Information Technology Training in Building an Entrepreneurial Spirit

[1*]Muhammad Ferdiansyah, [2]Anisa Martiah, [3]Sevi Andriasari

[1]Informatics Engineering, STMIK Tunas Bangsa
[2,3]Information Management, AMIK Lampung

Corresponding Author: ferdiverd@gmail.com

A R T I C L E I N F O	A B S T R A C T
  	Entrepreneurship is a process of creative and innovative activities to change commodity goods or services by taking advantage of opportunities and existing resources to generate added value in winning the competition. Creativity, innovation, and added value become keywords related to Information Technology to build Entrepreneurship. The ability of the community to use information technology, especially foreign language students and the general public, is still in the passive user order. These are problems that must be resolved because entrepreneurship today is multiplying thanks to information technology. From the aspect of understanding, partners also need to be equipped with skills in using information technology based on E-Commerce to develop entrepreneurial principles. Universities must participate in providing solutions to this problem through Information Technology training activities in Building Souls Entrepreneurship. This can be seen from the average gain score of participants' understanding of training activities of 0.63 which is in the moderate category. Taking into account the results of this training activity, This activity should be followed up with training or mentoring sustainability so that participants, in particular, and society, in general, will be skilled in creating and utilizing e-commerce-based business profiles to sharpen opportunities for entrepreneurial spirit development.

1. INTRODUCTION

Entrepreneurship is a process of creative and innovative activities to change commodity goods or services by taking advantage of existing opportunities and resources to generate added value in winning the competition. Creativity, innovation, and added value are keywords related to information technology to build entrepreneurship. This means that to compete with competitors in this technological age, good understanding and skills are needed in using information technology to hone creativity, stimulate innovation and provide added value to trade not only commodity goods/services but also personal and unit-added value—systems as an entrepreneur.

People's ability to use information technology for business, especially foreign language students and the general public, is still in the passive user category. Even though information technology based on online communication systems (using the internet) is neither foreign nor a luxury item for most people. It was reported by Bohang (2018) that more than 50 percent, or around 143 million people in Indonesia, have connected to the internet network throughout 2017, with the majority of users, as much as 72.41 percent, still from urban communities.

Entrepreneurship is a problem that must be resolved because entrepreneurship today is multiplying thanks to information technology. Information technology can digitally process business transactions to create relationships between sellers and buyers. This transaction certainly has many advantages compared to conventional trading processes where sellers and buyers transact directly, which results in narrow

money circulation, access to the variety of goods and services offered is limited, it takes a relatively long time to find goods/services with the appropriate quality. with the consumer's budget. It requires space that can be uncomfortable or less decorative to attract consumer interest. In conventional trading, products must be available in real time, even though consumers can buy unlimited quantities of any product online, mainly since it is supported by the quality of advanced and mushrooming expeditions and almost touching all regions in Indonesia.

Information technology offers various facilities to increase the added value of goods/services, and the business profile is run and starting from social media such as Facebook ads, which can be used to promote online trade in Indonesia, to developing blogs or websites that contain business profiles. Communities need to be equipped not only from an understanding aspect but also need to be equipped with skills in making and using e-commerce-based information technology to develop entrepreneurial principles. Universities must participate in providing solutions to this problem. Therefore it is necessary to carry out Information Technology training activities in Building Entrepreneurship Spirit.

2. METHOD

The community needs a good understanding of the use of information technology to develop an entrepreneurial spirit. The utilization of information technology is expected to be designed and implemented by creating a business environment to optimize added value to business commodities and business profiles owned so that they can survive in

the face of increasingly advanced competitors thanks to technological sophistication. Various information technologies that can accommodate the development of these business potentials include developing blogs, websites, and e-commerce. Communities need to be equipped with understanding and skills about the what, why, and how of information technology in entrepreneurship. Changes in community knowledge and skills due to training activities are expected to increase skills and creativity in creating a business environment that can develop creativity and productivity in producing innovative commodities. The activity matrix in problem-solving is formulated in Table 1.

Tabel 1. Activity Matriks

Present Condition	The Treatment Given	The Expected Conditions
➢ Lack of public knowledge about information technology in entrepreneurship. ➢ Lack of community skills in designing the use of e-commerce-based information technology.	➢ Information technology training in entrepreneurship and its implementation in optimizing the added value of the business profile.	➢ Increasing public knowledge about information technology in entrepreneurship. ➢ Improving community skills in designing the use of e-commerce-based information technology.

Competition in the business sector has become increasingly diverse since the development of information technology. The tendency of people to switch from conventional trading modes to online-based trading demands good mastery not only in understanding but also in skills in utilizing and making creative innovations in optimizing the added value of commodities and business profiles. This paradigm is expected to train people to solve problem-solving that is solutive and capable of dealing with changes in the business world. Universities, in this case, AMIK Lampung, have a moral responsibility towards this problem by participating in efforts to improve people's skills in using information technology for entrepreneurship. Thus, it is hoped that this activity can overcome these problems and minimize the difficulties encountered by the community in using information technology.

The method of community service activities in the form of information technology training in developing an entrepreneurial spirit is carried out with the following steps.
a. Presentation of material to convey the basic concepts of information technology in entrepreneurship.
b. Discussions were held to exchange ideas about the trainees' experiences in implementing information technology compared to the concepts given by the presenting team.
c. Analysis of the design of e-commerce-based business profiles facilitated by

the team implementing community service activities.

The evaluation carried out in this activity includes initial evaluation, final evaluation, and impact evaluation. The initial evaluation was carried out before the training activities took place, intending to know how much the community's initial knowledge was related to the training material. The final evaluation was conducted to determine the participants' uptake of the training material. Then an impact evaluation is carried out to determine the significance of the community service activities. Evaluation carried out in the form of :

a. Initial evaluation through a pretest to determine the extent of people's knowledge and understanding of information technology in entrepreneurship.
b. Final evaluation through the posttest, containing the same questions as the pretest, to determine the participants' final understanding after participating in the training activities. In addition, a questionnaire was also given to measure views on the impact of training activities.

The normalized gain score **(n-gain)** is calculated using the following formula to determine the increase in understanding of the training participants.

$$n_{gain} = \frac{N_{post} - N_{pre}}{100 - N_{pre}}$$

Based on this *n-gain* score, the increase in the trainee's understanding of hands-on activities in high grade mathematics learning is classified into the following classification (Hake, 1999).

n-gain < 0,3   (Low)
0,3 < *n-gain* < 0,7   (Medium)
n-gain > 0,7   (High)

3. RESULTS AND DISCUSSION

This training activity was held in the STBA Yunisla Meeting Hall on Tuesday, January 14, 2020. It was attended by 50 participants of STBA Yunisla students and the general public in Bandar Lampung. Participants were very enthusiastic about participating in this training activity. The participants' enthusiasm shows this for participating in training activities. The enthusiasm of the training participants positively impacted the success of this training activity. The success of this training activity is described as follows.

The initial evaluation of this training activity was carried out at the beginning of the activity before the participants received different material explanations from the two presenters who were members of the team implementing this community service activity. The initial evaluation of this activity was carried out by giving pretest questions to the training participants. Giving pretest questions is intended to measure and determine the initial understanding of training participants regarding information technology in entrepreneurship.

Table 2. Recapitulation of Pretest Results

Lowest	Highest	Average	Standard Deviation
25	66,67	50,56	12,87

The data in Table 2 shows that the participants' initial understanding of information technology in entrepreneurship is still relatively low, with an average of 50.56 out of an ideal score of 100 with a standard deviation of 12.78.

The final evaluation of this training activity was carried out after the participants received an explanation of the material from the lecturers of the implementing team. The final evaluation of this activity is intended to measure the participants' understanding of e-commerce-based information technology training in entrepreneurship after participating in this training activity. The final evaluation of this activity is carried out by giving posttest questions about the same as the pretest questions that were given before.

Table 3. Recapitulation of Postest Results

Lowest	Highest	Average	Standard Deviation
53,33	91,67	82,22	9,89

The posttest results showed that the participants' understanding of e-commerce-based information technology design in entrepreneurship after participating in this training activity was quite good, with an average of 82.22 out of an ideal score of 100 with a standard deviation of 9.89. The data shows that this training activity positively impacts community understanding.

Then based on the results of the pretest and posttest of each participant, the amount of increase (n-gain) in understanding is calculated. Based on the analysis results, the following is a recapitulation of the n-gain results of the understanding and skills of the trainees.

Table 4. Recapitulation of Improvement Results

n-gain Lowest	*n-gain* Highest	Average	Standard Deviation
0,33	0,86	0,64	0,16

Based on this n-gain analysis, increasing public understanding of e-commerce-based information technology design in entrepreneurship is moderate (the average n-gain is 0.64 <0.7). Based on this classification, this training activity effectively increases public understanding of e-commerce-based information technology design in entrepreneurship.

At the beginning of the training, participants obtained relatively low pretest scores. This pretest value shows that people's understanding of e-commerce-based information technology in entrepreneurship still needs improvement. Based on the results of the questionnaire, information was obtained that 13.33% of teachers had teaching experience of more than 10 years, while the remaining 86.67% had experience of less than 10 years. This data shows high awareness of the community to follow and be included in training activities to increase their abilities.

At the end of the training, participants obtained posttest scores with a significant increase in average compared to the average pretest scores. The success of this training activity is indicated by an increase in the posttest score from the pretest value that was measured at the beginning of the training activity. After attending the training, the participants' n-gain understanding was included in the medium category. Analysis of e-commerce-based information technology design in entrepreneurship was also carried out well, marked by the need for more clarity in the design. Thus, this training has positively impacted increasing people's understanding and skills about e-commerce-based information technology in entrepreneurship.

The increased understanding of e-commerce-based information technology in entrepreneurship is supported by the seriousness and activeness of each participant participating in the entire series of training activities. The high enthusiasm of the participants during the training activities is also an indicator of the success of this training activity. This training activity was divided into two sessions of presentation of different material by two lecturers who were members of the implementing team and ended with an analysis of e-commerce-based information technology design in entrepreneurship guided by the committee and the PKM team of lecturers.

Based on the results of the questionnaire given at the end of the training activity, it is known that the training participants felt that this activity was enjoyable, helpful, and memorable because they gained experience and motivation to create business profiles using e-commerce-based information technology in entrepreneurship. The examples displayed regarding e-commerce-based information technology in entrepreneurship became a source of inspiration and added to the participants' insights. Participants also expressed their hope to hold similar training activities every year. The training activities which were packaged impressively and interestingly added a lot of new knowledge and experience gained.

4. CONCLUSION

To give birth to successful young entrepreneurs, universities need seriousness in carrying out entrepreneurial campus missions. Based on the results of the activities, these training activities effectively increased people's understanding and skills regarding the design of e-commerce-based information technology in entrepreneurship. This is based on an increase in understanding which is

classified as moderate. Based on the results of this activity, it is necessary to follow up with ongoing training or mentoring so that participants, in particular, and the community, in general, will be skilled in creating and utilizing e-commerce-based business profiles to sharpen opportunities for developing an Entrepreneurship spirit.

BIBLIOGRAPHY

Mahpuz, M., Bahtiar, H., Fathurahman, F., & Nur, A. M. (2021). Pelatihan pembinaan UMKM berbasis Teknologi Informasi untuk meningkatkan SDM pelaku UMKM. *ABSYARA: Jurnal Pengabdian Pada Masyarakat*, *2*(2), 212-219.

Mukrodi, M., Wahyudi, W., Sugiarti, E., Wartono, T., & Martono, M. (2021). Membangun Jiwa Usaha Melalui Pelatihan Kewirausahaan. *Jurnal PKM Manajemen Bisnis*, *1*(1), 11-18.

Gunawan, A. (2020). Pelatihan Digital Entrepreneurship Mewujudkan Generasi Milenial Berjiwa Wirausaha Di Sekolah SMA Desa Karangasih Cikarang. *Jurnal Abdimas Kartika Wijayakusuma*, *1*(1), 38-45.

Harjadi, D., & Komarudin, M. N. (2021). Pelatihan Penumbuhan Jiwa Entrepreneurship dalam Pembangunan Desa Cigandamekar Kabupaten Kuningan. *Empowerment: Jurnal Pengabdian Masyarakat*, *4*(01), 85-90.

Gunawan, A., & Hazwardy, D. (2020). Pelatihan Digital Entrepreneurship untuk Mewujudkan Generasi Milenial Berjiwa Wirausaha. *Abdimas Dewantara*, *3*(1), 81-88.

Trang, I. (2017). IbM Tentang Pelatihan Dan Pengembangan Menjadi Entrepreneur Berbasis Teknologi Informasi Pada Mitra Usaha Laundry Di Desa Pineleng I. *JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi).*, *4*(2).

Sedyastuti, K. (2018). Analisis pemberdayaan UMKM dan peningkatan daya saing dalam kancah pasar global. *INOBIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, *2*(1), 117-127.

Ramaditya, M., Effendi, S., Faruqi, F., & Darmawan, A. (2020). Pelatihan Kewirausahaan Kreatif Berbasis Manajemen Pemasaran Digital bagi UMKM Di Wilayah Rawamangun. *Journal of Sustainable Community Development (JSCD)*, *2*(1), 48-54.

Isabella, A. A., & Sanjaya, P. N. (2021). Pelatihan Kewirausahaan 'Pengelolaan Keuangan Bisnis Online Shop Era Digital.'. *Jurnal Pengabdian Kepada Masyarakat*, *2*(1), 15-21.

Wijoyo, H., Haudi, H., Ariyanto, A., Sunarsi, D., & Akbar, M. F. (2020).

Pelatihan Pembuatan Konten Digital Marketing Dalam Meningkatkan Kompetensi Mahasiswa (Pengabdian Kepada Masyarakat Kerjasama Antar Kampus). *Ikra-Ith Abdimas*, *3*(3), 169-175.

Rimayasi, R., Sa'ban, L. A., & Wijaya, A. A. M. (2022). Women empowerment through functional literature education based on entrepreneurship. *Community Empowerment*, *7*(8), 1277-1285.

Aryawan, I. W. (2019). Strategi kepemimpinan kepala sekolah di era revolusi industri 4.0 berlandaskan pada konsep panca upaya sandhi. *Jurnal Ilmiah Ilmu Sosial*, *5*(2), 132-141.

Syaiful, S. (2016). Strategi Pengembangan Usaha Mikro, Kecil Dan Menengah (UMKM) Melalui Pemanfaatan Teknologi Informasi Dan Komunikasi (TIK) Sebagai Upaya Meningkatkan Daya Saing. *AKMEN Jurnal ilmiah*, *13*(3).

Handani, S. W., Saputra, D. I. S., & Hermawann, H. (2019). Pelatihan Kewirausahaan Pada Mahasiswa Stmik Amikom Purwokerto Sebagai Upaya Membangun Usaha Rintisan (Startup). *Jurnal Pengabdian Mitra Masyarakat (JPMM) Vol*, *1*(1).

Mamat, M., Trisnawati, I., Farida, Y., & Antini, A. (2022). PEMBERDAYAAN MASYARAKAT KAMPUS DALAM BIDANG ENTERPRENEURSHIP MELALUI PROGRAM PENGEMBANGAN KEWIRAUSAHAAN BERBASIS TEKNOLOGI. *SELAPARANG: Jurnal Pengabdian Masyarakat Berkemajuan*, *6*(4), 2199-2205.

Nafiudin, N., Huddin, M. N., & Wahyudin, W. (2023). PELATIHAN KEWIRAUSAHAAN DI PONDOK PESANTREN KECAMATAN CARENANG KABUPATEN SERANG. *Indonesian Collaboration Journal of Community Services*, *3*(1), 42-51.