



## Engineer Turned Entrepreneur Empowers The Elderly Through Innovative Smart Products



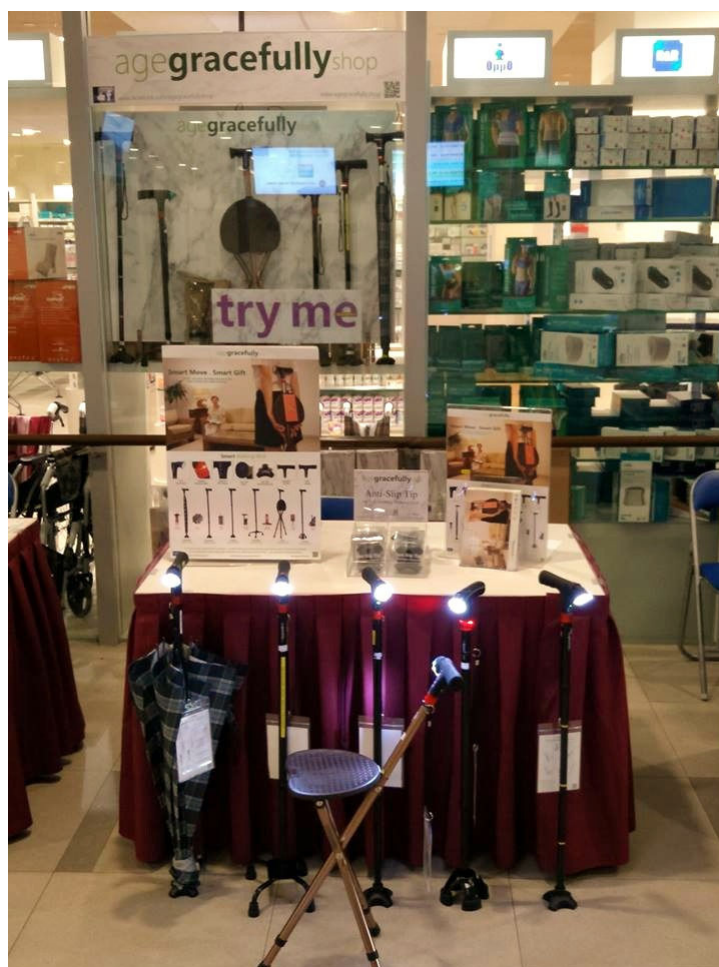
Founder of Bekind Solutions, Tan Lee Tuan

Getting old is never fun – backaches, sore joints, failing eyesight and more. Fortunately, founder of local start-up [Bekind Solutions](#), 45-year-old Tan Lee Tuan, is here to save the day with innovative, aesthetic and affordable solutions to better empower the ageing population!

Imagine a walking stick disguised as an umbrella and designed with a clever built-in MP3 player-cum-radio function that helps to improve the user's mental and emotional capacities. Pretty

brilliant! It comes to no surprise that this Smart Umbrella Walking Stick, aptly named **Bond**, won the Eldercare Innovation Award in 2018.

The **CarbonQuad** series, with its ingenious design functions such as an interchangeable base and a lightweight yet durable carbon fibre frame, also won the Singapore Good Design Award Mark 2019 and is selected as the finalist in the prestigious German Design Awards 2020.



Although a newcomer in the eldercare industry, he has now become a familiar and respectable figure through determination and sheer faith. Tuan's innovative range of products and dedication to his vision have won him much credibility and opened many doors for him. Despite his considerable achievements in merely 2 years, he remains affable and down-to-earth.

We chat about his journey and his design influences.

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## **What was your background before you embarked on this startup journey?**

I was an engineer in the Marine industry for 12 years. I have been talking to machines for most part of my adult life. Then, I swapped industries and went into product design for furniture, where I was based in China for 3 years.

Both these jobs required me to travel extensively and it was hectic. I felt that it was time for me to come back to Singapore and spend more time with my family here. That was when I decided to start something myself.

## **What was the pivotal moment that made you decide to set up Behind Solutions?**

Initially, I did not really have a plan so I prayed about it. I also read this book "The Purpose Driven Life by Pastor Rick Warren" that I bought some time back which I did not have time to finish reading. After praying about it and reading this book, the message became very clear to me - which is to help the elderly!

One can help the elderly in many ways and for me, it is easier to do it through product design.

## **Where do you get your design inspirations from?**

I remember this scenario at the beginning. I stepped in Mothercare at Harbourfront and I saw a lot of nice and fancy things for pregnant ladies and babies such as clothing, toys, equipment and prams. I realised this is because we are rich enough to be able to afford all these and to be able to enjoy a better lifestyle. In other countries, pregnant ladies probably just wear a XL t-shirt.

"I felt that the elderly market should have something similar as well. Items that are more design-focused and not just functional because the current product offering is really quite ugly and depressing."

The inspiration for the Quad stick also came from a rehabilitation store at the hospital. This customer walked in, gave a prescription slip to the counter and paid money for a quad stick. The entire process only took a few minutes so I thought to myself "Wow if only I can get that opportunity as well!" So, I decided to create the CarbonQuad Stick as part of my collection.



### **How did you apply innovation to your products?**

A good example is the CarbonQuad! It was meticulously designed through a lot of feedback from customers who wanted to save some money and continue using it even after their injuries have healed. There is no such product in the marketplace because the parts are normally welded together.

So, I came up with the idea of an interchangeable base. It was also designed to be lighter so that frail users can lift it easier. Plus, the base was made to be lower so that the user's foot will not get inserted accidentally below it.

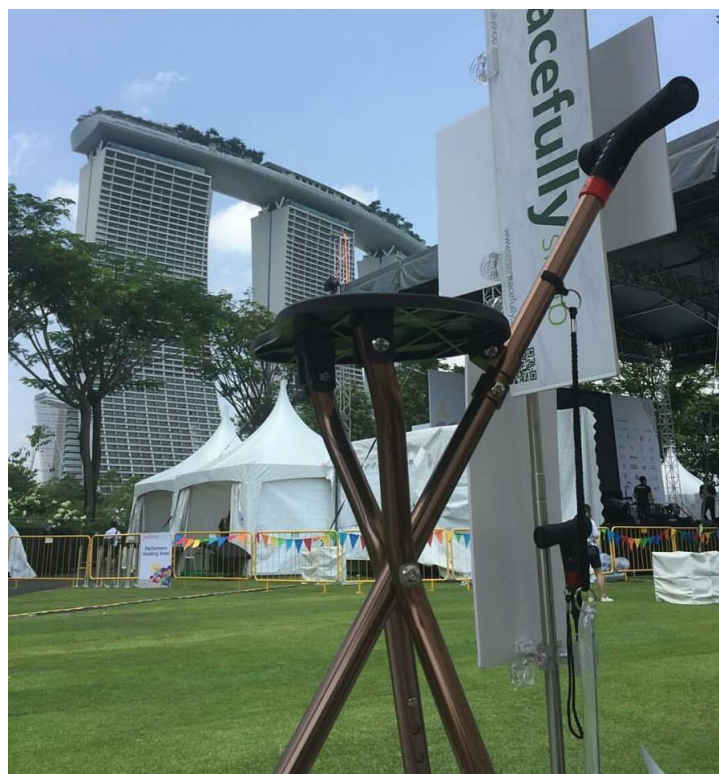
"Through design innovation, the compact size of the carbon quad also helped us to reduce costs on transportation and logistics. I got this idea from Ikea's flat packaging!"

## What are some of your main challenges?

Money was an issue as I did not have deep pockets so I chose the walking stick as a start because it is less expensive, less storage space is needed and it is something that the elderly will use daily.

I did not quite know what to do so I started off by observing elderly people more intentionally and volunteering at St Luke's Eldercare. By analysing the existing products available in the market, I marry the important functions and improved on the eventual design. This allowed me to cut a lot product development costs as well.

It is a lot of trial and error, product testing and improvisation before a fully functional and financially-viable product can be launched.



Being new to this industry, it has been very tough for me to get people to buy my walking stick, let alone test the product. From pressing unknown doorbells and facing rejections repeatedly to solving all sorts of problems being a one-man show, this whole experience has been very humbling for me.

Working in an MNC prior to this, I get to stay in better hotels and fly better airline carriers. The salary is good and there are many teams to support you. As an entrepreneur, I have to do every single thing my own.

"The most challenging role to me is not knowing what I do not know."

### **Last question. One advice for aspiring startups?**

Get a job first! A lot of new startup owners have big dreams but a lot of knowledge and skills are not taught in school. They may not be sufficiently prepared to run a startup without going to work in the corporate world. Also, money and the proper mindset is needed to sustain the business.

To gain some industry experience, understand the irrationality of consumers and how to fight big competitors is instrumental to your business.

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And work never stops for this busy entrepreneur. Currently, he is working on improving the design of the Smart Chair Walking Stick and adding on more thoughtful features so to enhance user experience

Tuan's vision to improve the lifestyle for the elderly is noble, his passion and efforts are commendable yet his perspective on life is humble. Society needs more inspiring role models like him.