

# Analysis of Lecturer Digital Literacy Skills in Entrepreneurship Course

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## ABSTRACT

Entrepreneurship course has unique characteristics, where the expectation of students is not quite up to the level of to knowing, but to the level of to being and to doing, for that it needs to be given an entrepreneurial lecture package that can facilitate this expectation, for that it is necessary to develop learning programs. This study aims to analyze the level of lecturer's digital literacy skills in conducting entrepreneurship courses. The study population was all lecturers who taught entrepreneurship courses in Universitas Negeri Padang (UNP). Data was collected using a questionnaire. The results showed that; 1) The majority of lecturers who teach entrepreneurship are categorized as the millennial generation, they were born after 1976 These lecturers have high interaction with digital devices and the internet; 2) The digital literacy skills of lecturers who teach entrepreneurship courses are already in a good category; 3) The level of familiarity of the lecturers who teach entrepreneurship courses with digital concepts in business is already in a good category. The results of this study hope that both lecturers and students will always improve their digital literacy skills in entrepreneurship because the digital world in entrepreneurship is constantly developing.

**Keywords:** *digital literacy skills, lecturer, entrepreneurship course*

## 1. INTRODUCTION

Data from the Central Bureau of Statistics (BPS) in August 2019 recorded that the number of open unemployed in Indonesia was 7.05 million people, of which 737,000 were university graduates. The problem of educated unemployment can actually be minimized by increasing the number of young entrepreneurs as an alternative job for college graduates. The entry of entrepreneurship as a compulsory higher education curriculum is one of the positive responses in overcoming educated unemployment. The digital era that is developing today provides many benefits for education. These benefits include easier learning facilities and faster access to lecture information, Munir

(2017). Regarding opportunities for entrepreneurship, the digital era makes the opportunity to start a business and do entrepreneurial activities relatively easy to do, therefore, lecturers who are teaching entrepreneurship courses need to respond actively to the conditions of this shift towards digitalization. Challenges as well as opportunities in this era need to be answered by improving the digital literacy skills of lecturers, so that they are able to design digital-based entrepreneurship learning. Digital-based learning is expected to have a positive impact on the ability and sensitivity of students to take advantage of various digital business opportunities around them to become productive business opportunities.

Digital literacy has been developed since 1990 and has become an urgent need for today's society. In its development of the concept of digital literacy, many experts argue that digital literacy will see how an individual has the ability, attitude and interest in utilizing the use of available communication tools and digital technology. These abilities, attitudes and interests will be used by individuals to analyze digital information, so that they can build new knowledge that they will use as a means to participate and contribute more optimally in social life. Digital literacy activities have been synonymous with a person's ability to use and understand the use of information and communication technology, for example in supporting the world of education and the economy. One of the figures who popularized the term digital literacy is Paul Gilster who published his book in 1997 with the title *Digital Literacy*. According to Paul Gilster: Lee, SH (2014). Digital literacy is the ability to understand and use information in multiple formats from multiple sources when it is presented via a computer. Digital literacy is also defined as the ability to understand, analyze, assess, organize and evaluate information using digital technology. This means that both lecturers and students are expected to know about various technologies and understand how to use these technologies, both for learning and to support entrepreneurial activities. From some of the definitions of digital literacy above, it can be concluded that in digital literacy it is not just the ability to find, use and disseminate information but, it requires the ability to produce critical information and evaluation.

In an effort to produce students who are able to take advantage of digital business opportunities, the role of entrepreneurship lecturers is very important and strategic. Lecturers are required to innovate in order to increase their productivity as teachers and educators. Entrepreneurship learning patterns must be able to keep up with the development of digital technology so that they are able to produce highly

competitive students and graduates. Lecturers also play a role in spreading passion so that students realize that the entrepreneurial profession is a noble profession, because they will not become job seekers but become job creators so that later the number of unemployed in Indonesia can be reduced. Entrepreneurship learning faced by students must be prepared to adapt to the times. The present era is a digital era where entrepreneurial activities will be much more successful if they take advantage of digital technology. For this reason, a lecturer must first have high digital literacy skills, so that learning is increasingly relevant to the needs of the times. Based on the explanation above, this article aims to describe how the digital literacy skills of lecturers who teach entrepreneurship courses. as seen from 1) their interaction with information technology and internet devices, 2) digital literacy skills possessed by lecturers in entrepreneurship learning, 3) and their familiarity with digital concepts in entrepreneurship. Based on the explanation above, this article aims to describe how the digital literacy skills of lecturers who teach entrepreneurship courses. as seen from 1) their interaction with information technology and internet devices, 2) digital literacy skills possessed by lecturers in entrepreneurship learning, 3) and their familiarity with digital concepts in entrepreneurship. Based on the explanation above, this article aims to describe how the digital literacy skills of lecturers who teach entrepreneurship courses. seen from 1) their interaction with information technology and internet devices, 2) digital literacy skills possessed by lecturers in entrepreneurship learning, 3) and their familiarity with digital concepts in entrepreneurship.

## **2. METHODS**

### *2.1. Types of Research*

This research uses descriptive studies, descriptive study is a type of research that is the most basic, which aims to describe directly related

problems or phenomena in society, which are interesting to study, (Kumar, 2011). Descriptive study was chosen because this research article aims to describe how the digital literacy skills of lecturers who teach entrepreneurship courses, seen from 1) Their interactions with information technology and internet devices, 2) Digital literacy skills possessed by lecturers in entrepreneurship learning, 3) And their familiarity with digital concepts in entrepreneurship.

*2.2. Location, Population and Sample Research*

The research was conducted at Universitas Negeri Padang (UNP). The population in this study were all lecturers who teach entrepreneurship courses at Universitas Negeri Padang. Samples were drawn using random sampling method.

**3. RESULTS AND DISCUSSION**

Based on the purpose of the following research will present the data related to, 1) The interaction of entrepreneurship lecturers with information technology and internet devices, 2) Digital literacy

**Table 1.** Data on the Gender of Respondents

Gender	%
Female	75.06
Male	24.94
Σ	100.00

Source: Primary Data Processed: 2019

**Table 2.** Respondents Age Data

Age	%
<30	62.50
30 – 40	25.00
> 50	12.50

Source: Primary Data Processed: 2019

*2.3. Instruments and Research Data Analysis*

The study used a questionnaire as a research instrument, the instrument was developed based on standard instruments issued by the global framework reference-digital literacy skills for indicators. 4.4.2, 2018. For the research data obtained, a descriptive analysis was carried out by looking at the average and trend of the data.

*2.1. Research Limitations*

This study has limitations, where not all research respondents fill in the data properly so that not all data can be used, and the respondents have various faculty origins and ages, but it has not been seen how different digital literacy skills are in each category.

skills possessed by lecturers in entrepreneurship learning, 3) Familiarity of lecturers with digital concepts in entrepreneurship

**Table 3.** Respondents' Experience Data in Teaching Entrepreneurship Subjects

Experience (Year)	%
<1 Year	25.00
1 – 2	62.50
> 5	12.50

Source: Primary Data Processed: 2019

**Table 4.** Intensity of Daily Use of Technology Devices by Entrepreneurship Lecturers

Intensity of Use Technology Device (Hour)	%
3- 4	12.50
5-6	25.00
7- 8	50.00
> 8	12.50

Source: Primary Data Processed: 2019

**Table 5.** Intensity of Daily Use of the Internet by Entrepreneurship Lecturers

Utilization Intensity Internet (Hour)	%
3- 4	12.50
5-6	25.00
7- 8	37.50
> 8	25.00

Source: Primary Data Processed: 2019

The table above is related to descriptive data of respondents and data related to lecturers' interactions with information technology devices and the internet. Entrepreneurship has only been used as a compulsory subject at Universitas Negeri Padang since 2017, so many of the lecturers have only been teaching for 2 years. Lecturers who teach entrepreneurship courses come from various departments at UNP, and most of the lecturers who teach entrepreneurship are women under 30 years of age. When examined from the theory of generation differences, it appears that the lecturers who teach entrepreneurship courses are categorized as millennial generation. Generational groupings in the world of work both in universities and in other workplaces will emerge following the development of human resource management. Research on this generational difference has been widely studied by their experts stating that generation is an aggregate of a group of individuals who experience the same events in the same period, Ryder 1965 in Putra, YS (2017). The theory of generational differences was popularized by Neil Howe and William Strauss in (1991). Howe and Strauss divided generations according to the similarity of birth time and the similarity of historical events. Other researchers also divide the generations with different labels, but generally have the same meaning. Furthermore, according to researchers Kupperschmidt (2000) generation is a group of

individuals who identify their group based on the similarity of birth year, age, location,

Tables 2, 4 and 5 above show that the majority of lecturer respondents who teach entrepreneurship courses are under 30 years old, born after 1980. The intensity of their use of information technology and the internet is quite high, more than 6 hours per day. These lecturers are categorized as millennial generation. Compared to the previous generation, the millennial generation has a little difference, as stated by Tapscott (1998), calling the millennial generation the term Digital Generation who was born between 1976-2000. has a unique character. One of the main features of the millennial generation is marked by increased use and familiarity with communications, media and digital technology. Having been raised by technological advances, the millennial generation has creative, informative, passionate and productive characteristics. Compared to the previous generation, they are better friends with technology. This generation is a generation that involves technology in all aspects of life. The real evidence that can be observed is that almost all individuals in that generation choose to use smart phones. By using these devices, millennials can become more productive and efficient individuals. In the world of education, the interactions they do include the ease of accessing educational sites, as well as the ability to take advantage of online businesses. Millennials tend to have more open communication and views in the social, political or economic fields. This generation is netizens because they use social media actively, and their lives are heavily influenced by technological developments

The second research objective is to look at the digital literacy skills of lecturers who teach entrepreneurship courses, for collecting this data an instrument is used which refers to the guidelines developed from the global framework reference-digital literacy skills for indicator in 2018. The following is an explanation of lecturer

digital literacy skills data consisting of the top 5 main indicators.

**Table 6.** Digital Literacy Skills for Entrepreneurship Lecturers

No.	Indicator	Mean	Percentage	Remarks
1	Information and Data Literacy	4.42	88.40	Very High
2	Communication and Collaboration	4.25	85.00	Very High
3	Digital Content Creation	2.56	51.20	Enough
4	Safety	4.25	61.13	High
5	Problem Solving	3.30	65.98	High
	<b>Mean</b>	<b>3.72</b>	<b>74.43</b>	<b>High</b>

Source: Primary Data Processed: 2019

**Table 7.** Lecturer Familiarity with digital concepts

No.	Indicator	Mean	Percentage	Remarks
1	Basic digital concept	4.42	88.40	Very High
2	Digital World Security	4.25	85.00	Very High
3	Business Ethics in the Digital world	2.56	51.20	Enough
4	Business Management in the Digital world	4.25	61.13	High
	<b>Mean</b>	<b>3.72</b>	<b>74.43</b>	<b>High</b>

Source: Primary Data Processed: 2019

Table 6 above shows that the average digital literacy skills of lecturers who teach entrepreneurship courses are in the highest category. This condition means that the lecturer has good digital literacy skills, this can be seen from the four indicators of digital literacy skills that are very high and high, namely the indicators of information and data literacy, communication and collaboration, safety and problem solving. Digital content creation indicators are still in the enough category, so that skills need to be improved in this regard, so that lecturers are not only users of digital technology, but also able to produce digital content that can be used by students as a learning resource. The highest aspect of digital literacy skills in table 6 above is in the information and data literacy indicator. This

condition means that lecturers have been able to take advantage of the development of digital technology and the internet as an alternative media and source of entrepreneurial learning for students. Table 6 also shows that the lowest digital literacy skills are in digital content creation, this means that lecturers are still not maximal in creating entrepreneurial digital content, content that can be used by students in learning, there needs to be training and effort from lecturers so that they are not just users. Digital products, but also as digital content creators that can be used by students in learning, especially during the Covid 19 pandemic. The application of good digital literacy will provide benefits because it can be used as actual to support the creative, innovative, and creative

learning process. And independent by utilizing information technology Maulana, M. (2019). But behind the convenience offered by the digital era in the field of education, of course, this era presents quite a challenge, especially in strengthening students' digital literacy skills so that they do not abuse current technological developments.

Seeing from the opinion expressed by (Summey: 2013) that digital literacy is not equal to the ability to use digital devices, learn to use new devices, or even apply these devices and technology to the learning process and continue to improve skills, because digital literacy is a high adaptability result, which allows people to take advantage of technical skills and navigate the various information available on the internet network. The technical ability in accessing technology now can change in the future, but digital literacy will shape a person to be ready in the present and in the future, regardless of the form of technological development that will come later.

Table 7 above shows that lecturers who teach entrepreneurship courses are familiar with the concept of digital concepts in entrepreneurship. Both related to basic digital concepts, security in doing digital business, business ethics in the digital world and business management in the digital world. Being a lecturer who cares and has digital literacy skills will be very beneficial in managing entrepreneurship learning, because the use of technology will make the atmosphere of entrepreneurship learning more active and creative, and the latest developments related to entrepreneurship topics can be faster and easier to take advantage of (Sharpe 2011). Meanwhile, Olsson and Edman-Stålbrant (2008) stated that a lecturer must have the ability to: 1) Decide what types of digital tools are suitable for their course content and be able to present their courses online, 2) Determine what types of digital tools and methods work that supports, develops or improves the quality of their courses, 3) Realizes costs with different digital exams so that they can

choose the form of examination best suited to the objectives and guidelines, and 4) Clarify and highlight teaching and learning problems, for students, according to the tools and the selected digital method. In the digital era, lecturers are required to follow technological developments, therefore, in addition to general teaching skills, several more skills are needed to be instilled in a lecturer to play their role effectively as a learning facilitator so that the goal entrepreneurial learning that is expected to be realized.

#### **4. CONCLUSIONS**

From the results of this research, we can conclude the following: (1) The majority of lecturers who teach entrepreneurship are categorized as millennial generation, they were born after 1976. These lecturers have high interaction with digital devices and the internet. 2) The digital literacy skills of lecturers who teach entrepreneurship courses are already in a high category. 3) The level of familiarity of the lecturers who teach entrepreneurship courses with digital concepts in business is already in a high category. 4) The results of this study hope that both lecturers and students will always improve their digital literacy skills in entrepreneurship because the digital world in entrepreneurship is constantly developing.

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