

ONLINE SEMINAR BEESWAX — WRAP MAKING

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Abstrak

Pandemi covid-19 mengakibatkan terbatasnya ruang gerak bagi pelaksanaan pengabdian masyarakat oleh para dosen. Universitas Trilogi menawarkan fasilitas pengabdian kepada masyarakat yang diintegrasikan dengan acara seminar daring yang dikelola oleh mahasiswa KKN Materi seminar adalah beeswax-wrap. Tujuannya menginspirasi pebisnis pada saat pandemi, yaitu menghasilkan produk penunjang penyimpanan makanan dan sosialisasi penghentian penggunaan single use plastic. Pelatihan dilaksanakan dalam bentuk ceramah, demo, dan tanya jawab. Seminar berbasis web menggunakan aplikasi Zoom, koordinasi melalui WhatsApp, dan pengelolaan pendaftaran melalui Google Formulir. Peserta yang mendaftar sebanyak 422, sedangkan yang hadir 348 orang. Peserta yang hadir tersebut terdiri atas 64% perempuan dan 36% laki-laki; 90% berdomisili di pulau Jawa dan sisanya di luar pulau Jawa. Jenjang pendidikan peserta 74% masih mahasiswa, 14% lulusan S-1, dan 3% lulusan S-3. Dalam rangka mengetahui respons peserta, dilaksanakan survei lewat Google Formulir. Hasilnya 58% merespons seluruh kegiatan secara positif dan 36% kecewa.. Respons negatif itu disebabkan oleh buruknya koordinasi panitia, waktu yang buruknya koordinasi panitia, waktu yang terlalu pendek, kendala sinyal internet, dan kualitas suara yang tidak memuaskan. Secara umum peserta memahami pengembangan produk kreatif yang berkaitan dengan isu global pandemik dan darurat sampah.

Kata kunci : seminar daring, zero waste, beeswax- wrap, abdimas era pandemi Covid19

Abstract

The Covid-19 pandemic resulted in minimal wiggle space for lecturers to implement community service. Trilogi University provides community service services combined with online workshops organized by KKN students. The seminar materials are beeswax wraps. During pandemics, the aim is to encourage business people, namely to create food storage support goods and socialize the cessation of the use of plastic for single use. The instruction is conducted in the form of seminars, demonstrations, and q & a. Web-based seminars use the Zoom app, organize via WhatsApp, and administer registration via Google Forms. Participants who signed up were 422, 348 of whom attended. Participants were 64 % female and 36 % male; 90 % live on the island of Java and the rest outside the island of Java. The educational standard of participants is now 74 % of candidates, 14 % of respondents of undergraduate, and 3 percent of graduates of graduate. A survey is conducted via Google Forms. To find out the answers of the participant a survey is administered through Google Forms. As a result, 58% reacted favourably to all events, and 36% were dissatisfied. The negative response was due to weak management of the committee, poor coordination of the committee, very little time, internet signal limitations, and inadequate sound quality. In general, participants recognize the creation of innovative goods relevant to global pandemics and waste emergencies.

Keywords : online seminar, zero waste, beeswax- wrap, Community service amid the Covid- 9

INTRODUCTION

Since 2017, Trilogi University has carried out KKN events which are integrated with community service in partner villages. In 2020 lecturers are led to become resource persons or coaches of on-line seminar events coordinated by students.

This is in line with the LLDIKTI Region 3 Circular of 17 March 2020 which asks universities to conduct tri-dharma on-line[1].

Following up on this direction, Trilogi University facilitates community service activities for lecturers and students based on web conferences. In particular, if the previous year needs analysis was carried out from community service partners. In 2020 the theme of the activity has been determined from the start. The determination of focus is based on current issues in the community locally and nationally to attract audiences to register as participants. The subject of the seminar is business in the period of the covid-19 pandemic.

Based on the profile of the target participants in the student and student age group, the topic of the content offered is something familiar to them. The focus of this on-line training is a *zero-waste* lifestyle, which relates to the 3R principle (reduce, reuse, and recycle) and market opportunities during the covid-19 pandemic.

There are two reasons why the *zero-waste* lifestyle is relevant to the lives of the participants. First, because they are autonomous, second, they have a world of their own so that they are already responsible for preserving their environment.

A *zero-waste* lifestyle is considered relevant to local regulations regarding the prohibition of single-use plastics. The province government of DKI Jakarta has been enforcing a ban on the use of single-use plastics since 1 July 2020. The same

applies to other regions or cities in Java that have a plastic waste emergency. Areas that have imposed regulations related to plastic waste are:

1. DKI Jakarta enacted Governor Regulation No. 142 of 2019 on the use of environmentally friendly shopping bags[2],
2. Regency of Bandung by Local Regulation No. 21 concerning Garbage Processing of Juncto No. 15 of 2012, in addition to the Bandung Regent Instruction No. 4 of 2018[3],
3. Bandung via Bandung Mayor Regulation No 37 of 2019 will enable a gradual reduction beginning in 2020.[4].

Food preservation would be a good business opportunity as the Covid-19 pandemic hits. To prevent covid-19 from spreading at an exponential trend human are forced to live in more confined spaces, so their mobility is limited. It also means that there is a reduction in time and flexibility to carry out day-to-day activities related to fulfilling basic needs, like getting something to eat.

Nowadays, humans live in the age of single-use plastic shopping bags, plastic wraps of various sizes, zip locks to cling wraps. Plastic has the advantage of being waterproof, durable, and functional in usage, almost eliminating the functions of different other containers and wrappers that have ever existed in modern civilization.

Single used plastics have a significant potential for waste due to the single-use factor. The worst thing about plastic waste is that it is not biodegradable. As a result, plastic waste will continue to accumulate and pollute the earth. It can even enter the bodies of living things in the form of microplastics. Enactment of regulations leads

to a zero-waste lifestyle give opportunities for the emergence of supporting products that meet today’s needs. *The new-normal life* and the demands of a life that is more aware of environmental safety.

The goal of this online seminar is to deliver a *zero-waste* lifestyle and to inspire support items that comply with the *zero-waste* concept, especially *beeswax-wrap* training.

Beeswax-wrap product is an alternative to *cling wrap* that is more environmentally friendly and can retain food durability[5]. The benefits of supplying content for the manufacture of *beeswax-wrap* can be an informative aspect of eliminating plastic waste, using it for personal needs, and inspiring business amid pandemic.

Beeswax-wrap is a *cling-wrap* substitute product that was first popularized in modern times ten years ago by a *start-up* from the United States. This food packaging tool generally uses cotton cloth coated with beeswax with additional ingredients.

There are three advantages of *beeswax-wrap* that make it a business opportunity in the era of pandemics and zero wasteful lifestyles:

1. Can work as a jar lid or a cling wrap replace-

ment because it has the following characteristics:

- It can be wrinkled because it has stretch characteristics along with cling wrap so that it can wrap, securely cover the different surface shapes.
- It can be bent/folded because the fabric is coated with beeswax to make rigid fabric, using the origami technique of making bags, envelopes, and many more.
- Waterproof at a certain degree due to wax coating.

2. An ideal container for food preservation because beeswax has anti-bacterial properties believed to stop fermentation. The use of other mixing ingredients such as oil for the addition of beeswax mixtures typically brings some benefits. Jojoba has anti-bacterial and anti-fungal properties, or VCO coconut oil has anti-bacterial properties[6].

The feeling of the *beeswax-wrap* surface is tolerable, in particular the stickiness of the beeswax coating with natural oils, which can be decreased by the addition of resin or gondorukem. This additional ingredient is useful to reinforce



Fig. 1. *beeswax-wrap* making using *sprinkle-iron* and *melt-baste-iron* technique.

the mixture of wax and oil in the pore filling of the cloth. In opposition to oils that offer a soft and slippery character, the resins bind to the brittle and rigid properties of the fabric. It makes less oily and stiffer, so it can be securely be folded into the envelopes.

Several things to consider when making *beeswax-wrap* as a seminar-workshop material:

1. The content is already familiar to the audience.

The target seminar participants are 10 % SMA / SMK students, 60 % of students, so the rest is the general public. Materials such as cotton linen, beeswax, and parchment paper are commonly known to learn about batik. The audience already knows Gondorukem or resin as a mixture of batik wax.

2. Easy tools and supplies are available in the average household.

Iron or pan for melting the average wax available in each household. The pot for the double boiler technique consists of two pans of different sizes with the same shape.

The iron used has the requirements for regular iron, not for industrial uses. The iron function is to melt and disperse a coating of beeswax to the fabric.

3. The material is easy to get.

Most materials, such as cotton cloth, beeswax, resin, and blending oils, can be purchased in *marketplaces* with a national sales network.

4. Relatively low material prices.

The price of beeswax in the food-grade level on the *marketplace* ranged from IDR 35.000 to 75.000 per 100 gr. This amount is enough for meters of beeswax-wrap meters. The price range also applies to VCO or Jojoba oil.

5. The steps are simple

So that it is easy for the participant to follow and understand. Figure 1 below shows steps in the process of the *beeswax-wrap*.

Steps of the beeswax-wrap-making are: firstly, wash-dry-trim the edges of the fabric, second melt the beeswax, thirdly scatter the wax over the cotton cloth that covered with hot iron parchment paper. Then dried it in the air.

METHOD

The phases of the implementation of online training shall be carried out in several steps, as illustrated in Figure 2. Below are the five steps of the implementation of the operation:

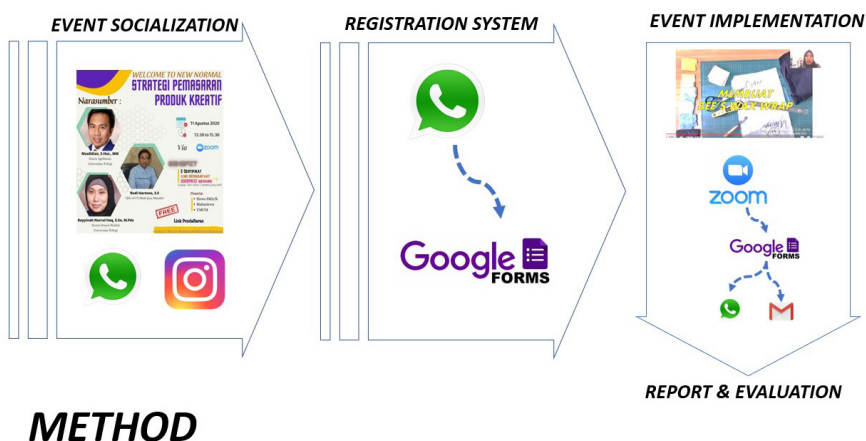


Fig. 2. Seminar implementation flow chart

1. Preparation

The coordination stage between the committee and the technical experts. Subject of coordination are the registration process of the participants, timeframe implementation, the task distribution, and the material to be carried out in the online seminar.

2. Socialization of event

The dissemination of event information via the social media *WhatsApp* and *Instagram*, the type of information in an *e-poster* format, the narrative text on *WhatsApp*, all of which are *Google-enabled*.

3. Participant registration

The media used for participant registration are *WhatsApp* and *Google Forms*. Participant’s data is collected in the form of an excel file (.xls). Then the participants are gathered in a *WhatsApp-group*, for ease of sharing information and spreading the web conference application link. One day before the implementation, the committee distributed the Zoom link to participants on the *WhatsApp-group*.

4. Implementation of the event

The event takes place from 13.30 to 15.00. Started with the opening of the committee chair, followed by materials presented by the speakers, and ended with a question and answer session. One hour after the event began, the committee circulated a link to the google form to fill in the attendance list.

5. Reporting and assessment of events.

The reports submitted by the committee come in the form of the participant registration files, the materials of the Resource Persons, the Recapitulation of the participant sat-

isfaction questionnaire, and the recording of the activities.

RESULT AND DISCUSSION

1. Result

Socialization occurred on 11 August 2020, attended by 80 participants of different regions. The resource person is a Product Design lecturer from Trilogi University that supported by two groups of students who are members of the 2019/2020 academic year of the KKN lecture group.

The event was implemented on Tuesday, 11 August 2020, from 13:30 to 15:00 WIB using the *Zoom* application. Participants registered via *Google Forms* reached 422 people a month earlier, but only on the day of implementation.

The audience profiles described in figure 3 are 64 % female and 36 %, male. Based on the audience’s domicile, the audience based in Greater Jakarta reached 70%, 5 percent in East Java, 8 percent in West Java, and 7 percent in Central

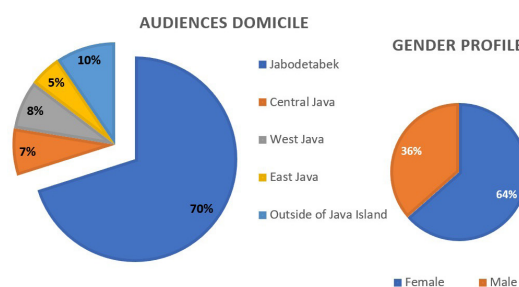


Fig. 3. Audience profile based on gender and domicile.

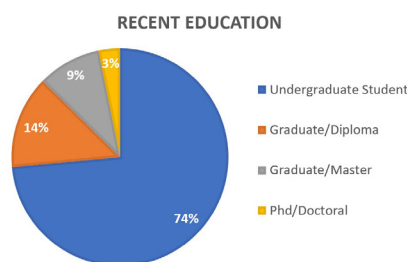


Fig. 4. Audience profile based on recent education.

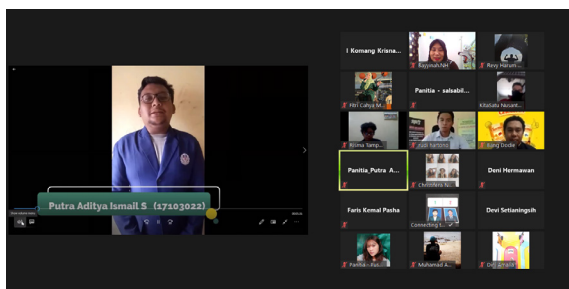


Fig. 5. Opening speech by the head of the committee



Fig. 6. Material presentation session

Java. The audience outside Java Island attains 10%, coming from different regions such as Bali, Lombok, Kalimantan, and Sulawesi.

Figure 4 described the profile of the level of education of the audience shown in, where 74 % are still students, 14 % are undergraduates, and 3 % are doctoral graduates.

The event began with a speech by the head of the committee. Then, followed by the presentation of the materials by the speakers. Presentation of the training material for making *beeswax-wraps* using slides and demo by speakers.

The presentation of the material went smoothly for ± 45 minutes, followed by a question and answer session with the participants via the *zoom chat feature*. Two categories of queries came out from the participants:

1. Show concern for efforts to reduce the use of single-use plastics;
2. Enthusiasm to study the development of creative products in responsive to market needs during the covid-19 Pandemic.

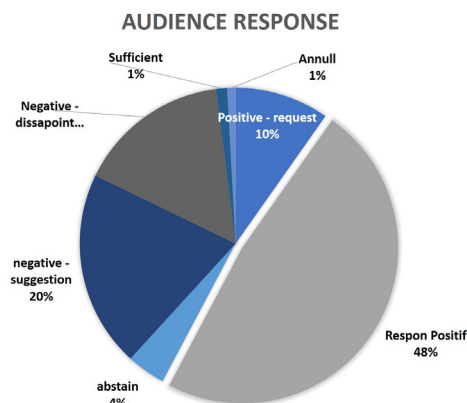


Fig. 7. Audience responses based on questionnaires distributed at the end of the event.

2. Discussion

After completion of the event, the *MC* asked the audience to fill out a questionnaire via *Google Forms*. The results of the questionnaire showed positive responses indicating interest and a feeling of inspiration. These positives reached 48 %, while 10 % of the audience requested similar seminars and asked for presentation materials.

Apart from the positive responses, the negative reached 36% with a disappointed tone. Generally, the audience’s disappointment is related to:

1. Lack of coordination of the Committee;
2. Bad signal to the internet;
3. Due to technical issues *MC’s* and speaker’s quality of voice is inadequate.
4. Unclear attendance filling list system;
5. The time for delivery of the material is too short, the time for question and answer session is limited.

Fig. 7, an overview of the audience response summarized through a questionnaire using *Google Forms*.

CONCLUSION

In general, participants understood the development of creative products related to the global issue of pandemics and waste emergencies.

When community service implementation amid the Covid-19 pandemic was not carried out with community service partners (through the MoU), an online seminar is an alternative solution. But online seminar with random audiences facing several challenges, namely:

a. The technological constraints. Working at home due to the implementation of the “PSBB” has led to differences in the technical conditions of the committee, the resource persons, and the audience.

The different locations have different internet signals, and the conditions of the devices used may vary. As a result of this, the audio-visual quality received will vary. If it is not carefully considered, it may interfere with the smooth running of activities and reduce the satisfaction of the *e-audience*.

b.Challenges in the management of activities related to the scheduling of events, event promotion strategy. Management of the registration system, participants management before the D-Day, D-day time management, post-event service system, communication building after the event ended, with the audience.

c. Challenge to understand the diverse characters of the audience due to the wide range of ages of the audience, the differences in educational backgrounds. That also affects the atmosphere of the audience.

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