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# The Effect of Digital Literacy and Entrepreneurship Education Towards Online Entrepreneurship Intention Through Online Business Learning and Creativity At Marketing Department in Batang Regency

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# Article Info

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#### **Abstract**

The intention of online entrepreneurship is the desire of a person by making several efforts to find information and planning to achieve business goals in the internet network. Some of the factors that are thought to influence this phenomenon include digital literacy, entrepreneurship education, online business learning, and creativity. This study aims to analyze the effect of digital literacy, entrepreneurship education, online business learning, and creativity on online entrepreneurial intentions. In addition, this study is to analyze the effect of digital literacy and entrepreneurship education that can be mediated by online business learning and creativity on online entrepreneurial intentions of Marketing major in Batang regency. This research method was a quantitative approach. The population of this study were students majoring in Marketing in Batang with a total of 345 students. The sample taken in this study were 160 students as respondents by collecting data using a questionnaire. The data analysis method used was descriptive analysis, confirmatory analysis and structural equation modeling analysis. The results show that digital literacy and online business learning have a positive and significant effect on online entrepreneurship intentions. Meanwhile, entrepreneurship education and creativity have a negative and significant effect on online entrepreneurial intentions. However, entrepreneurship education has no effect on creativity. Online business learning variables and creativity mediate digital literacy towards online entrepreneurial intentions. While the creativity variable does not mediate entrepreneurship education on online entrepreneurship intentions. Based on the research results, Entrepreneurship Education has no influence on creativity. So the school needs to carry out entrepreneurial education activities that can increase the creativity of students.

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## INTRODUCTION

Industry 4.0 challenges and opportunities encourage innovation and vocational education creation. The government needs to review the relevance between vocational education and employment to respond to changes challenges. In addition, there are opportunities for the industrial era 4.0 by still paying attention to human aspects (humanities). The challenges of vocational education are increasingly complex with Industry 4.0. The continued development of the digital industry make an online entrepreneur or an online grow rapidly in Indonesia. Entrepreneurship is a creative and innovative ability that is used as a basis, and a resource to seek opportunities for success. Entrepreneurship is said to be a pioneer in realizing sustainable and highly competitive economic growth in companies (Merakati, Rusdarti, and Wahyono, 2017). Meanwhile, Rifai & Sucihatiningsih (2016) defined Entrepreneurship Education as a process of taking various activities with certain methods to knowledge understanding or entrepreneurship with the aim of creating prosperity for individuals and adding value to society.

Theory Planned Behavior Model (TPB) and the Technology Acceptance Model (TAM) is a very precise theory in understanding entrepreneurial intentions online. Where TPB and TAM show a person's intention to carry out entrepreneurial behavior using technology that refers to his desire to be entrepreneurial online. Intention according to Fieshbein and Ajzen in (Wijaya, 2007: 119) is "a component in an individual which refers to the desire to perform certain behavior".

In this study, different results were also found between the studies that became the research gap (research problem). According to Hasanah and Setiaji's (2019) research, digital literacy on entrepreneurial intentions has a positive effect of 14%. Badaruddin et.al (2012), this research shows that there is a significant relationship between knowledge of information technology and the intention of cyber entrepreneurship. As well, research by Bayrakdaroglu (2017) states that literacy does not have a significant effect on entrepreneurial intentions to use the internet so that this variable is eliminated.

According to Fadhilah, et.al. (2016) who examined online marketing learning, Self Efficacy and Online Entrepreneurial Interest in Class XI Marketing of Surakarta State Vocational School, there is a positive and significant influence between online marketing learning on students' online entrepreneurial interest. The results of Sari and Wibawa (2017) research, concluded that through the use of E- commerce, has the effect of giving convience for the sales process to increase sales in schools. In addition, Tjahjono, et.al. (2013) stated that the tendency of entrepreneurial people who have been built in a person is due to individual learning. However, different results found about entrepreneurial intentions studied by Hejazinia (2015) in her study found no significant effect of IT-based education on entrepreneurial intentions. Kurniawan (2018) in his research shows that there is no influence between the use of media on the interest in entrepreneurship. Social media is also a tool used for practice in online business learning to become one of the benchmarks.

In addition, research conducted by Kusuma and Warmika (2016) on the analysis of factors affect entrepreneurial intentions that undergraduate students of FEB UNUD shows that entrepreneurship education has a positive and significant effect on entrepreneurial intentions. However, Suharti and Sirine's research (2011) where contextual factors, namely the level of student participation in entrepreneurship training / education, were not proven to affect students' entrepreneurial intentions. In addition, research by Fayolle & Gailly (2015) found entrepreneurship education has a negative effect on entrepreneurial intentions. Pratana Margunani (2019)research shows that entrepreneurship education, partially has no effect on entrepreneurial intentions.

Research also shows a research gap, which according to Hamidi (2008) shows that high scores on creativity and entrepreneurial experience tests have a positive effect on entrepreneurial intentions. Widyaningrum and Harnanik (2016) where the results of their research show that there are two dominant factors that influence creativity, namely the state of

learning and stimulation from the environment. On the other hand, research conducted by Zampetakis et.al (2011) found that the influence of creativity at the University was not the effect between creativity and entrepreneurial intentions. Leonadi (2017) in his research shows that creativity has no effect on student interest in entrepreneurial interest.

## **METHODS**

This research method was a quantitative approach. The population of this study were students majoring in Marketing in Batang with a total of 345 students. The sample taken in this study were 160 students as respondents by

collecting data using a questionnaire. The questionnaire in this study uses a ratio scale that aims to give numbers. The data analysis method used was descriptive analysis, confirmatory analysis and structural equation modeling analysis.

#### RESULTS AND DISCUSSION

Structural equation modeling analysis is used to determine the structural relationship between the variables studied. The structural relationship between the variables is seen from the path diagram obtained from the output of the AMOS 24 program and tested for conformity with the goodness-of-fit index.

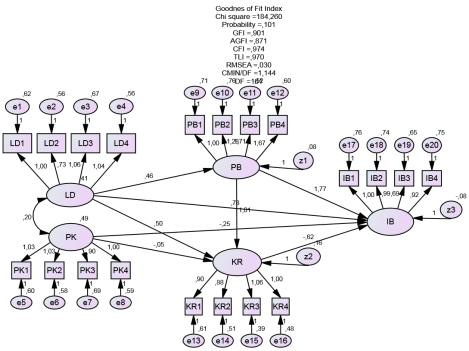


Figure 1. Full SEM Model

The picture above shows that there are 4 independent variables, namely digital literacy shown by the LD symbol, entrepreneurship education shown by the PK symbol, Online Business Learning shown by the PB symbol, and the Creativity variable shown by the KR symbol. While the dependent variable Online Entrepreneurship Intention is indicated by the symbol IB.

The conformity index and absolute statistics are used to test whether a model can be accepted or rejected (Ferdinand, 2014: 67). The test results can be seen as follows in Table 1.

Table 1. Goodness of fit Index Value

| Goodness of            | Cut-Off     | Value   | Description |  |
|------------------------|-------------|---------|-------------|--|
| Fit Index              | Value       |         |             |  |
| X <sup>2</sup> – Chi - | Expected    | 184.260 | Good        |  |
| square                 | small       |         |             |  |
| Significant            | $\geq 0.05$ | 0.101   | Good        |  |
| Probability            |             |         |             |  |
| RMSEA                  | $\leq$ 0.08 | 0.030   | Good        |  |
| GFI                    | $\geq 0.90$ | 0.901   | Good        |  |
| CFI                    | $\geq 0.95$ | 0.978   | Good        |  |
| TLI                    | $\geq 0.95$ | 0.970   | Good        |  |
| CMIN/DF                | $\leq 2.00$ | 1.144   | Good        |  |

Source: Primary data processed, 2020.

The goodness of fit index value table above shows that the index value for each measurement of the model is good, so it can be said that the research model used in this study is good and meets the goodness of fit because it has an index value in accordance with the expected criteria.

Table 2. Weight Regression for the dependent variable on the SEM independent variable

|                | Estimate | S.E   | C.R    | P     | Label  |
|----------------|----------|-------|--------|-------|--------|
| PB <b>←</b> LD | 0.463    | 0.114 | 4.075  | ***   | Par_16 |
| KR ←PK         | -0.051   | 0.099 | -0.521 | 0.602 | Par_20 |
| KR ←PB         | 1.009    | 0.342 | 2.946  | 0.003 | Par_22 |
| KR <b>←</b> LD | 0.496    | 0.202 | 2.452  | 0.014 | Par_23 |
| IB ←PB         | 1.768    | 0.598 | 2.958  | 0.003 | Par_17 |
| IB <b>←</b> LD | 0.779    | 0.288 | 2.705  | 0.007 | Par_18 |
| IB <b>←</b> PK | -0.248   | 0.120 | -2.072 | 0.038 | Par_19 |
| IB <b>←</b> KR | -0.624   | 0.296 | -2.113 | 0.035 | Par_21 |
|                |          |       |        |       |        |

Source: Primary data processed by AMOS 24, 2020.

The table above shows the different levels of influence on each relationship. These different influences are explained in the explanation of the test below: Digital literacy has an influence on online business learning. CR on the influence of literacy digital to online business learning for 4,075 (CR<1.96) with significance <0.05 is 0,000. This indicates that digital literacy (LD) has a positive and significant effect on learning online business (PB). So it can be concluded that hypothesis 1 is accepted.

Entrepreneurship education has an influence on creativity with the value CR to the influence of entrepreneurship education for the creativity of -0,521 (CR<1.96) with significance >0.05 is 0,602. This shows that enterpreneurship education (PK) does not have a positive effect and significant against creativity (KR). So it can be concluded that hypothesis 2 is rejected.

Online business learning has an influence on creativity. CR on the influence of online business learning to the study of creativity of 2.946 (CR>1.96) with significance <0.05 is 0,003. This shows that the learning of online business (PB) has a positive effect and significant to Creativity (KR). So it can be concluded that hypothesis 3 is accepted.

Digital literacy has an influence on creativity. The CR value on the effect of digital literacy on creativity is -2.452 (CR>1.96) with a significance >0.05, namely 0.014. This shows that digital literacy (LD) has a negative and significant effect on creativity (KR). So it can be concluded that hypothesis 4 is accepted.

Online business learning has an influence on online entrepreneurship intentions. CR on online business learning effect to the intention of online entrepreneurship for 2,958 (CR>1.96) with significance <0.05 is 0,003. This shows the online business Learning (PB) has a positive effect and significant on online entrepreneurship intentions (IB). So it can be concluded that hypothesis 5 is accepted.

Digital literacy has an influence on entrepreneurial intentions online. CR on digital literacy effect to the intention of online entrepreneurship for 2,705 (CR<1.96) with significance <0.05 is 0,007. This indicates that digital literacy (LD) has the positive effect of and significant on online entrepreneurship intentions (IB). So it can be concluded that hypothesis 6 is accepted.

Entrepreneurship education influence on online entrepreneurship intentions with value CR on the influence of entrepreneurship education on entrepreneurship intentions at -2,072 (CR<1.96) with significance < 0.05 is 0.038. This shows that entrepreneurship education (PK) has a negative and significant effect on online entrepreneurship intentions (IB). So it can be concluded that hypothesis 7 is accepted.

Creativity has an influence on on online entrepreneurship intentions. Value CR on effect creativity to the online entrepreneurial intention at -2.113 (<1.96) with significance >0.05 is 0.035. This shows that creativity (KR) has a negative and significant effect on online entrepreneurial

intentions (IB). So it can be concluded that hypothesis 8 is accepted.

Testing the Effect of Mediation (Intervening) from the results of the sobel test calculation, the z value is 5.5447, because the z value obtained is 5.5447> 1.96 with a significance level of 5%, it proves that online business learning is able to mediate the relationship between the of influence digital literacy online entrepreneurship intention.

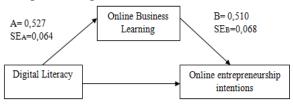
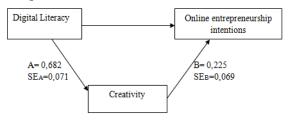


Figure 2. The sobel test calculation

From the calculation of the sobel test above, the z value is 5.5447, because the z value obtained is 5.5447>1.96 with a significance level of 5%, it proves that online business learning is able to mediate the relationship between the influence of digital literacy on online entrepreneurial intentions.



**Figure 3.** The sobel test calculation

From the calculation of the sobel test above, the z value is 3.0877, because the z value obtained is 3.0877>1.96 with a significance level of 5%, it proves that creativity is able to mediate the relationship between the influence of digital literacy on online entrepreneurial intentions.

In the intervening variable research model, there is a requirement that the independent variable on the dependent is also signaled to be significant. Because there are variables that are not significant, it means that creativity is not able to mediate the relationship between the influence of entrepreneurship education on online entrepreneurial intentions.

## **CONCLUSION AND SUGGESTIONS**

#### Conclusion

The results showed that digital literacy and online business learning have a positive and significant effect on online entrepreneurship intentions. This means that higher digital literacy and better online business learning will increase online entrepreneurial intentions, or otherwise. Entrepreneurial education and creativity have a negative and significant effect on online entrepreneurial intentions. This means that the entrepreneurial education creativity will increase the intention of online entrepreneurship, or vice versa. Meanwhile, entrepreneurship education has no effect on creativity. This means that the worse entrepreneurship education is, the creativity will increase or vice versa. Online business learning variables and creativity mediate digital literacy towards online entrepreneurial intentions. This means the increasing influence of digital literacy, while the variable creativity does not mediate entrepreneurship education on online entrepreneurial intentions. Based on the research results, Entrepreneurship Education has influence on creativity.

# Implications of the Theory

Based on the analysis of digital literacy data and online business learning, it turns out that it affects the intention of online entrepreneurship. These findings have supported the results of previous research by Hasanah and Setiaji (2019) that digital literacy on entrepreneurial intentions has a positive effect. Likewise with the results of Stoke's (2008) study which states that digital literacy is the knowledge and skills to utilize a variety of digital resources to support their activities as learners. Moreover, Hamalik (2006: 239) who says that a composed combination includes human elements, material facilities, equipment and procedures that influence each other's learning objectives. Meanwhile, purpose of online business learning itself is expected to be able to print online business people in the future. Thus the results of this study strengthen the theory.

The results of this study support the previous research of et.al. (2016) which shows that

there is a positive and significant influence between online business learning on students' interest in online entrepreneurship. Likewise, Sari and Wibawa's research (2017) concluded that through the use of E-commerce it has an effect on making it easier for the sales process to increase sales in schools.

The results of this study indicate that entrepreneurship education has a negative and significant effect. This result is reinforced by research of Fayolle & Gailly (2015) which found that entrepreneurship education has a negative effect on entrepreneurial intentions.

Research that also shows a negative and significant influence between creativity and online entrepreneurial intentions. This result contradicts to Hamidi's research (2008) which shows that high scores on tests of creativity and entrepreneurial experience have a positive effect on entrepreneurial intentions.

# **Managerial Implications**

Based on data analysis, the findings in this study add to the understanding of the relationship between digital literacy, online business learning, entrepreneurship education and creativity on online entrepreneurial intentions. The results of this study provide input for leaders/ principals or teachers in making policies and carrying out activities in improving digital literacy, online business learning, entrepreneurship education and student creativity consideration for increasing online entrepreneurial intentions of students majoring in Online Business and Marketing. Overall, the managerial implication of this research is that the school must focus on developing digital literacy and online business learning which will foster students' intention to do online entrepreneurship with business learning in e-commerce activities. These two elements have been proven in this study to be the most important or powerful for schools in fostering entrepreneurial intentions in students.

#### Further research recommendations

Based on data analysis and the limitations of this study, the authors propose a number of areas in which advanced research can be formulated as follows: to be able to draw

general conclusions from online entrepreneurship intentions, future research must examine other factors that are not only at the level of digital business literacy, online learning, entrepreneurship creativity and education. However, it could be from the point of view of other factors that are strong in influencing the intention of online entrepreneurship. In addition, to minimize the potential for bias from the analyzed data, future studies should assess the reliability of the study. Thus, online data collection requires online group briefing through chat-based on social media so that it does hot cause errors.

Personality is at high criterion, with frequency 95 and percentage of 56.55%. Adversity intelligence is at a high criterion, with frequency 104 and percentage of 61.90%. Creativity is at a high criterion, with frequency 98 and percentage of 58.33%. Student involvement is at high criteria, with frequency 92 and percentage of 56.55%. Entrepreneurial interest is at a high criterion, with frequency 110 and percentage of 65.48%.

#### **REFERENCES**

Astuti, N.H.W., & Setiyani, R. 2018. "Pengaruh Individul Entrepreneurial Orientation, Pendidikan Kewirausahaan, Self Efficacy, dan Kecerdasan Emosional Terhadap Niat Berwirausaha". *Economic Education Analysis Journal*, EEAJ (1) (2018).p-ISSN 2252-6544, e-ISSN 2502-356X.

Badaruddin, M.N.B.A,. Arokiasamy, L,. Nordin, N.M,. Yusof, Hamidah. & Zakaria, T. 2012. "Cyber-Entrepreneurial Intention Among Business Undergraduates in Instituions Of Higher Learning In Malaysia". ISBN: 978-967-5705-076.

Bayrakdaroglu, F. & Bayrakdaroglu, A. 2017. "A Comparative Analysis Regarding The Effects of Financial Literacy and Digital Literacy on Internet Entrepreneurship Intention". *Journal of Entrepreneurship and Development*. Volume:12 Number:2, p. 27-38.

Fadhilah, S., Wahyuni, S. & Nugroho, J.A. 2016.

"Pembelajaran Pemasaran Online, Self Efficacy
dan Minta Berwirausaha Online Kelas XI
Pemasaran SMK Negeri Surakarta". Jurnal
Bisnis dan Ekonomi, Vol. 2 No. 2 ISSN 2579728x.

Fayolle, A., & Gailly, B. 2015. "The Impact of Entrepreneurship Education on Entrepreneurial

- Attitudes and Intention: Hysteresis and Persistensnee. Journal of Small Business Management, Vol. 53 (1), pp: 75-93.
- Ferdinand, A. 2014. Structural Equation Modeling Dalam Penelitian Manajemen: Aplikasi Model Model Rumit Dalam Penelitian Untuk Skripsi, Tesis dan Disertasi Doktor. Semarang: Undip Press.
- Hamalik, O. 2006. Proses Belajar Mengajar. Bandung: Bumi Aksara.
- Hamidi, D.Y., Wennberg, K, & Berglund, H. 2008. "Creativity in entrepreneurship Education". Journal of small business and intreprise development Vol. 15 No. 2, 2008 pp. 304 320
- Hasanah, U.U., & Setiaji, K. 2019. "Pengaruh Literasi Digital, EfikasiDiri, Lingkungan Terhadap Intensi Berwirausaha Mahasiswa Dalam *E-Business"*. SINTA, 5 EEAJ 8 (3) (2019) 1198-1215
- Hejazinia, R. 2015. "The Impact of IT-based Entrepreneurship Education on Entrepreneurial Intention". *International Journal of Management, Accounting and Economics,* Vol. 2, No. 3, March, 2015. ISSN 2383-2126.
- Hikmah, S.T., & Margunani. 2017. "Pendidikan Kewirausahaan, Kecerdasan Adversitas, dan Lingkungan Keluarga sebagai Prediktor Minat Berwirausaha Siswa SMK TAM TAMA Karanganyar Kebumen". *Economic Education Analysis Journal*, EEAJ (1) (2017). p-ISSN 2252-6544, e-ISSN 2502-356X.
- Kurniawan, I.S. 2018. "Analisis Pengaruh Penggunaan Instagram, Pengalaman Praktik Kewirausahaan, dan Hasil Belajar Kewirausahaan Terhadap Minat Berwirausaha Online". Jurnal Akuntansi & Manajemen Akmenika, Vol. 15 No 2 Tahun 2018.
- Kusmintarti, A., Asdani., & Riwajanti., N.I. 2017. "The Relationship Between Creativity, Entrepreneurial Attitude an Entrepreneurial Intention (Case Study on The Students of State Polytectnic Malang). Int. J. Trade and global Market, Vol. 10. No. 1, 2017.
- Kusuma, M.W.A. & Warmika, I.G.K. 2015. "Analisis Faktor Faktor Yang Mempengaruhi Intensi Berwirausaha Pada Mahasiswa S1 FEB UNUD". *E-Jurnal Manajemen Unud*, Vol. 5, No.1, 2016: 678-705 ISSN: 2302-8912.
- Leonadi, S. 2017. "Pengaruh Motivasi dan Kreativitas Terhadap Minat Mahasiswa dalam Berwirausaha". *Tesis*. Semarang: Unika Soegijpranata Semarang.
- Lutfiadi, R., & Rahmanto, M.I. 2011. "Analisis Peran Pendidikan Kewirausahaan, Kepribadiaan, Lingkungan terhadap Minat Siswa SMK Untuk Berwirausaha di Kota Bekasi. Jurnal Agribisnis

- dan Pengembangan Wilayah". Vol. 3 (1), pp: 56-65
- Merakati, I., Rusdarti., & Wahyono. 2017. "Pengaruh Orientasi Pasar, Inovasi, Orientansi Kewirausahaan melalui Keunggulan Bersaing Terhadap Kinerja Pemasaran". *Journal of Economic Education*, JEE 6 (2) (2017) 114 123.
- Nurikasari, F. 2016. Pengaruh Pendidikan Kewirausahaan, Kreativitas, dan Motivasi Berwirausaha terhadap Minat Berwirausaha pada Mahasiswa. Artikel Ilmiah, Malang: Universitas Kanjuruhan Malang.
- Pratana, N.K., Margunani. 2019. "Pengaruh Sikap Berwirausaha, Norma Subjektif dan Pendidikan Kewirausahaan Terhadap Intensi Berwirausaha". *Economic Education Analysis Journal*, EEAJ 8 (2) (2019) 533-550p-ISSN 2252-6544 e-ISSN 2502-356X.
- Rifai, I.A., dan Sucihatiningsih D.W.P. 2016.

  "Pengaruh Pendidikan Kewirausahaan dan Pelaksanaan Kegiatan *Business Center* terhadap Minat Berwirausaha Siswa Kelas XI Jurusan Pemasaran SMK Negeri 2 Semarang Tahun Ajaran 2015/2016". *Journal of Economic Education* JEE 5 (1) (2016).
- Sari, D.C.K., & Wibawa, S.C. 2017. "Pengaruh Penggunaan E-Commerce Dalam Proses Penjualan Terhadap Minat Berwirausaha Siswa Smk Negeri Ngraho". Vol. 2 No. 1, 2017: 16-23
- Stokes, W. 2008. Literacy. In N. J. Salkind & K. Rasmussen (Eds.), Encyclopedia of Educational Psychology (Vol. 2, pp. 608–616). CHAP, Thousand Oaks, CA: SAGE Publications.
- Suharti, L & Sirine, H. 2011. Faktor-faktor yang Berpengaruh Terhadap Niat Kewirausahaan (entrepreneurial intention). Jurnal manajemen dan kewirausahaan, Vol. 13 No. 2 September 2011:124-134.
- Tjahjono, H.K., & Fauziyah, T.M. 2013. "Intensi Mahasiswa Yogyakarta Berwirausaha Berbasis Teknologi Informasi (TI"). *Jurnal Siasat Bisnis*, Vol. 17 No. 1, Januari 2013.
- Widyaningrum & Harnanik. 2016. "Faktor-Faktor yang mempengaruhi Kreativitas Belajar Siswa Kelas XII Pemasaran Pada Pembelajaran Produktif Pemasaran di SMK Negeri 1 Purbalingga". Economic Education Analysis Journal, 5 (3), 729.
- Wijaya, T. 2007. "Hubungan Adversity Intelligence dengan Intensi Berwirausaha". Dalam Jurnal Manajemen dan Kewirausahaan". STTI Respati, Volume 9, No.9, September 2007 Hal 117-127.
- Zampetakis, L.A. *e.t.l.* 2011. Creativity and Entrepreneurial Intention in Young People, Entrepreneurship and inovation Vol 12, No. 3, 2011. Pp189-199.