

DEVELOPMENT OF LEATHER CALLIGRAPHY CRAFTS THROUGH INNOVATION OF DESIGN AND COLORING TECHNIQUE

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Abstract: This article is the result of community service program to develop micro business of leather calligraphy crafts in Sonorejo Village Sukoharjo District. So far the product of leather calligraphy, made using a single color screen printing technique with a monotonous visual form without variations of decoration. In general, craftsmen tend to be passive in developing new designs because they feel enough to produce calligraphy from the order designs carried by middlemen. Dependence on the middleman, causing the weak bargaining position of craftsmen in determining the price of the product. Meanwhile, craftsmen have production experience as a basis to develop their creativity in creating design innovations that are likely to expand the marketing area. In view of these conditions, the program is implemented to develop creativity and craftsman skills in: 1) create more varied designs of calligraphy, 2) create decorative patterns, 3) apply techniques of color screen printing on leather calligraphy crafts products. This community service program uses a participatory approach with a bottom up method; where the participation of craftsmen during the activity is expected to be able to answer their needs in a participative manner. Its activities are focused on training on the development of shape design, decorative pattern, and application of color screen printing technique. Through this program, there has been an increase in the ability of craftsmen in terms of: 1) creating new and more varied calligraphic designs using coreldraw software. 2) composing calligraphy style, decorative pattern, and background in harmony and artistic, 3) creating product according to design by applying color screen printing technique.

Keywords : crafts, calligraphy, leather

INTRODUCTION

Sonorejo Village Sukoharjo District is known to have a long history of potential resilience of its population resources, in the business of making leather calligraphy crafts which have been handed down from generation to generation. However, in general the existence of the business of making leather calligraphy is still managed traditionally and has not met the requirements of good business management. These conditions can be seen from the following: 1) The design of calligraphy craft produced by craftsmen is still simple, without decoration and color variations. Craftsmen have not been able to create design variations with decorative patterns of various shapes due to the limited ability to make designs. They simply mimic existing products or designs that are booked through the services of graphic designers. 2) Making calligraphy using only

one color screen printing technique, so as to produce one color that tend to monotone and less dynamic.

Although still traditionally managed, the existence of the business of making leather calligraphy in Sonorejo Village has helped the people's economy because on the sidelines of his work as a farmer, they can make leather calligraphy handicrafts for sale. Thus, the impact of this micro-business can reduce the number of unemployed. If the skill of craftsmen is improved and managed professionally then will make business of leather calligraphy handicraft in Sonorejo Village have excellent prospect forward.

To realize these expectations, the authors implement community service involving two micro companies, namely 'Suci Kaligrafi' and 'Ardie Kaligrafi'. Both companies currently produce crafts of leather calligraphy as wall decoration to beautify the house, office, hotel, restaurant, and others. The raw material of leather calligraphy production is not dependent on imported raw materials but uses raw materials that are easily obtained in the surrounding area and from out-of-town areas that are still affordable by land transportation. The main raw material is the parchment leather of a goat or cow and screen printing ink. While the additional raw materials are wooden frames, straps, plastic.

The condition of both business partners, currently has not reached the maximum production scale. The problems include; disbelief in making new designs, the inability to make designs with computers, and the inability to apply multicolored screen printing techniques. Thus, the specific problem of partners that need to be resolved is how to develop the skill and creativity of craftsmen in making design of leather calligraphy craft more varied.

METHODS

Implementation of community service activities using a participative approach where the implementers are the craftsmen themselves. In this approach, participation of craftsmen and stakeholders is required by using "Button Up Method", where planning activities are expected to respond to the needs of participating craftsmen. The implementation of development of calligraphy design and application of multi-color screen printing techniques is done through methods of lecture, discussion, and demonstration. Here are the steps taken as a solution to solve the problems of craftsmen.

Craftsman Problem

- Craftsmen only make the calligraphy products are still simple without decoration and have not been able to make alternative designs and ornaments and develop multi-color screen printing techniques.
- Craftsmen have not been able to make designs with computers. So far in making the design involves the services of external graphic designers.
- Craftsmen have problems in creating new designs, because of the difficulty of drawing design drawings, can only replicate existing designs, do not have confidence that new designs will sell in the market.

Solutions

- Training to develop skills and creativity in designing calligraphy and ornaments, manually and digitally.
- Training to improve the skill of artisans in applying multi-color screen printing technique.

Activities

- Identify the designs of products owned by artisans: includes the number of designs ever produced, the number of designs still produced, and the kind of designs that are selling in the market.
- Analyze designs of market interest, based on designs produced by partners, designs produced by other craftsmen, and based on current trend designs.
- Compose the concept of leather calligraphy design that will be developed based on the designs of interest in the market; both designs owned by partner craftsmen and designs owned by other craftsmen. The development of the new design is based on market conditions of each partner's craftsman, the condition of the facilities and the resources they have.

To cultivate the participation of craftsmen, the main strategy is to open the awareness to: 1) understand the business problems it faces, 2) understand the real needs that must be met immediately, and 3) solve the problems faced.

RESULT AND DISCUSSION

Training on Calligraphy Design with Computer

Training to make calligraphy design is digitally done using computer device with Corel Draw X4 software. Technically, craftsmen are taught how to operate software, especially in terms of editing. Some well-regarded sketches are then photographed / scanned to be processed into coreldraw software with tracing techniques. Craftsmen are taught to technically operate tools to create lines, colors, and fields. By mastering these tools, it will make it easy to make calligraphy design compositions.

Here are some designs of calligraphy made with computers, the lines are firmer, the shape and size more precise. This will make it easier for the process of making films on screen printing techniques.

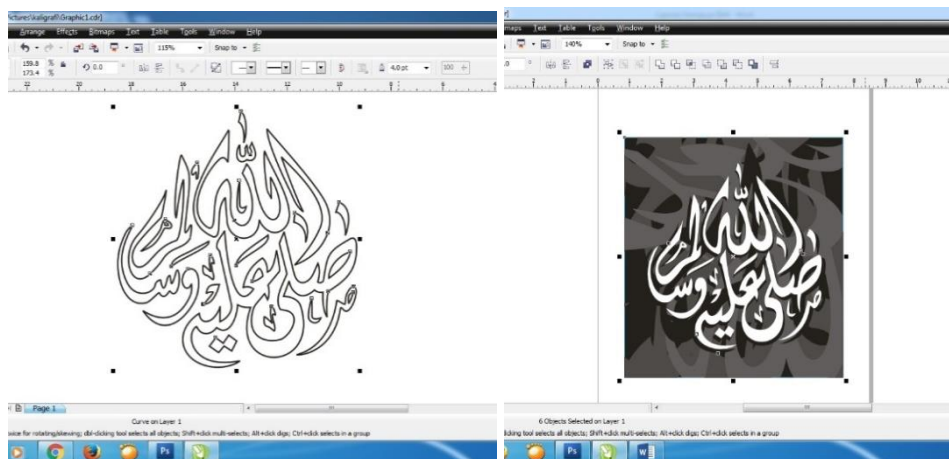


Figure 1. Calligraphy design using coreldraw software

Training on Color Screen Printing Application

Before doing multi-color screen printing techniques, some tools are prepared ie screen, rack, table, hairdryer, and handspray. Screen or gauze is a tool for printing pictures / designs of calligraphy on the leather to be screened. This fabric is very delicate pore so it resembles a silk fabric. The pore hole in this cloth serves to filter and determine the amount of ink that comes out. Screen used for the screen printing technique on the leather is a moderate type, which does not absorb much water with the density number between 120 T – 150 T. Rack is a tool for polishing and smoothing screen printing paint applied to the screen. The rack is made of synthetic materials such as polyurethane or polyvinyl. This material is strong enough and resistant to air humidity. The type of rack that is used is a hard rack for detailed and smooth results. The table is used as a base of leather to be screened. Hairdryer necessary to help accelerate drying afdruk layer in the process of making cliches, while handspray / water spray is necessary to clean the image on the screen models that have been in afdruk.

Preprinted materials used for this screen printing are chemicals used for afdruk process, among others: 1) emulsion liquid and sintizer (light-sensitive material) the ratio of the mixture of these two materials is 9: 1. Afdruk material product used in this training is Ulano. 2) Detergent cream; used as a laxative remnants of paint and ink that are still left on the screen. 3) Chlorine or bleach; used to remove afdruk layer after scren used. 4) Screen laquer; fluid used to correct afdruk results in scren. This liquid is used to patch if there is a leaking affdruk part. (5) Synthetic adhesives such as duct tape are used to cover the non image area, which is leaked on the screen.

The printed materials used are screen printing ink and diluent. Screenprinting ink is used as the basic material for shooting the target or media to be screened. The diluent is used for the ink mixer so that the viscosity can be adjusted. The type of ink used is oil-based inks (Solvent Base), which uses oil as a diluent. After all the tools are ready, the next step is to make afdruk on the screen. The stage is to print the design on tracing paper using black ink. With tracing paper will facilitate the afdruk process because light can enter easily through clear paper. After the design is printed on tracing paper, then the afdruk process (exposure) by moving the calligraphy design to the screen using ultra

violet (UV) light. The material used is emulsion and sensitizer solution. This afdruk process starts from dissolving the emulsion liquid with a sensitizer with a ratio of 9: 1 which is then applied evenly on the screen cloth. Then the screen is dried by using a hair dryer; this process is done in a dark room to avoid UV light burning afdruk layer, because if exposed to UV light then this process will fail.

After the initial drying process is completed, then continued the process of irradiation by closing the design that has been made on tracing paper. Above it the design of the image is pressed against the glass so as not to shift at the time of irradiation, and on the back of the screen filled with sponge and dark cloth to reduce or reduce UV rays. After \pm 1 minute screen is moistened with water, this process is called development process. Once moistened with water and the chemical solution has been completely clean then it is left just before cleaned by using hairspray. Hairspray is useful for tidying and cleaning of the remnants of afdruk solution in the image area. The next process is to correct the image / design with screen laquer to cover the image of the unwanted area into a non image area. The final process in making afdruk is the final irradiation for finishing, after the afduk process is completed and corrected, then the screen is left to dry before use.

The process of screen printing begins by installing the screen on the leather precisely. Next done the process of incised paint on the screen, starting from the brightest color and gradually to the dark color. Paint is trimmed evenly using the rack, then the screen is removed and the result is dried, while waiting for the next coloring process using another screen. The following is the implementation process of multi-color screen printing technique.



Figure 2. The process of cleaning the leather to be screened



Figure 3. Screen installation process and application of screen printing technique



Figure 4. The printing process (left) and check the printed screen printing (right)

Here are some designs of calligraphy and decorative patterns are developed, and the results of printing with multicolor printing techniques.



Figure 5. Calligraphy design and decoration pattern in the background



Figure 6. Multi-color screen printing test results

CONCLUSION

Implementation of product design development activities as an effort to solve the problem of the limitations of artisans in developing designs of calligraphy and decorative patterns and production with multicolored screen printing technique, quite successful. It can be seen from 1) the resulting calligraphy product is more varied with a variety of shape design and coloring techniques. 2) the creativity of craftsman has increased because of the ability to use multi-screen printing techniques as an alternative technique to beautify calligraphy.

The empowerment activities of craftsmen in the form of training on design development and application of multi-color screen printing techniques, should not stop until the training activities are completed. However, it needs to be followed up by the trainees by implementing training materials in running the business of calligraphy handicrafts to make business continuity more progressive. The craftsman should be able to develop or explore the material that has been given so that the enrichment of ideas on the material given in the training can be developed.

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REFERENCES

- Campbell, David, (1986). *Mengembangkan Kreativitas*, Kanisius, Yogyakarta.
- Garnes, Jane E, (1986). *A Complete Handbook of Leathercrafting*. Florida: Robert E Krieger Publishing Company.
- Ghiselin, Brewster, (1983). *The Creative Process* atau *Proses Kreatif*, terjemahan Wasid Soewarto. Jakarta: Penerbit Gunung Jati.
- Noviani, Leny, Jonet AN, Adam Wahida, (2013). *Pengembangan Desain Bentuk dan Finishing pada UKM Gitar*. Jurnal INOTEK Vol 17 No. 2, Agustus 2013
- Noviani, Leny dan Adam Wahida, (2012). *Pengembangan UKM Keramik Desa Melikan Kecamatan Wedi Kabupaten Klaten Jawa Tengah*. Jurnal SEMAR Penerapan IPTEK Bagi Masyarakat Vol.1/No.1/Desember 2012
- Noviani, Adam Wahida, AG Tamrin, (2014). *Pengembangan Desain Keramik Batik Berbasis Go Green*. Jurnal SEMAR Penerapan IPTEK Bagi Masyarakat Vol.3/Nomor 1/November 2014
- Wahida, Adam dan Leny Noviani, (2013). *Pengembangan Desain Tenggok Bambu di Dusun Grenjeng Kabupaten Boyolali*. Jurnal SEMAR Penerapan IPTEK Bagi Masyarakat Vol 2 No. 1, Nopember 2013