bruce, and Hemmings (2016) [26] supported the importance of social networks in academic careers, and opportunities for learning in more informal ways. However, while technology-based professional development can be beneficial, not all academics may utilize communication via social media for further career development. Some

may lack interest in or are not interested in technology-based professional development, or have no knowledge of how to use the existing social media platforms to develop themselves professionally [27]. Based on the results of this study, the majority of respondents used social media for more than 2 hours.

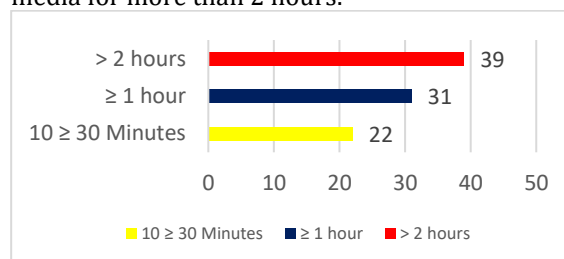


Figure 5. Social Media Usage Intensity

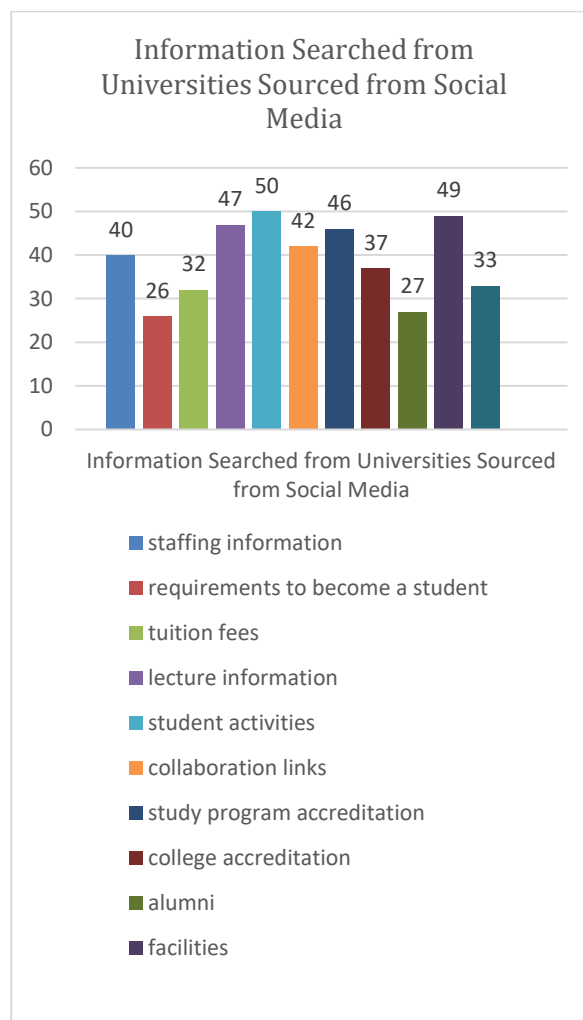


Figure 6. Information Searched from Universities Sourced from Social Media

Longer intensity of using social media allows lecturers to interact with students longer as well. This is because social media has the ability to help students connect with educators and have easy access to relevant news and information [28], [29].

In general, the most sought-after information from universities sourced from social media is about student activities, facilities, lecture information, study program accreditation, collaboration links, staffing information, college accreditation, college locations, tuition fees and alumni. On the other hand, the least sought information is the requirements to become a student, in fig 5. social media; The researchers explained that the universality of social media use is a result of people constantly communicating over the Internet on different platforms. This constant connection allows individuals to absorb news, talk and make decisions without looking at each other [30]. According to McCorkle and Payan (2017) s social media marketing is one of the most successful strategies to reach target audiences in today's marketing communications. Due to the large amount of time students spend on social media; they are ideal targets for social media marketing. They find many types of contents on social media, which influences their opinions and choices. According to some academics, international students use social media to help them make university choices [31]. Several studies have examined the use of social media in higher education institutions and their impact on student choices [32], [33].

Although there were still lecturers who had not implemented social media in their interaction with the academic community, the majority of them implemented social media and interacted actively with students, fellow lecturers, and education staff. The use of social media as a mean of interaction between lecturers and the academic community can be seen in the following graph, in fig. 7:

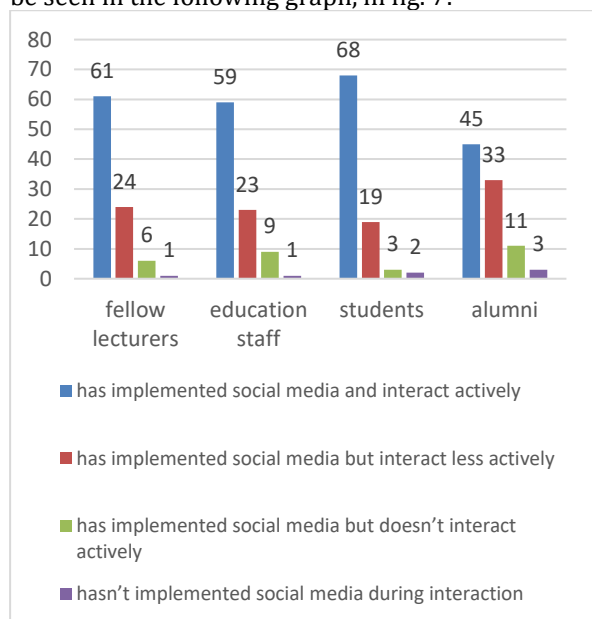


Figure 7. Use of Social Media as a Mean for Interaction between Lecturers and Academic Community.

Online interaction was first introduced by Moore (1989) [34] who categorized three types of distance learning interactions, namely communication between one student and the other students that can occur with or without the presence of a teacher and tutor, student-teacher interaction which aims to stimulate and encourage students to relate to teachers who will assist their learning, and student-content interaction, which is a communication process that involves students interacting with certain learning content that will lead them to understand content and allows to develop cognitive processes. Research in various western countries have found that the use of social media for collaborative learning has a significant contribution to students' academic performance and satisfaction [35]. The social media used for interaction and learning media prepared by universities are generally Youtube, Facebook, Instagram, and WhatsApp. For more details, it can be seen in the following graph, in fig. 8:

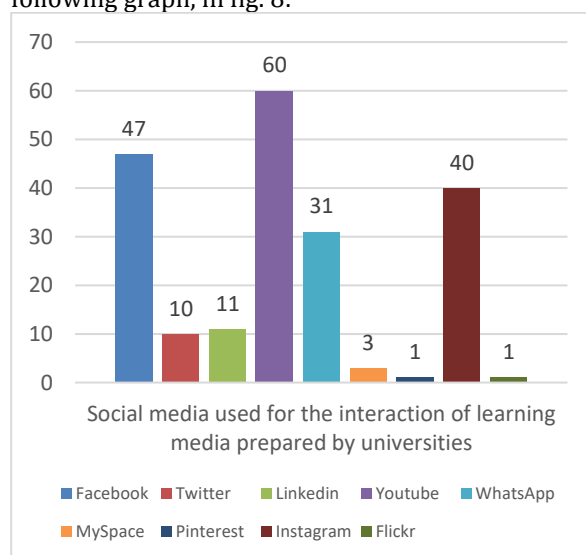


Figure 8. Social media used for the interaction of learning media prepared by universities

Youtube is the largest social media prepared by universities as a platform for learning media and interaction. YouTube (www.youtube.com) is the largest online repository of video material with over one billion users [36]. In terms of learning process, it provides benefits for students and teachers [37]. These benefits include: attracting students' attention, focusing students' concentration, observing experiences that are difficult to observe, generating interest in subjects, improving content attitudes, building relationships with students, fostering creativity, increasing collaboration, motivating students, making learning fun, reducing anxiety about scary topics and increasing understanding [38]. YouTube is also considered the most suitable for the "net generation" (students

raised since the introduction of the World Wide Web) with a high acceptance rate [39]–[41]. The use of online and hybrid learning has been found to increase discourse, collaboration, and learning engagement [39], [42], [43]. Videos can be integrated into most learning management systems and incorporated into materials, assignments, quizzes, and tutorials [44], and used to support self-directed learning and tutoring [41], [45]. While some studies have found YouTube to be very effective in enhancing full-fledged online learning [46], others have shown that the use of online video-sharing services is most effective when used as a complement rather than a substitute for hybrid or mixed-model lecture demonstrations [41]. Social media used to publish research results prepared by universities are generally Facebook, Youtube, Instagram, and WhatsApp. This can be seen in the following graph, in fig.9:

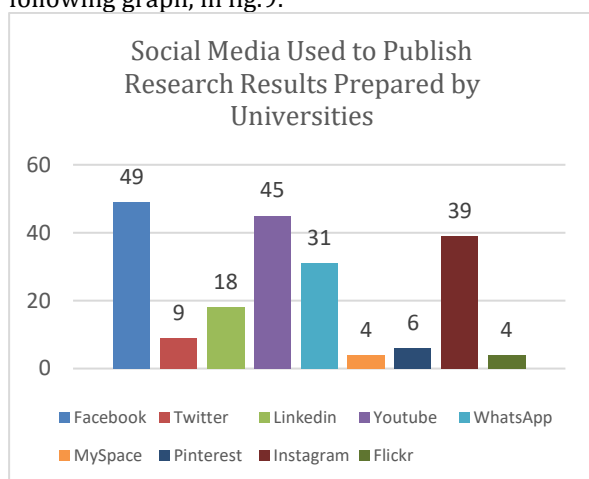


Figure 9. Social Media Used to Publish Research Results Prepared by Universities

Social media used to publish community service activities and results prepared by universities are Facebook, Youtube, Instagram, and WhatsApp which can be seen as follows in fig. 10.

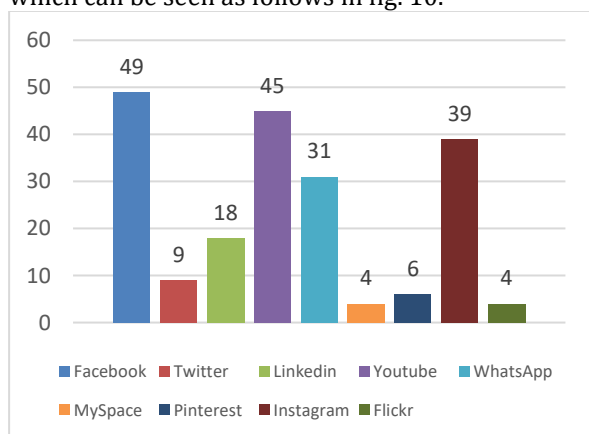


Figure 10. Social Media Used to Publish Community Service Activities and Results Prepared by Universities

Facebook is a social media that is widely used to publish the results of research and activities documentation as well as the results of community service. In the Internet Age and the rapid growth of the Open Journal System, many journal managers have not utilized it as a marketing platform and they do not pay a full attention to marketing strategies. The cause of this problem is the lack of resources for marketing and partly because of the limited knowledge of marketing. Social media provides an opportunity to connect with customers using richer media with more to achieve [47].

An example is Elsevier Publishing Company which publishes medical and scientific literature. The company uses social media such as Facebook, Twitter, LinkedIn, and Google+ to get attention and create engagement with their audience, promote new research, highlight news about their journal, call for papers, encourage audience to visit their website, and increase article downloads [48]. The results according to almetrics.com states that scientific articles on Elsevier receive 12.000 new mentions on social media, news and blogs every day and more than 20.000 articles are shared every week.

The benefit of social media marketing is that it increases traffic exposure. Social media can build and increase brand awareness. Since a large number of people are already visiting social media, the presence of a brand name across the network can help inform people about it and become familiar with the company, thus creating awareness about it [49]. Facebook is one of the largest social media platforms with more than 1.2 billion registered users and the most successful online social media which population continues to grow.

In addition, Facebook has offered many marketing tools for companies to target their audiences such as creating groups, pages and social ads. However in journal publishing this is still not explored by most organizations or educational institutions. Facebook is a marketing tool for scientific publications on the internet because many users are lecturers or editors as well as various academic groups who can become marketing targets [50]. The commonly recommended social media to help the academic community find information on higher education are Instagram, Facebook, and Youtube which can be seen below, in fig. 11.

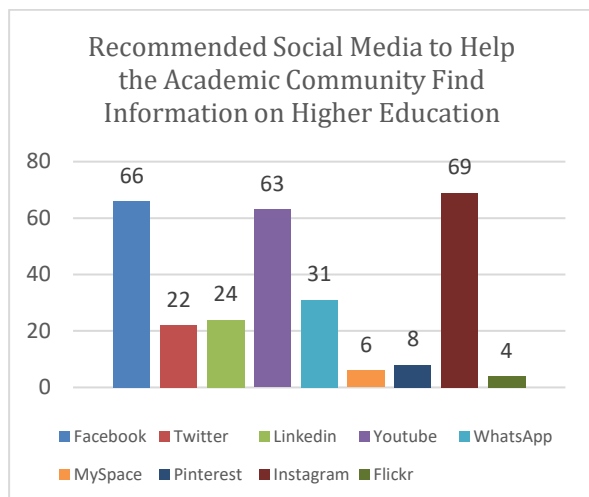


Figure 11. Recommended Social Media to Help the Academic Community Find Information on Higher Education

The most recommended social media to help the academic community find information about higher education is Instagram. A study conducted by Rusle et al (2021) [51] explained that most of the respondents in their research had an Instagram account for 3-5 years and spent 5-10 hours a week browsing Instagram. The main purpose of using Instagram is to share visual contents, and it is used as a fun information conveying tool because one can post interesting pictures while delivering information or facts [52], [53]. Salomon [53] argued that Instagram reaches a younger and more diverse audience than other social networks. Therefore, it can be a recommended social media to help the academic community find information about higher education.

CONCLUSION

This study concluded that social media has a function as a professional self-development tool and improves working skills that can support the career development of lecturers. The results of this study found that social media functioned as a professional self-development tool and improved working skills that could support the career development of lecturers. Suggestions for further that Lecturers can implement social media as a means in the teaching and learning process and the development of education, research and community service.

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