

■ Out-of-the-Box in CLO3D



*It's not just digitizing the patterns.
Preserving the memory of piece of fabric.
This digital memory can fully retain the heritage textile, presented in true proportion in the digital age.*



The Vizoo .zfab loads with correct real-world scale and substitute physics (no cut), so I can simulate and render immediately.

*The material holds up under neutral and raking light, giving consistent visuals across scenes.
This is the difference between a file and a usable digital asset.*

IKAT 02



● *Digital Indonesia Ikat Textiles*

0). Fabric Sources – Antique and Tourist-Market Ikat

-Small collection of cloths that reveals different lives of ikat today.

1). Digitising Methods – Vizoo Scan vs DIY Scan

-Testing and comparing different workflows to capture texture, scale and drape.

2). Digital Product

*-Using the digital fabrics for digital garment and apply it for Homeware
This Part is more about possibility of IKAT Textiles.*

This chapter asks how Indonesian ikat textiles that were never meant for industrial efficiency can still live in a digital age. By digitising both antique heirloom cloths (sourced from and the UK) and contemporary tourist-market ikat from Sumba, I try to keep their cultural and symbolic value visible without changing their material essence. Instead of offering a “solution”, this work builds a small digital fabric library that becomes a starting point for new ways of seeing, storing and re-using these textiles.w



1).Digitising Methods



Accurate Physical Measurements for 3D Simulation



Why I choose vizoo

For this project I care less about abstract “accuracy” and more about how close the digital fabric can feel to the cloth I held in my hands. Vizoo’s xTex scans give me dense, seamless textures that keep the character of my ikat on a larger area, while the files drop smoothly into my 3D workflow. It becomes the bridge between the physical textile and the virtual space I am building.

● Comparison of Three Digitisation Methods: Scale, Texture, and Virtual Usability



Path/Method	IKAT Fabric	Collection & Deliverables	PBR channel	True scale & seamless	Appearance stability (switching HDRI)
Vizoo*Tex (No Sample Cutting)		Textures folder: BASE,ROUGH, DISP, ALPHA, MTLP. u3m. zfab (for direct use in CLO)	Base/NRM Rough/HeightAlpha Metalness	Built-in real size / seamless processing completed	High (The lighting change is still natural with PBR support)
CRUSE large-format flatbed scanning		High-resolution Base images (TIFF/JPG; single image covering a large area) without u3m/.zfab. PBR channels need to be built by myself.	Base only	Seamless (This time my fabric is just enough to cover it completely)	Middle (Base only, lighting is baked, prone to appear flat under side light)
EPSON small-format sectional scanning		Multiple Base images (partitioned collection) need to be stitched together in other software.	Base only	Manual calibration	Middle (However, it must be scanned with a high DPI and output. Manual splicing is prone to blurred textures)

0). Fabric Sources – Antique and Tourist-Market Ikat

A small set of cloths that shows two different lives of ikat today: heirloom pieces circulating in global vintage markets, and contemporary cloths woven for the tourist market in Sumba.

■ Antique ikat cloths (F1-F2)

Fig.1



Fig.2



Fig.1-Fig.2:
Flores (Lio/Nggela), lawo (warp ikat), morinda & indigo, mid-20th c.; four-panel layout with twin central fields.
Flores (Lio/Nggela), lawo with vertical bands (warp ikat), c.1960s-80s; commercial cotton, likely mixed dyes.

■ Tourist-market ikat from Sumba (F3-F8)



Fig.3



Fig.4

Fig.3:
Sumba warp-ikat narrow cloth (runner/selendang scale), contemporary; vendor purchase.

Fig.4:
Sumba warp-ikat selendang (scarf/stole), contemporary; shop purchase.



Fig.5



Fig.6

Fig.5-Fig.6:
Both are Bali endek (weft-ikat) runners, modern homeware, not ceremonial antiques; sourced via a Japanese resale site.



Fig.7:
East Sumba shell-appliqué style — lau wuti kau type (this piece is a flat decorative panel, not a tube skirt), contemporary; shop purchase.

Fig.7



Fig.8:
Sumba hinggi-style warp-ikat, two panels joined at center; contemporary market piece, vendor purchase.

Fig.8

Baselines: Other Scans in 3D

EPSON sectional scans → Estimated physics in CLO



Scan (EPSON, sectional)

Each tile has equally clear texture, but requires manual stitching (risk of mirrored seams and scale drift) likewise Base only. so CLO realism is driven by my estimated physics.

CLO Render (estimated physics)













04
Dress

03*05
Trousers/Top





01*02
Top/Skirt

02*05
Top/Skirt



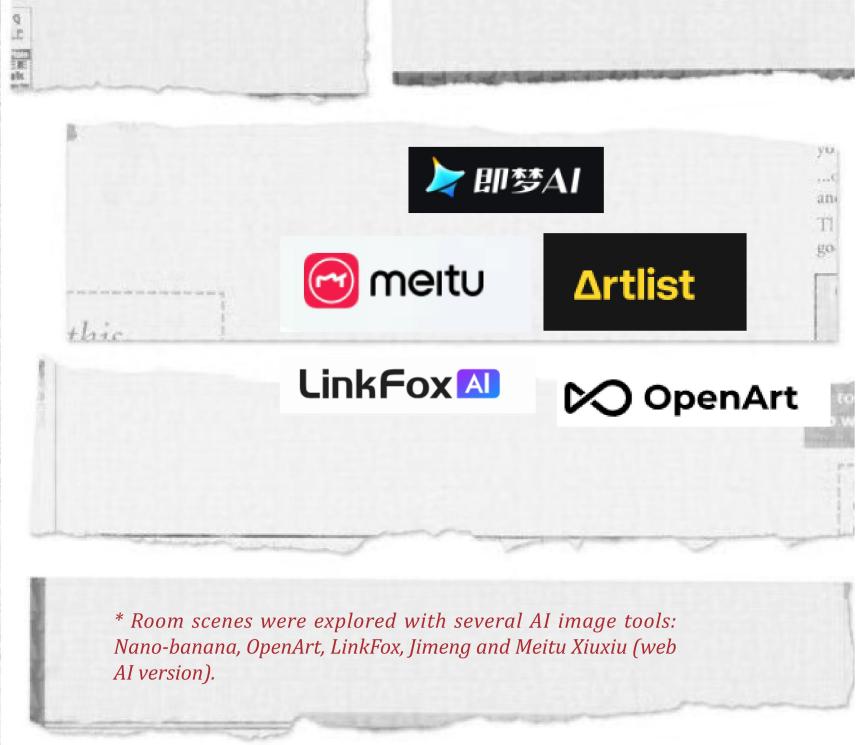
■ Ikat in the Home

-AI Generated Room Studies

- Using accessible AI image tools instead of full 3D modelling, I quickly placed my digitised ikat fabrics into home interiors.
- AI works as a fast sketchbook to test scale, colour balance and atmosphere, rather than to produce final product images.
- These room studies explore how non-industrial ikat textiles might live in everyday urban homes and purely digital contexts.



3



** Room scenes were explored with several AI image tools: Nano-banana, OpenArt, LinkFox, Jimeng and Meitu Xiuxiu (web AI version).*

Instead of building every object in 3D, I used accessible AI image tools to quickly place my digitised ikat fabrics into urban home settings as wall hangings, cushions, throws and table pieces.

In this project, AI works like a fast sketchbook: a convenient way to test scale, colour balance and atmosphere, rather than a finished product catalogue. These room studies explore how non-industrial ikat textiles might appear in contemporary digital life and real apartments, without requiring mass production of the fabric itself.

■ **Product Possibilities –
Ikat as Interior Textile**

Tablecloths & Runners & Cushions



** Digitised ikat fabrics are tested on dining tables and sideboards.*



Name/Type:

Hinggi kombu — an East Sumba (Sumba Timur) men's ceremonial cloth made in warp ikat (tie-dyed warp)

Region:

Indonesia, Sumba Island — East Sumba

Material: Cotton

Technique: Warp ikat (the warp threads are bound/resisted and dyed before weaving), then woven into a cloth; hinggi are commonly made as two loom-width panels joined.

Motifs:

Horses&Birds

In hinggi kombu traditions, animals such as horses and roosters function as status and prestige markers.

Hinggi are documented as Men's ceremonial wrapper/shawl.

**These Cushion are generated by AI*



Name/Type:

Lamaholot marriage-exchange (bridewealth)

ikat textileRegion:

Indonesia, Eastern Nusa Tenggara (NTT)
Flores/Lamaholot-area attribution

Material: handspun cotton

Technique: Warp resist-dye

Usages:

it is used in women's wedding exchanges.
Given as a ceremonial gift during marriage
arrangements.

**These Cushion are generated by AI*

Digital Archive App

APP Prototype

From fieldwork notes to a
scalable digital archive.

