Naked Truth:
Innovation is Not an Everyday Man's Job

ALEX LAU
Founder & Chief Executive Officer,
Anacle Systems
SCS Entrepreneurship of the Year 2017

Age: 44
Earliest Tech Experience: Playing with Pong Machines and the Apple IIe
Favourite Mobile Apps: Twitter, Wikipedia
Intrigued by: Titbits on Natural History and Scientific Developments
Current Pet Topic: Donald Trump
Secret Career Ambition: To be a doctor

The popping up of the words "disruptive technology" every so often coupled with wildly successful start-up stories have made innovation seem like an easy feat even for the average Joe. Contrary to this perspective, *The IT Society* **found out from our conversation with seasoned innovator Alex Lau, Founder and Chief Executive Officer of Anacle Systems, that the road to true innovation is filled with challenges and backbreaking work.**

Q: Question, **AL:** Alex Lau

FROM LAB TO MARKET

Q: Was coming out with the Starlight® Energy Management System (STARLIGHT) idea the hardest part?
AL: Every product idea starts with a pain point and it was not any different for STARLIGHT. We were working with a few real estate companies on another product and they shared about their challenge in managing energy costs. This was the time when oil and electricity prices were growing year on year, and constituted a huge part of operating expenditure. For these companies, a 1% saving makes a tangible positive impact to their bottom line. It was an obvious opportunity – there was a problem and a potential market; what we needed to do was to come out with the product.

Q: Was the subsequent research and development process equally smooth sailing?
AL: We set ourselves up for a challenge right from the beginning. Rather than positioning STARLIGHT as a system only for new buildings, we also targeted the product at existing buildings. After all, most mature economies, including Singapore, have many more old buildings than new ones. However, that also meant that we needed to work around existing building structures, retrofitting them so that we can accurately collect their energy consumption data and present it in a meaningful manner.

To top it off, STARLIGHT consists of both software and hardware. The hardware component requires high investment of time and money in rounds of prototyping, lab testing, sample fabrications, etc. Other factors contributing to this challenging situation include a lack of testing laboratory for power instrumentation and control equipment in Southeast Asia.

Q: What kept the team going despite these challenges?
AL: We believed in our product and what it can do. And true enough, the market reacted well to STARLIGHT when it was launched. There was much interest in it and we made our first sale quickly. To date, we have deployed approximately 30,000 units. That is quite a feat if you were to consider that STARLIGHT was only commercialised in late 2011.

Of course, this journey is also filled with its share of trials and tribulations. For example, in the early months of launch, we had to deal with many incidents involving lightning protection, and proper

installation and usage. Often, these incidents not only tested our customers' confidence in us and our product, but also caused a strain on our resources. Because fixing the problems often entail shutting down the whole building before replacing the faulty parts – compensating every tenant in the process – or waiting for business hours to be over before commencing repair works. The upside of going through these challenges is that we have become very disciplined. Today, our factory in India puts each unit through 72 tests to ensure a product lifespan of at least 15 years.

THE MAN BEHIND THE PRODUCT

Q: What personal beliefs have guided you through this entire journey?
AL: There are two beliefs that I have held closely for most parts of my career. They may seem contradictory, but they actually make a lot of sense. The first is, "nobody owes me a living or my success." It is a keen reminder that if I want to make it, I have to be the one to make it happen – hard work and all. The second is actually

> "It is tough to come up with something truly innovative so not being able to come up with one doesn't mean you are less worthy. Some people are lucky and make an instant hit, but for most, the climb is steep – so just be prepared that you are likely to be unsuccessful rather than successful. But never give up!"

the same belief that makes the US great – an immutable belief that everyone is destined for great things and all is going to end well no matter what. This manifesto conditions one to be positive and forward-looking regardless of the circumstances.

Q: Do you have a most admired tech personality or company?
AL: My most admired company is 3M. All the little things their products do for us, we barely even realise, but they take care of all the little life inconveniences and make a difference to our lives. Imagine life without post-it notes? Cellophane tapes? Or sandpaper? Not just that, they have built a strong culture of innovation. And they continue to do that sustainably over a hundred years. That is amazing. It is my wish that Anacle can be like 3M – improve people's lives in little ways that they take for granted.

On a personal level, I have deep admiration for Steve Jobs' product vision and Eric Schmidt's management capabilities. The first is legendary in creating groundbreaking products that people want while the latter had transformed Google from a start-up to what it is today, overtaking the market leader – Yahoo – along the way. They are both inspiring and amazing in their own ways.

A Guide to the
INTERNET OF THINGS
How billions of online objects are making the web wiser

The Big Data Bang

2006	**2 Billion**
2015	**15 Billion**
2020	**200 Billion**

That will be around
26 SMART OBJECTS
for every human being on Earth.

A Spectrum of Smart Stuff

Smart Dust
Computers smaller than a grain of sand can be sprayed or injected almost anywhere – to measure chemicals in the soil, or to diagnose problems in the human body.

An Entire City
Fixed and mobile sensors dispersed throughout the city of Dublin are already creating a real-time picture of what is happening, and will help the city react quickly in times of crisis.

Where the Wireless Things are – and Why

Business/Manufacturing 40.2%
Real-time analytics of supply chains and equipment, robotic machinery

Healthcare 30.3%
Portable health monitoring, electronic record-keeping, pharmaceutical safeguards

Retail 8.3%
Inventory tracking, smartphone purchasing, anonymous analytics of consumer choices

Security 7.7%
Biometric and facial recognition locks, remote sensors

Transportation 4.1%
Self-parking cars, GPS locators, performance tracking

Sources: IDC, Intel, United Nations

Sources: Everythng.com, NYTimes.com, TechCrunch.com, GigaOM, McGill University, NBC News, University of Washington, Venture Beat

Sources: Strategy Analytics M2M Strategies advisory service, McKinsey Global Institute, NYTimes.com