

# **BYO Living**

## **ASEAN Design Forum**

# Who We Are

- Award winning weaving specialist for sustainable architecture & design solution since 2008.
- We do weaving customization for large scale projects with leading international architects/designers.
- Our research is heavy on computer aided design & material technology development from recycling waste and sustainable source.

# Awards & Recognition

- ASEAN Senior Mastercraft Designer 2016
- Venice Architecture Biennale Award Winner 2018
- Good Design Indonesia Top Prize Winner Of The Year 2021
- Good Design Award Japan 2021



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# CUBES

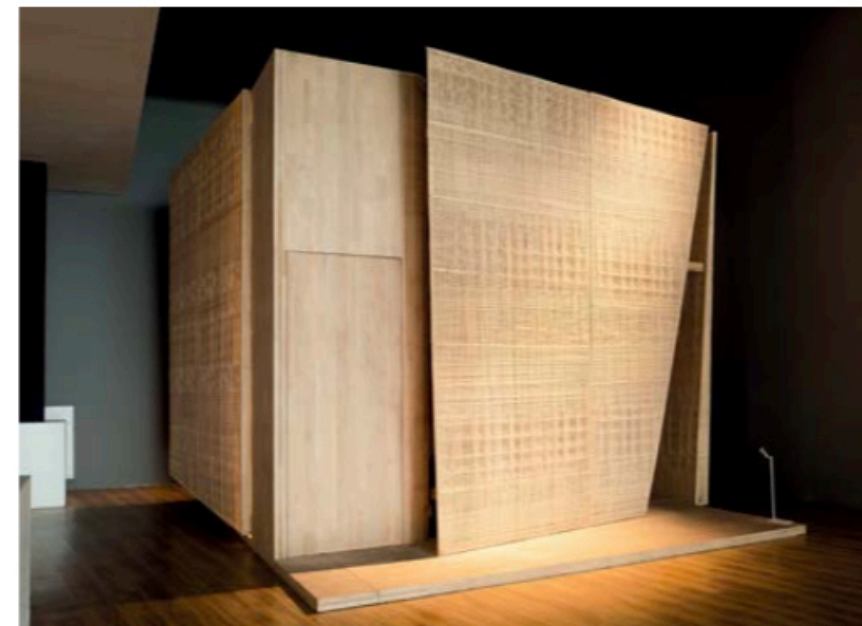
INDE.Awards Winners 2019  
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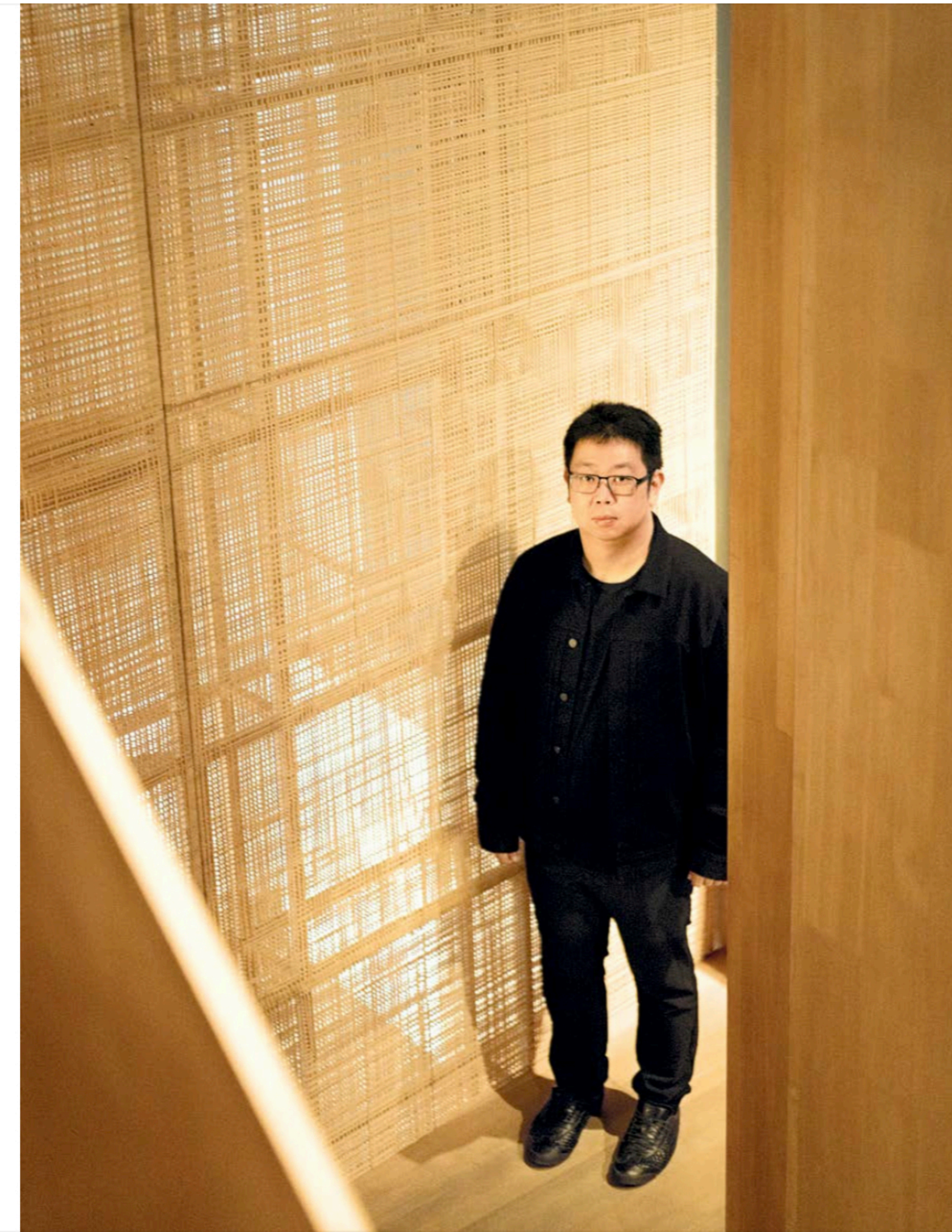
## Reconsuming Tradition

Words Yvonne Xu Photography Vicky Tanzil



What is the true value of traditional craft in contemporary design? Beyond the cultural necessity of heritage preservation, could craft and tradition provide answers to present and future needs? Lim Masulin, founder of Jakarta-based weaving company BYO Living, is invested in such an idea.

Above: Andra Matin's *Elevation* installation from the 2018 Venice Architecture Biennale has been presented again at Jakarta's Museum MACAN in the *Matter and Place* show. The installation features a woven rattan facade by BYO Living. Opposite: Lim Masulin inside the installation.





Since its founding in 2008, BYO Living has been fabricating woven components for architecture and interior use, while also being equally interested in the research and development of the Indonesian weaving tradition. Founder Lim Masulin, who graduated from the University of Wisconsin with a degree in economics, believes that the craft of weaving, so central to the history of civilisation, will be a linchpin for a future balanced on how we tackle issues such as climate change.

Lim shares, “We created the brand BYO Living [inspired by the term ‘bio’] because we felt the urgent need to focus on a sustainable approach. Thirty or forty years ago it was still very common to live in a house with weaving. Traditional houses are like that because the weaving helps protect from the sun and rain, and certain patterns keep mosquitoes out. You get very good privacy. You get ventilation. What we are questioning is why we, who live in Asia, are not protecting our way of living – which is very sustainable from an energy point of view.”

Today, BYO Living partners with design offices around the world (including Andra Martin, Kengo Kuma and Associates and OMA) to explore the application of weaving in modern built environments. In exhibitions such as *Elevation* (produced in collaboration with andramatin studio for the 2018 Venice Architecture Biennale) it also delivers pertinent messages about the utility and beauty of the craft and heritage.

BYO Living operates three workshops in Indonesia, with its largest in North Jakarta where its research and development unit is housed. A team of eight architects and designers work closely with the in-house weavers. Lim shares, “We employ and bring our master weavers close to Jakarta, rather than have them work in the villages, because it allows architects and weavers to come together and experiment.”

The team recently developed a collection of curved screens for a project by Kengo Kuma in Bali. “The development process was quite long. It took us about six months to almost a year,” says Lim. Such development work is crucial to the efforts of BYO Living, which has woven diverse materials including paper, leather, fabric, rattan, wood and upcycled plastic.

But the company also always tested out unusual techniques. For the residential development Vida Bekasi (master planned by Andra Martin) for instance, BYO Living created an entrance structure with a woven panel made of polyethylene (replacing the more common aluminium composite). The material’s merits are in lightness and lower cost. It is expected to last fifteen to twenty five years.

Lim shares, “We developed the plastic using the same kind of weather-proof additive that you have in plastic car bumpers. This additive has been used in the car manufacturing for decades; we are just bringing it to architecture.”

In the tropics, where air conditioning is still the greatest energy guzzler, woven screens can be a productive component of an overall design solution. Beyond the provision of ventilation and shading – as is the case for a data centre in Surabaya, whose woven building skin was created from extruded upcycled plastic – woven elements can be used to improve the efficiency of air conditioning.

In the Toyota Headquarters in Jakarta (architecture by Nikken Sekkei; interior design by Budi Lim), BYO Living created beautiful undulating ceiling ventilation panels to facilitate the efficient and even distribution of air conditioning for the 7,000-square-metre interior. “People are focused on the aesthetics of the design but this weaving pattern is very utilitarian,” says Lim. “The openings of the weaving pattern were [strictly] controlled. It required meticulous calculation.” The project was completed in collaboration with engineering consultants Arup and Meinhardt.

Lim believes that creative exploration and collaboration are the way forward for the company, if not for the rest of us. He explains, “We are not focused on products, we are not focused on design, we are focused on processes. It is just like coffee; we are not selling the beans, we are not selling the coffee, but how you make it – the process.”

This, suggests Lim, is one of the missing links in today’s society. He says, “You start to forget that process is very precious. But this is where humanity lies.”

byoliving.com

Opposite: The three-dimensional woven screens on the *Elevation* installation feature a number of traditionally inspired weaving techniques fused into a new mode of expression.

### Weaving By Numbers

With the aid of software, weaving is delivering the precision expected of modern architecture. BYO Living is developing techniques to realise complex parametric patterns and measurable, metric-quantified solutions. Its Creative Director Lim Masulin shares, “In the past with weaving we could not tell you information such as the amount of thermal radiation of a window screen or panel. Now we can ask, ‘What is the number of lumens your space will need?’ By controlling the weaving pattern we can control the amount of light. We weave by numbers.”





# design anthology

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## Weaving Magic

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Christopher  
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*Images*  
Mario  
Wibowo

Ten years ago, product designer Masulin Lim was looking to do something distinctively Indonesian. 'I was looking for people who were part of Indonesia's heritage who could strengthen their skills,' he says. 'That could involve wood or mining, but the craft that spoke to me most was weaving because it very easily crosses over into design thinking, architecture, business, master planning, government and law.'

Weaving has been a part of Indonesia's craft tradition for centuries, but when Lim travelled overseas, he realised just how undervalued it was. 'I saw how pieces done for some of the biggest brands in the world were actually from Indonesia, and how pieces that were sold for sixty thousand US dollars were made here for one thousand.' He began asking himself why Indonesia hadn't invested more in developing its weaving techniques. 'When we talked about weaving, it was only about fulfilling an order, rather than improving techniques based on future needs. That's how we started.'

Lim ended up launching BYO Living, which creates woven furniture for high-end hotels, restaurants and residential complexes. Lim's work went even further when he took part in House Vision, a 2013 Japanese-Indonesian exhibition that looked into how residential architecture could have a broad social impact. Lim was introduced to Indonesian architects Andra Martin and Yanto Effendi, and they began exploring how weaving could be incorporated into architecture. Effendi was particularly interested in using woven materials as a screen to reduce the solar gain of his buildings. Another architect, Iklim Tanumihardja, looked to BYO Living to create a building facade based on a traditional batik Peranakan weave, giving his building an unmistakably local texture.

More possibilities soon began to reveal themselves. For one project, a building for one of Indonesia's telecom companies, BYO Living created a woven facade from discarded plastic, revealing a new use for the waste material that plagues Indonesia's waterways. In another project for auto giant Toyota, the firm created a 4,000-square-metre breathable ceiling made of natural rattan. 'It was quite a challenging project,' says Lim. 'We didn't know for sure whether the material was insect-proof or moisture-proof, so we had to do research and develop a new weaving technique.'

But that opened up even more new doors. BYO Living's latest work can be seen at the Venice Biennale of Architecture, where Andra Martin designed *Elevation*, an installation made from a type of rattan called *rumpum* that isn't normally used for weaving. 'We have millions of hectares of this in Indonesia, but people don't know how to use it in weaving,' says Lim. Although projects like this are hand-crafted by up to 200 master weavers in various rural communities, they're also backed by parametric design programmes and a research arm that makes use of material innovations like aluminium fibre, recyclable HDPE fibre and steel slings.

'The grand scenario is to be sustainable from the starting point to the end,' says Lim. 'We use the hand of the master weaver while still conveying the idealism of architecture, and the whole project is meant to serve the needs of society.' That message seems to be getting across: *Elevation* won a Special Mention award in Venice. 'Architecture can be very robotic, very computerised, but here in Indonesia we can do something very indigenous, very authentic, and that projects a kind of heritage,' says Lim.

*Facing page:*  
Andra Martin's  
*Elevation* pavilion  
for the 2018  
Venice Biennale  
of Architecture.  
The pavilion won  
a Special Mention,  
the first time  
an Indonesian  
architect has been  
awarded such an  
honour at Venice.

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The highly technical custom-woven rattan panels for *Elevation* were produced by BYO Living



# What Is Our Work

- Rendering Of Architectural/Design Solutions & Weaving Patterns.
- Weaving Artwork, Architectural Elements, Interior Furnishing, Sculptural Lighting, Outdoor Furniture, Design Objects, Etc.
- BYO Living weaving solutions is handmade by our in house master-weavers.
- We also develop our own weaving materials and research weaving techniques from natural materials (rattan, leather, wood, paper, fabric, stone, etc.), man made materials (recycled waste, plastic, metal, carbon fiber, etc.)























