

JULY 2020

The Newsletter of the Institute of Inventors and Innovators

III – A non-profit organization. A home for inventors. Run by inventors. Supporting inventors.

III – South Africa Business Award Winner – MEA Markets 2019

<https://www.mea-markets.com/latest-issues/>

Face-to-face **Eureka!MEET** sessions are still on hold.



Our next **Pitch it to the Panel™** is on **25 July 2020** so be sure to book your seat – feel free to communicate, telephone or email – we are open!

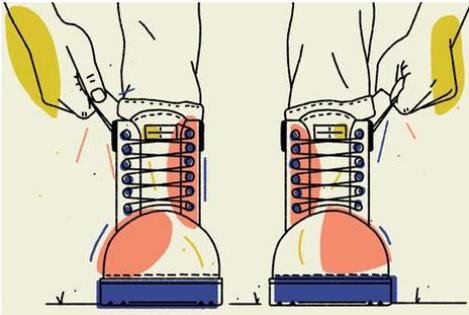
Main ideas in this issue:

- ❖ Bootstrapping? Is it the business model for you?
- ❖ 3 Organisation and Time Management tips for Inventors.
- ❖ Band Aid of the future says MIT.
- ❖ Youth Inventors.
- ❖ When last did you visit the website www.iii.org.za ? Your comments are welcome!

Is the Bootstrapping business model for you? It's all about Self-reliance.

To '**pull yourself up by your bootstraps**' is an English idiom that essentially means to improve your situation or succeed or elevate yourself by your own, unaided efforts, and with little or no outside help.

When used in a business sense, the term is familiar to entrepreneurs and others wanting to 'do' anything without external funding or sometimes, practical help



So BOOTSTRAPPING essentially means starting a business from scratch and building it up with minimum (or no) outside investment.

For the inventor, the concept can also be used in any of the invention process steps or any part of bringing an idea to fruition.

They say that if you are starting a business for the first time, then it's better to bootstrap. There are many reasons for this advice, but by bootstrapping a business, you can learn everything about start-up finances, costs, budgeting, manufacture, marketing, operating and selling ... and a whole lot else in between. Besides, confidence is the key – believing in yourself and your invention will make you focus on successful actions. And every positive action you take means more profits.

An entrepreneur does more than anyone thinks possible with less than anyone thinks possible.

Step-by-step invention and start-up funding has always been (and it seems will always be) a problem for inventors and innovators so let's look at this business model in more detail. As already noted, you can use this thinking to help you get from step to step while you are following the invention process if you are still on your way to producing your 'idea'. You need to know and have more than just an idea.

With a viable product **how do you start** if bootstrapping as a business model is a must?

- ⇒ First off, starting and building up a business with minimum or no outside investment is hard work.
- ⇒ You need to understand how a business is run, so speak to business owners, research, read, observe, go 'you-tubing', keep an open mind, study success stories, develop a growth mind-set.
- ⇒ Take stock of your resources, be very clear about how you will 'spend' what you've got.
- ⇒ Know and understand your product. Identify and understand your customer.
- ⇒ start small. **Grow** into the spaces left behind, deliberately and surely.
- ⇒ Be creative. Be a problem solver. Take action quickly.
- ⇒ Generate profitable income from customers quickly; be financially disciplined.
- ⇒ Don't focus on personal profits initially, the time for profits will come.
- ⇒ Learn as many skills as possible then pick team members who complement your talents. You can't do everything and be everything, do what you're good at.
- ⇒ Make money from Day One. A bootstrapped business has no choice. There's no cushion in the bank and not much in the pockets. It's make money or go home. To a bootstrapped business, money is air.
- ⇒ Keep your word.



Remember: You will never know it all. You will learn something new everyday. Just get on with it.

Like other business models, bootstrapping has its own pros and cons.

Some PROs of Bootstrapping

- Investors can't influence or make demands on your business. Bootstrapping means you can be your own boss, It's 100% yours.
- You don't have to worry about equity, you don't have to give away shares in your business as a price to be paid for being funded.
- You can take risks, make your own decisions, and do things your way. With an investor you cannot make decisions without the 'approval' of the board or other interested parties.
- You can make quick decisions, change direction, pick and choose whatever and adapt without dragging along the 'mini' bosses.

Some CONs of Bootstrapping

- If you need them, you have to search for mentors. You won't get access to the help of start-up or financial or marketing experts etc. that often comes as part of the package with investors in or funders of your business.
- Your growth will be relatively slow. Bootstrapped sme's don't grow as fast as funded start-ups do because they have fewer resources, things may take longer to develop.
- You may have to hire less experienced (and therefore 'cheaper') talent. Maybe you can offer shares in the business or sweat equity' in lieu of paying full wages.

Surprisingly, many of the hugely successful companies like Microsoft, Dell, HP, Craigslist, MailChimp, GoPro and Apple were once bootstrapped start-ups. Steve Jobs and Steve Wozniak apparently bootstrapped **Apple** by selling their car and calculator. Today Apple is worth in excess of \$640 billion.

Australian Nick Woodman, founded **GoPro** when saw a gap in the sports camera niche while surfing. He bootstrapped the business until 2012 when a tech firm Foxconn injected \$200 million into his business. Two years later, the business was valued at more than \$2 billion.

MailChimp was founded in 2001, the product developed as the owners used their own funds to keep it going. It now it has over 12 million customers and last year it made more than \$400 million in profits.

"When building your business, do not be impatient if your progress seems slow. Do not try to run faster than you presently can. If you are working hard, serving your customers well and using your resources optimally, you are making progress whether you are aware of it or not." Jake Abrams, Owner, Mini-Business Coaching.



"A bootstrap business needs to be profitable right away or within a matter of months – not five years along the line like other businesses."
Stephen Hart, CEO Cardswitcher



"Think carefully and time it properly and don't take money if you don't know what you will do with it."
Pere Hospital, Co-Founder Cloudways



"Your early customers are the most precious asset you have."
Tyler Rooney, Co-Founder, Format



"Worry about every dollar you spend before (and even after) you're profitable."
Chris Wantstrath, CEO GitHub



"Have patience as there will be times you will want to quit but don't. It takes time to build a business."
Safwan Khan, Founder, Startupily.



"If everyone starts giving away their product for free (to get future business) in the end, there will be 0 customers and 0 revenue."
Devashish Mamgain, Co-Founder Kommunicate



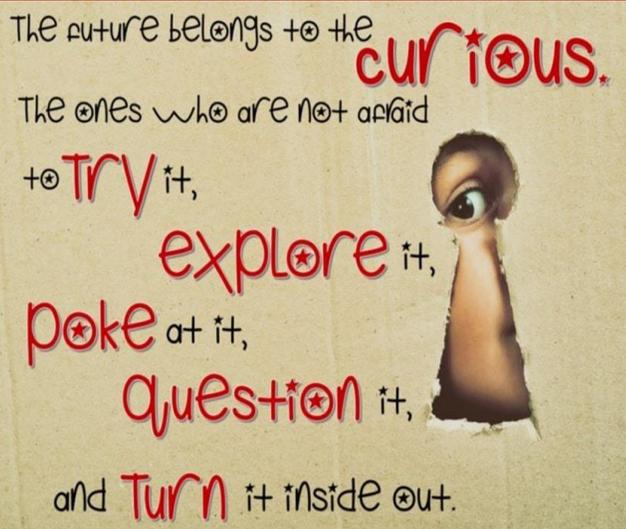
"Bootstrapping means crunching every possible number and sticking to a very tight budget."
Deborah Sweeney, CEO, My Corporation.



"In order to get the most out of bootstrapping you need to learn to become an expert in scarce resource utilisation."
Bryan Johnson, Founder Baintree, OS fund and Kernel.

There is so much more to bootstrapping than what you have read above but essentially, this is it – it's all about using your own money, frugal spending, good business habits, self-discipline, self-reliance and consistency. Perseverance and optimism are important too.

PITCH IT TO THE PANEL™



**Next PITP™ is set for
 25th July 2020**

EACH OF OUR PANELISTS HAS EXPERT KNOWLEDGE TO IMPART AND GUIDANCE TO OFFER TO AN INVENTOR WITH AN IDEA OR PRODUCT THAT NEEDS TO BE DEVELOPED.

And they will do so at the next PITP™ meeting. You should book now so that you can be sure of a seat, places are limited - make sure one of them is yours; besides, you need to move your project forward! Go to www.iii.org.za for more information and your booking opportunity.

"I don't need time. What I need is a deadline."

Duke Ellington, jazz pianist, composer, and conductor (1899-1974)



3 Organization and Time-Management Tips for Inventors.

Use these 3 ideas to add to or support what you already know!

Time Management is a big factor for inventors. Remind yourself of your priorities each day then keep on starting again like we all do.

● **Prioritise the needs for your Invention.**

Developing your invention idea needs hard work and dedication and comes with the responsibility of staying organised and active. This is not easy for inventors – a creative mind can often mean a messy workspace and a disorderly diary. What are your needs? What do you need to prioritise? There are many steps but put them into a sensible order. Maybe you need 'proof of concept' which may include creating a prototype, which first requires a definition or a drawing (CAD?). Maybe you need to come to PITTP™, get initial legal advice on patents etc. There is more to say here, but only you know where you are in your own process with your idea. Funding is always an issue – but understand, no-one will invest in just an idea ... you have to work it first.

● **Keep an Inventor's Notebook.**

You ought to keep track of your progress right from the beginning. Famous inventors like Da Vinci and Edison did it then, smart inventors do it now. An inventor's journal is a

confidential place to marshal your thoughts, record your ideas and concepts, document your progress, and keep you organised.

● **Establish and maintain a filing System**

As an inventor, your paperwork, drawings, email (etc.) needs to be dated, saved and filed somewhere and somehow. It is important to build a 'document safety system' prior to beginning your inventor's journey. There'll be no searching for lost information and you will have proof that the ideas are yours. A lawyer passed on a great tip – "print out and file everything, it'll keep you sane if you need to refer to anything!"

Every inventor and every idea is different (!) so don't be afraid to mix things up, depend on what works best for you or think of new ways to keep yourself organised. The thing is just keep it up ... consistency is a key.



This well-known matrix is useful to keep reminding yourself often about using that clever question **'What's the best use of my time right now?'**

Membership Renewals

This is a reminder that all members **who have not renewed their fees** since March 2019 should do so. As



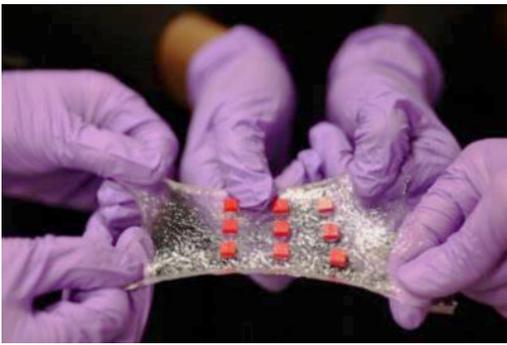
a non-profit organisation **we are dependent on our loyal members** to sustain our efforts to communicate and promote the relevance and importance of what the Institute does. Since this will **be the last time you will need to renew** (you will remember the Executive decision to offer LIFETIME membership to all who joined from March 2019), you

will be supporting invention and innovation by paying R350 this one last time. Please go to the website to renew and update your details and as soon as all is in order, a Certificate of Membership will be sent to you. The **membership number** that you will be given will **enable you to access members' only** areas of the website (and other services). Are you a member and **not yet received your membership certificate?** Let us know and we'll get one to you pronto.

Become a Member!

There are a lot of very bright people around. If you are not a member – JOIN NOW! It's easy – just go to the website, visit the membership page, read all about it, fill out the form and submit it from there.

The sticky, stretchy and smart 'Band-Aid of the future'



In 2015 researchers at MIT designed what they referred to as 'the Band-Aid of the future' -- a sticky, stretchy hydrogel that includes temperature sensors, LED lights and drug delivery channels. The dressing releases medicine in response to body temperature changes, and lights up if the medicine is running low.

Its stretchy form means it can be applied to flexible areas like elbows or knees, moving with the body. The team was able to embed various electronics into the dressing -- including conductive wires, semiconductor chips, the aforementioned LED lights and temperature sensors which could keep the

electronics intact at the same time. They also found that the research using hydrogels revealed other medically-related uses.

Hydrogels are traditionally intended for bonding to hard metals like gold, aluminium and titanium as typically, these metals are brittle and not stretchable. During the course of their research, the team fitted a titanium wire in the hydrogel, forming a transparent conductor that when stretched multiple times was able to produce constant conductivity. They also embedded several electronic components inside the gel to create a "smart dressing" -- including temperature sensors and drug channels.

As a result of this research they found that even when stretched extremely taut, the dressing was able to monitor temperature and administer drugs consistently.

The team hopes their dressing could be used immediately to treat burns and in the long term, they hope hydrogel could be used for other health-related uses ... such as delivering tiny electronics inside the body, such as glucose sensors or neural probes. Research is on-going. Source www.wired.co.uk



A Teen scientist's invention that helps wounds heal

Working out of her garage, **Anushka Naiknaware** designed a sensor that tracks wound healing, becoming the youngest winner (at age 13) of the Google Science Fair. Her clever invention addresses the global challenge of chronic wounds, which don't heal properly due to pre-existing conditions like diabetes and account for billions in medical costs worldwide. Join Naiknaware for just 7 minutes as she explains how her 'smart bandage' works -- and how she's sharing her story to inspire others to make a difference.

https://www.ted.com/talks/anushka_naiknaware_a_teen_scientist_s_invention_to_help_wounds_heal/transcript?language=en

In case you missed it



May was Africa month and here is a story that shows that innovation and invention has no age limit or geographical boundary. **Nine-year-old Stephen Wamukota** invented a handwashing machine and is amongst the 68 others Kenyans who received state commendations for innovations and/or assisting Kenya to deal with Covid-19. Helped by his carpenter father, he used wood to suspend a jerry can of water and created a pedal which dispenses water and soap thereby avoiding hand contact. He thought of this because he saw that available public places to wash hands were exposing people to the virus through contact. Hopefully he will keep on inventing!


 Totem pole for innovators and others
INVENTION
 harnessing your ideas
 CREATE something TODAY
 See the world come alive in your hands. Start now.

FOCUS
 SOUTH AFRICAN INGENUITY
 AT ITS BEST - AVAILABLE AND
 JUST WHEN YOU NEED IT


 A world that's the lucky recipient of ingenious, useful life-saving solved problems

PATIENCE
 Finest quality offered to smart customers demanding the best
 DOES MAD MARTHA'S METHOD MAKE MORE WITH LESS ... YES


 Inquisitive Curious
 Relentless Researcher Ready
 and Rearing to Go

PERSEVERING

 CoMMon SeNse
 Have a chocolate or a piece of cake
INNOVATIONRULESOKAY
 Geeks United
 Oh. So does that mean I have to start again?

Coping is as Coping does

Use these 3 strategies, they may help you cope with any fallout from Covid-19.

Everyone, absolutely everyone has been affected in one way or another by this dreadful disease.



It's easy to get caught up and perhaps overwhelmed with what's going on in the world right now. Many people seem okay, but others feel lonely. Helpless. Sad. Down. Worried. This is not to say that we should shut out worldly concerns, but with all of the volatility going on globally (and here is South Africa) it's important to choose carefully what we allow into our minds. Stress is sneaky.

What we can do is make constant small changes that will keep us (feeling) safe, (feeling) sane, in touch with *and* in charge of our lives.

Enjoy the beauty of life and in this glorious country, we are surrounded by lot of beauty ... that of nature, of spirit and of sense. Now, more than ever, we need to care for ourselves.

Dr. Lucy Hone builds RESILIENCE among individuals and organisations for as she says "Tough times are inevitable ... adversity doesn't discriminate. If you are alive, you are going to have to, or you've already had to, deal with some tough times."

Sorrow and tragedy happens to us all and nobody can say just how any one person will cope. Life happens ... and then there's Covid-19 that swept in, essentially unannounced, and caught everyone by shocking surprise.

A recent email received asked a poignant question ... 'How is a person supposed to invent stuff when you can't pay your bills because your business has closed and you have no income?' Life is pretty scary right now for many and saying 'Chin up old chap' would be stupid and useless.

In this TED talk, the good doctor offers 3 secrets RESILIENT PEOPLE can use. What she says makes sense. Perhaps what helped her then can help anyone now.

https://www.ted.com/talks/lucy_hone_3_secrets_of_resilient_people?utm_source=newsletter_daily&utm_campaign=daily&utm_medium=email&utm_content=button_2020-06-15#t-886975

Dear reader, we wish you, and all in your circle, good health and a positive spirit in this challenging time as we count down the phases to 'normalcy' in South Africa. It's likely not helpful to remind you that you're *not* alone, but we do anyway.

'I could not tread these perilous paths in safety, if I did not keep a saving sense of humour.'

– Horatio Nelson



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The Next Eureka!NEWS will be out by 5 August ... look out for it. Greetings to you all.

In August we'll feature Licensing a simple Idea ... and other stuff.

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As you know the III is a member of IFIA - the International Federation of Inventors Associations.

IFIA | is a non-profit organization aiming to disseminate the culture of invention and innovation support inventors transfer technology and establish co-operation with the related organizations. The



International Federation of Inventors' Associations website provides information on the broad range of activities undertaken by the association. **IFIA** aims to disseminate the culture of invention and innovation, improve the status of inventors, promote cooperation among the inventor associations and contribute to the idea development. IFIA cooperates closely with international organizations of importance in the realization of its objectives.

Established in 1968, the **IFIA** headquarters are in Geneva, Switzerland.

With Covid-19, IFIA has temporarily closed their offices, but members can stay in touch with them by email.

IFIA WISHES EVERYONE GOOD HEALTH.

Got something on your mind? Contact us on info@iii.org.za

