

INTRODUCTION

Indonesia has a variety of national fashion heritage, one of which is Kebaya. The general definition of Kebaya is traditional Indonesian women's clothing in blouses or long-sleeved tops with front buttons, collars, and varied clothing lengths according to local culture (Hardisurya et al., 2019). As an effort to preserve the heritage, according to (Decision President Number 19 Year 2023 about National Kebaya Day, 2023), it is determined that July 24 is commemorated as National Kebaya Day. Therefore, Indonesian people need to maintain and preserve Kebaya's existence amid the rapid development of fashion trends. Due to the rapid growth of trends, kebaya design has been beginning to transform. According to (Trismaya et al, 2022), designers started to design Kebaya to a higher level by modifying ornamentation, aesthetics, and functionalities that were more developed than the function and meaning of kebayas in the past. The development and transformation that are mentioned became known as Kebaya Modification. Kebaya became a luxurious fashion product which is often hand made by various artisans for one particular design. Marketed as an exclusive fashion item by high end fashion designers, the value of kebaya depends on the material, design, and its decorative aspects.

Various aspects, including the development of material variations, influence the development of modified Kebaya. The lace fabric is one of the popular variations of materials and is identical to Kebaya. The lace fabric is a fabric material with a basic structure in the form of lace that is perforated like a net and transparent but has a variety of motifs, thin, smooth, and elastic so that it forms a curve and gives a floating effect (Arumsari, 2014). Due to its high demand, the lace fabric is available in various variations and is relatively easy to find in clothing industries. There are many types and quality of lace in the fashion industry. Each price range has different quality and characteristic. Globally, various types of laces are made of cotton, linen, or even silk. In Indonesia, lace is often made of synthetic yarns. This kind of lace has a lower price point and is often used to make modern style Kebaya for middle class consumers. Embroidery

in floral and natural motifs are often added on the surface with metallic yarns or beads. Kebaya made out of lace are commonly used in formal or semi-formal events in Indonesia such as graduation, weddings, or other ceremony. Kebaya is used by women in Indonesia throughout different social classes and ages. Lace is often the common fabric choice to make kebaya, resulting in the high demand for lace fabric production for the manufacture of a kebaya. Furthermore, the process of cutting, making, and tidying, actually results in up to 15% of fabric wasted through an uncreative approach in making fashion patterns (Gwilt, 2020). Kebaya from lace fabric will produce waste that can damage the environment due to its synthetic materials. Therefore, an efficient and organized pre-production system is critical in reducing textile waste.

This research was conducted based on case studies on research on lace waste development (Arumsari, 2014) and the application of zero waste pattern-cutting techniques on kebaya design (Garlufi & Nursari, 2018). Based on the two case studies, the researchers analyzed to determine the potential for lace waste remanufacture to become a new reusable fabric sheet structure, and the potential application of a new fabric sheet results from lace waste becomes a kebaya fashion by applying the Zero Waste Pattern technique. The research was carried out using the "FRANGIPANI" method so that the research process runs systematically and the work results are the same as the initial idea (Mulyadi et al., 2022). The use of the "FRANGIPANI" method is to find the existence of an element of "Taksu" or the strength of the power (*Hyang Kuasa*) that is attached to the work process or the results of zero waste kebaya work using lace waste, which remains to Indonesia's traditional dress culture (Arumsari, 2020). This research was conducted as an essential step in the process of craftsmanship that cannot be separated from conventional Indonesian culture, as well as to discover the potential for a more efficient and organized pre-production system to reduce textile waste towards sustainability.