

WHEN
CIVILIZATION
REMEMBERS ITSELF AGAIN





Digital Loomscapes: Re-imagining Indonesia Ikat Textile



MASTER PROJECT

This project focuses on how Traditional Textiles in the digital age can survive And it also explored the possibility of integrating Indonesian ikat fabrics into the modern market through digital means.

After industrialization, how do we deal with those things that were not created for efficiency?



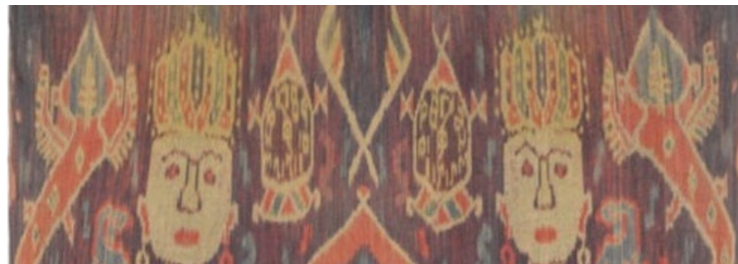
Fig.1



Fig.2



Fig.3



What is Ikat

Ikat (from the Malay-Indonesian mengikat, “to tie”) is a textile produced through a pre-weaving resist-dyeing technique.

Yarns are grouped into small bundles, tightly bound in specific sections to block the dye, and coloured in one or several stages. After each dyeing cycle the bindings are adjusted, allowing multiple colours to be built up. These pre-patterned threads are then woven—often on simple backstrap looms—so that the dyed areas align to form the final motif. The term refers to both the technique and the cloth created through it.

Fig.4



What

Fig. 2. Photo by the author.

Fig. 3. Image source
petitesbullesdailleurs.fr

Fig. 4. Image courtesy of Threads of Life Textile.



● *History of Ikat*



Over the past two millennia, pre-weaving dyeing techniques have developed independently in many regions of the world—most notably in the South American Andes, the Middle East, and across Asia—but they reached their most intensive development in Indonesia, where ikat, a traditional hand-woven cloth now strongly associated with the archipelago though not unique to it, has long been and continues to be produced in some of its finest forms.

● INDONESIAN IKAT



Fig.1-2

Indonesia is an archipelagic country, with each island having its own traditional textiles, including ikat. Even within the same island.



Fig.4 Map of Indonesia – regions and provinces. Source: VectorStock, image ID 21810710.



Fig.3

All photographs were taken by the author during HUMBA – Sandalwood Festival 2025 at Bukit Tanarara, East Sumba, Indonesia (12 July 2025).



Social and Ritual Functions of Ikat Textiles

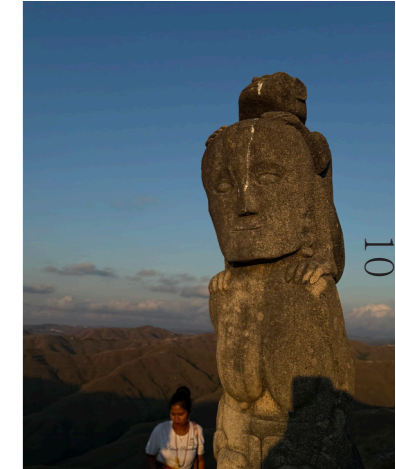
In many Indonesian island societies, traditional ikat cloths are not only garments but working ritual objects. Life-cycle events often require an elaborate exchange of gifts, especially at weddings and funerals: they serve as shrouds in funerary rites, circulate as bridewealth in weddings, and mark noble rank through restricted motifs. Through these uses, ikat carries spiritual protection and encodes social bonds in everyday life.



Astonishing Variety



© 2017 David & Sue Richardson



Although the technique is shared, ikat textiles display remarkable diversity, from bold geometric compositions to highly intricate figural designs. Their sources of inspiration are equally varied: some pieces bear the influence of Indian, mainland Southeast Asian or Islamic art, while others arise entirely from local aesthetics.

As Mary Hunt Kahlenberg writes in her introduction to the classic *Textile Traditions of Indonesia*, "the art of weaving - the intercrossing of the warp and the weft - symbolizes the structure of the cosmos: the warp threads fastened between the ends of the loom represent the predestined elements of life; the weft passing in and out and back and forth denotes life's variables."

Fig.1



Fig.1
 Source: Cabana Magazine, "The Weavers of Karaja".
 Fig.2
 Source: Photo by the author

Fig.1
 The Weavers of Karaja in West Sumba



Fig.2
 The East Sumbaness at the ceremony

Fig.3



Fig.3
 Source: ClothRoads, "A Textile Tour of Tribal Weaving in Indonesia"
 Fig.4
 Source: Asia Textile Journey, 2015.
 Fig.5

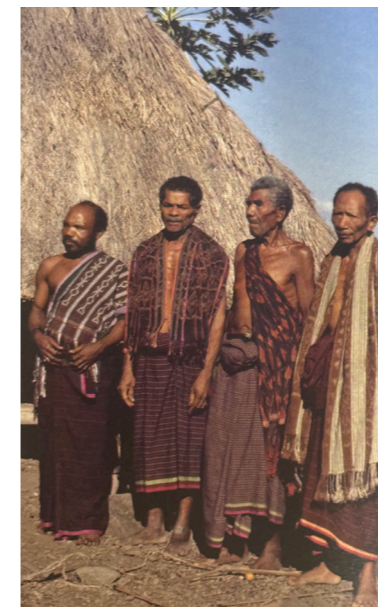


Fig.5



Fig.4

Fig.3
 Young girls in traditional sarongs from Jontona in Lembata.
 Fig.4
 Ndonga, Ende (Flores, NTT). Weaver at the village ikat co-op demonstrating plant-dyed ikat.
 Fig.5

Different Ikat Dress Across Indonesian Islands and Villages

Even on the same island, neighbouring villages often maintain their own inherited repertoires of motifs and colour combinations to signal group identity, belief or status—differences that become even more pronounced across the wider archipelago.

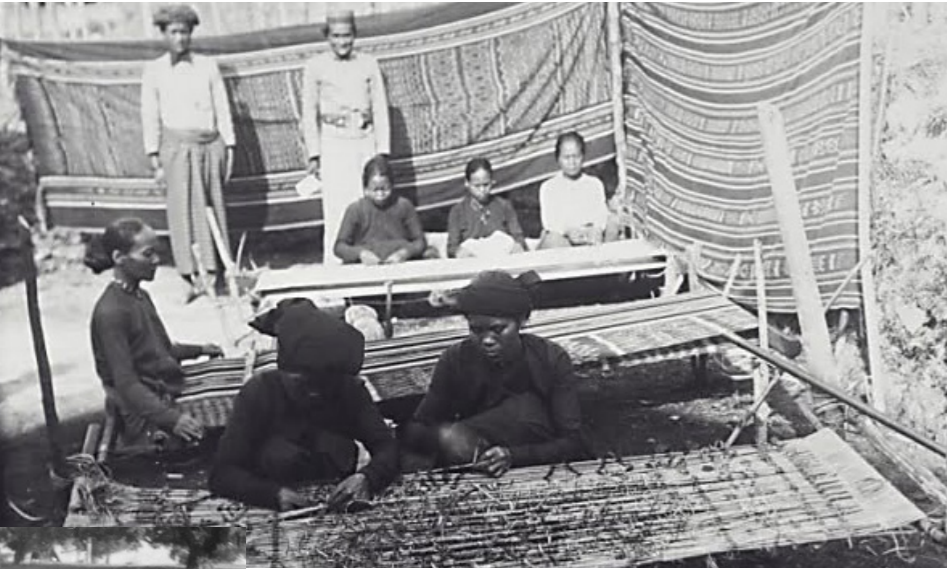


Fig.1
Wider shot of the same setting. Note the size of the cloth hung in the background.
Photographer unknown, early 20th C.



Fig.2
Photograph of a vendor wearing a hip cloth bearing the Dutch coat of arms, Waingapu, East Sumba, Indonesia; dated between 1900 and 1940.
Photographer unknown.

Fig.3 The East Sumba weaver Weaving a typical ikat



Fig.4
Shoulder Cloth (Hinggi), late 20th Century
Sumba culture; Sumba Island, East Nusa Tenggara Province, Lesser Sunda Islands, Indonesia



The Indonesian dyeing technique requires the skill of masterful artisans

In many Indonesian communities, the most experienced ikat weavers are middle-aged and older women—mothers, grandmothers and widows who have accumulated rich life experience and long participation in village rituals, sometimes from higher-status families. They are entrusted with the most complex motifs and ceremonial cloths and guard the knowledge of meanings, taboos and proper use. Younger girls usually learn at their side, assisting with spinning, tying and dyeing before gradually entering this circle of expert weavers.

Fig.1
Source: ClothRoads, "A Textile Tour of Tribal Weaving in Indonesia"

Fig.2
Source: Tropenmuseum (KIT), early 20th c., via Todi Art, Toraja textiles for use in funeral rites

Fig.3
Source: Asia Textile Journey, "Buffalo, betel nut, and bold, beautiful ikat from Sumba"

Fig.4
Source: Bowers Museum - Collections Blog, "I Came, I Saw, Ikat: Sumbanese Hinggi"

Ikat Today: Between The Past and The Present

Fig.1
Source: Tropenmuseum (NMVW), Vrouw aan ikatraam, Flores (TMnr 10014463)
Fig.3
Source: Tropenmuseum (NMVW), Markt te Waingapu, Oost Sumba (TMnr 10029608)

Fig.1



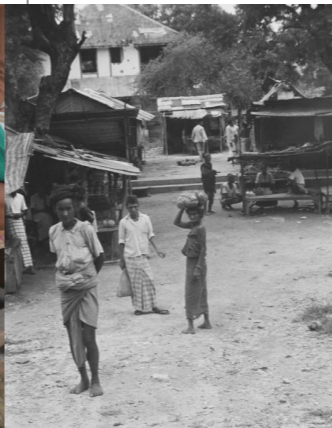
Woman at an ikat loom in Flores, showing the resist-bound threads in process; early 20th-century photograph.

Fig.2



West Sumbaness Weaver weaving Karaja Ikat in the village.

Fig.3



Market scene at Waingapu, East Sumba, with textiles displayed in the background; early 20th-century photograph.

Fig.4



Fig.5



Fig.6



Ikat's exposure to outside influences is hardly surprising. In the late 19th and early 20th centuries, during the colonial period, Dutch administrators, missionaries, merchants and travellers in the Dutch East Indies encountered these remarkable ikat textiles and purchased them from Indigenous communities. Many pieces were taken home as household goods or souvenirs and later entered private collections, the secondary market, or were donated to museums (van Dartel, 2005).

From the 1930s onward, more anthropologists undertook long-term fieldwork on remote eastern Indonesian islands—such as Alor, Rote and Sumba—with many studies focusing on textiles and material culture.

In recent decades, as global tourism has grown rapidly, ikat textiles have increasingly appeared in tourist markets and airport cultural-gift shops, bringing into commercial circulation cloths that were previously used mainly for ritual contexts and everyday dress. Consequently, various intermediaries have emerged between weavers and buyers from diverse backgrounds.



Ikat in Transition: From Living Cloth to Ethnic Style

“Experienced weavers thus became, in effect, part of the traditional cloth.” (Asian Art, n.d.) Today, the momentum for change comes from the younger generation. Yet as many young people gain education and exposure to cities and new tourist markets, the slow, age-old rhythm of the loom no longer appeals to them, and the tacit intergenerational “handing-on” is under strain.

In response to these tourist markets, weavers have begun to adjust their products. Motifs are no longer only the most direct bonds to spiritual belief and the ancestor spirit world. In this new context, patterns are simplified; some designs gradually depart from their original ritual compositions and become repeatable “ethnic” motifs, retaining only certain regional stylistic elements as markers of identity.

Even so, these motifs still carry island-specific characteristics—enough for visitors to associate them with Bali, Sumatra, or islands such as Flores and Sumba.

Fig.1

Fig.2



Fig.3



Fig.4



Fig.2
Shoulder Cloth (Hinggi), late 20th Century
Sumba culture; Sumba Island, East Nusa Tenggara Province,
Lesser Sunda Islands, Indonesia
Source: Bowers Museum – Collections Blog, “I Came, I Saw,
Ikat: Sumbanese Hinggi

Fig.3-4
Ikat retail for tourist traffic at a viewpoint, East Sumba—
signs of pattern simplification and standardised sizing.
Source: Author’s photo



19

Fig.1

Where I Enter This Story ?

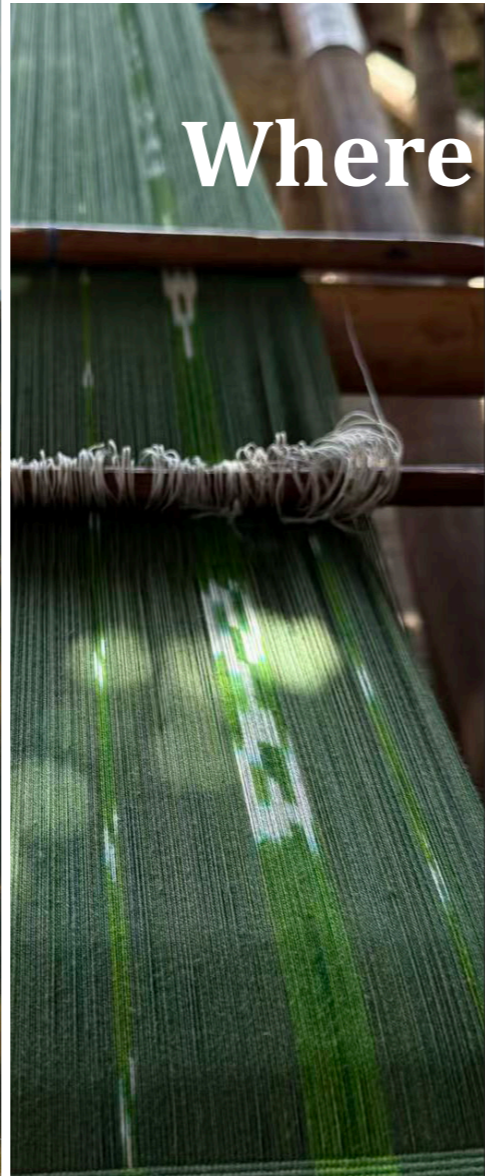


Fig.2

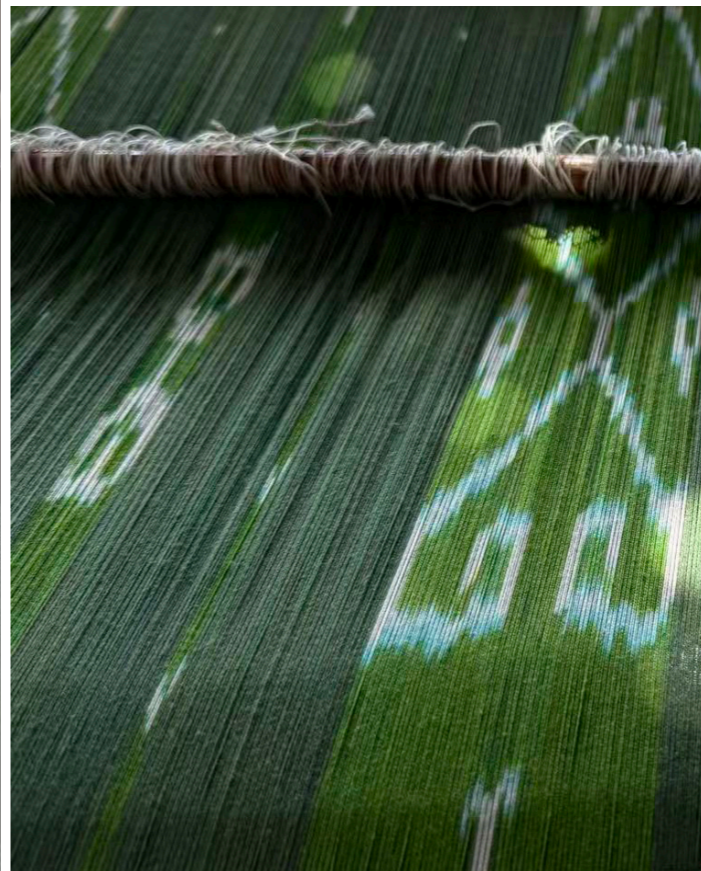


Fig.3

While ikat is fundamentally a non-industrial textile whose value lies in its cultural and material specificity, this does not diminish its potential for contemporary application. Instead, its non-scalability invites a different design logic—one that engages with materials as carriers of place, labour, and embodied knowledge rather than just as industrial units.

20

IKAT in Digital Age ?

At the outset I did not know what “digitisation” would mean for IKAT. My fieldwork did not begin with a mandate to rescue tradition through technology; it began with an intuition—the felt truth of Indonesian IKAT—and a fascination with the seam where the traditional and the contemporary touch.

In this project, the meaning of digitisation emerged as I walked the field. I met weavers at their doorways, backstrap looms breathing in the sea wind; I saw motifs abstracted from the natural world, threads binding people to ancestors and spirits. These encounters revealed both the highest artistic and human reach of cloth and the intricate tensions of modern life. I began to understand digitisation as another life-form for IKAT—the second breath of a living culture in a digital age.

Let us return to the fieldworker’s gaze.

Not a solution, but a question



Fieldwork & Research

Fieldwork is the core research method of this project. In July 2025, I studied traditional weaving in Bali with a weaver connected to Threads of Life and interviewed her. In West Sumba, I spoke both with weavers in organised village groups coordinated by local organisers and with independent women who weave at home on the verandas of their houses, outside these programmes. I also attended a traditional festival in East Sumba, observing how IKAT textiles are used in ceremonies that mark key moments of life.



In parallel, I collected and examined contemporary handmade ikat textiles and antique pieces from Sumba, Timor and Flores.

These concrete encounters—people, tools and cloth—form the ground on which this project has grown.