

NOVEMBER 2019

The Newsletter of the Institute of Inventors and Innovators

III – The home for inventors. A non-profit organization controlled by inventors, supporting inventors.

III – South Africa Business Award Winner – MEA Markets 2018

<https://www.mea-markets.com/2019-the-institute-of-inventors-and-innovators>



For your diary ...

- ❖ The date for our monthly Eureka! Meet ... set it aside because attendance is always worthwhile. November 13th is our last meeting for 2019... what an interesting year it's been! **The 2019 AGM – quick and informative and be held after the talk ... there is some important and interesting business to be covered.**
- ❖ The first EUREKA! MEET will be on January 15th 2020... pencil it in now, the subject will get you thinking ... "Protecting your Intellectual Property - PATENTS"
- ❖ **MAKE A NOTE NOW! The first PITTP session in 2020** for inventors will be held on 29th February. For expert and specific advice you'll not find a better forum!

Report back – October Eureka!MEET – Prototyping and Architectural Modelling

Okay – so what does architectural modelling have to do with inventors and inventions?

Actually quite a lot! To start off, some words on prototyping will not go amiss (and it will be useful as you read to keep one of your ideas in mind). Of necessity one has to generalise because there are so many ideas and products and services out there and there is no 'one size fits all'.



There are three essential ways a prototyped model can help your product succeed.

- ▶▶ A model/prototype brings your idea to life or gives it context and you'll be able to demonstrate it;
- ▶▶ A model/prototype is a way of proving your concept works and checks its viability (for as you are making your model, new problems and solutions present themselves, mistakes can be corrected) and lastly,
- ▶▶ You can make the necessary adjustments and

improvements to it to ensure the 3 p's: precision, perfection and practicality. Creating a practicable new product demands your full attention, otherwise you may just get stuck with an eternal "I've got this good idea" or a set of 'old' building plans that are no good to anyone.

Prototypes serve different needs and costs will vary depending on materials used and more but it's up to you. It doesn't really matter how you do it or get it done, just remember that the value of your prototype will manifest itself several times during the invention process.

A prototype can help you to file a patent, find funding, make cost-effective design decisions and demonstrate how your product works or solves a particular 'problem'. Not all prototypes are made of steel and moving machine parts. One of the ways could include model building either of the invention itself (plastic bricks? New flooring?) or placing your invention in context (garden landscaping or perhaps a road safety concept or government public service).

Paul Raggett is a leading expert architectural model builder. To start off he displayed an array of photographs and illustrations of his work as well as showed two examples of some of the promotional work he's done such as: a miniature commemorative Nelson Mandela Bridge (built to scale and precisely laser-cut in steel) in a Perspex presentation box; or a steel crane produced in numbers for the G5 Construction group. The results were impressive. The scale, the precision, the reality was amazing. His building models and dioramas are all built to scale – and the best tip here he said “to bring it all into line is to establish the size of ‘people, cars and trees’ that you use and the rest will fall into place.”

Paul spoke of having the right tools and using the right materials for the job at hand. Understanding the properties of each is important too – such as which glues work on what products, what finishes are best, what paint to use and when ... of course there was more.

His brief for our Eureka!MEET was to show us how he does what he does and to see how we could use the information to build a prototype using his methods and products. Of course it was impossible in the time available (he is a master practitioner with an international reputation and some 30 years' experience) – but he demonstrated some simple actions using ABS Styrene Plastic, a cutting mat, a scalpel, the right glue and a block sander.

He was generous with his information – he gave the names of the suppliers he uses and while there are many sources out there, the two main ones he mentioned were Esswex and Maizeys. He also outsources specialist skills to the specialists. Doing what he does this makes sense but if an inventor is making a prototype (and it works as it should do) then doing it yourself or with necessary advice should be fit for purpose.



The pics alongside are of the model Paul built of the [Burj Lake Hotel Dubai](#). The interpretation of the plans, the detailed crafting of the building, the vegetation and the depiction of water are quite remarkable, all done on a scale of 1:200.



Thank you Paul for a delightful presentation full of interest, information, questions answered, and ‘the proof is in the pudding’ talk!

PAUL RAGGETT ALSO INVENTED THIS ECO MINI BIN

If you are a non-smoker then you know how 'not nice' it is to go anywhere and be faced with an overflowing ashtray, or to see cigarette butts flicked into the garden, stamped out just any-old-where, at events and functions, on the beach, on a hiking trail, at the game reserve, on the golf course, at public picnic and braai places, when fishing, in parks ... in fact anywhere you share public space. 'NO SMOKING' signs and banned smoking places abound but - the butts prevail!

And if you *are* a smoker, and if you care about what you do about smoking (with manners) and butts – very often you will find that there are no proper facilities offered for their disposal anyway. Let's face it - many people just don't like smoking, smokers, second-hand smoke or smoking around children and ... the list just goes on.

So what can you do?

You can make a plan somehow but the easiest thing to do would be to purchase an ECO MINI BIN. This product was designed with cigarette butts in mind, but it is so useful for a lot more little bits and pieces that plague us. Think about the spent chewing gum stuck under public tables or under your

shoe! And then there are sweet papers or bottle tops or toothpicks or ear buds or plastic whatevers and more.



The ECO MINI BIN is cute, hand-sized, has a snap hook clip for belts or golf bags or car keys etc. and is useful even if you do not smoke. It is heat resistant, portable, and easy to clean. Besides being very useful it's great too as an anti-pollution solution like 'not littering made easy' – and they retail at around a reasonable R40 each.

For such a seemingly simple item, the inventor had to jump through a lot of expensive hoops before he saw it come to market. The first prototype was a loo roll and half a ping pong ball stuck on one end with a piece of masking tape. From there on all sorts of other questions had to be answered. Optimum body shape, triangle flip up lid and catch, twist off top, the grate for extinguishing cigarettes and then the material used to make it. It had to be light weight and 'green' and able to withstand the heat of hot ash. Paul learnt many lessons along the way as improvements came with every iteration. The detailed technical drawings meant he could choose the shape he finally wanted and once this had been done other choices and decisions became easy like manufacturing in earthy eco-colour combinations.

Attempts at having the product patented were expensive (around R35 000) but because of the wording being too generic no patent was awarded; so Paul resorted to getting a trademark for the name Eco Mini Bin. By far the most surprising cost was the tooling for its manufacture – some R225 000! He had the interest, involvement and sponsorship for this expense, but not everything came easy.

He shared some of his stories with us - like selling 2000 branded ECO MINI BINS to one of the leading cellphone networks with his cell number, belonging to the main rival, imprinted on the bottom! Or when he was speaking to the CEO of an international holding company producing multiple brands of cigarettes whom he met on the golf course, and just as the biggest of big orders was about to be signed – legislation changed and tobacco products could no longer be advertised. The unsigned order remained so and that particular 'dream' came crashing down around his ears.

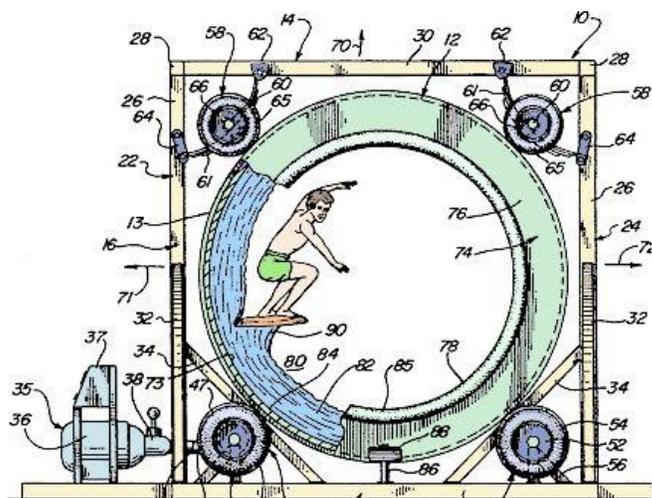
Not all inventors are cut out to be business people and Paul realised that he was one of these. Besides, at the time, the 25 odd years he had invested in his successful architectural model building consultancy beckoned.



He sold the design and all rights to the product and went back to using his imagination and talent where he belonged ... building models and helping architects see the errors of their building designs, easily picked up when you have to start building reproductions.

When asked whether or not he regretted his decision to sell his invention his answer was an emphatic **"No, I'm passionate about what I do as a model builder – it's deeply satisfying to overcome seemingly insurmountable 'building' challenges, and it's a highly rewarding way of spending my time."**

The Surf Donut



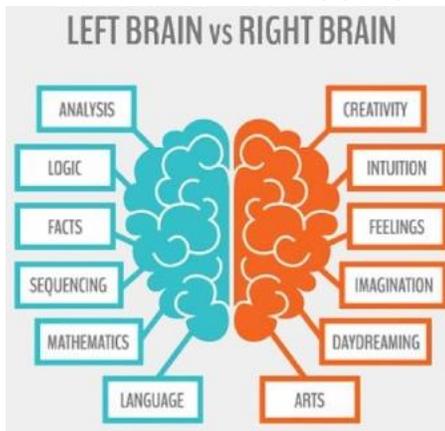
U S Patent issued 1995

To be able to surf you need some surf ... but what if you are landlocked and there isn't an ocean or a 'Sun City beach' nearby? What does a wannabe surfer do? Well, this inventor brainstormed and produced **the Surf Donut**, a giant spinning drum full of water that rotates its way into creating artificial surf and waves. The diagram doesn't show the depth of this or how a surfer enters the donut to catch said waves. Nevertheless, the U S patent office awarded a patent for the idea in 1995 so there has to have been a 'compelling' case made in the descriptive notes made by the inventor/s. One wonders if anyone else picked up on the idea to make any improvements?

Come on all ye of landlocked status – do something!

Eureka!MEET – LEFT BRAIN vs RIGHT BRAIN.

Our next monthly meeting is on **13th November 2019** so join us!



We have all heard about this fascinating subject some time or another and as INVENTORS we need both sides of our brain to work in tandem ... not so easy when you are stuck with a really dominant one side. And then LEFT and RIGHT side working throughout the body means a multitude of options for the person who can tap into what they are ... **Right Eye and Left foot** people approach problems and find solutions in different ways from **Left eye Right foot** people.

Ah yes, and there is so much more!

Join us when specialist facilitator **Claudina Hafenschner** discusses the phenomenon of using the whole brain as INVENTORS must, as well as giving tips on how to harness you whole brain to achieve what you should.

You are in for a treat – don't miss it!

The venue is 'Made in Workshop',

65a Maria Street, Fontainebleau –Tel: 083 269 2195 – speak to Henry.

Park in front of the building. Take Republic Road towards Randburg, Maria Street crosses Republic Road just south of the Rabie Road junction or click [Google maps](#)

Members and visitors are welcome!

We look forward to seeing you at our meetings, feel free to bring a guest.

Please book as space is limited. There is no charge.

THERE IS NO Eureka!MEET IN DECEMBER AS WE CLOSE FOR THE HOLIDAYS!

Our next monthly meeting is on Wednesday 15th January 2020 for a presentation entitled 'Protecting your Intellectual Property - PATENTS'



If you don't know who TED is then you're in for a big treat!

TED is a non-profit devoted to spreading ideas, usually in the form of short, powerful talks (18 minutes or less).

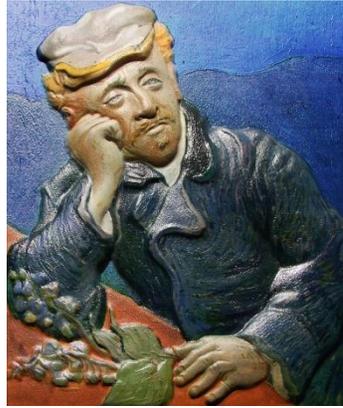
There is so much available when you go to **TED** and because of the amazing content each Eureka!, starting from this month, will feature a **TED** talk that you may find interesting – so go ahead, it's November... follow the link and **BUILD A JET SUIT** with Richard Browning.

https://www.ted.com/talks/richard_browning_how_i_built_a_jet_suit?referrer=playlist-the_inventor's_corner



COMRADES - 94 races run. First race 1921. 2019 race run on June 9. 5h30 am to 5h30 pm. Up- run, Durban to Pietermaritzburg, 87km. First prize R500k for both mens' and ladies' entrants. First 10 runners receive gold medals and cash prizes. Another R500k if a record is broken. R300k for the first South African runner in. Over 10 nations represented. 1808 international runners. 17,268 men entered. 4,357 women. **Refreshments:** 30,350 litres Coke. 430,000 paper cups. 480 000 energy drink sachets. 2 million 'Thirsti Water' sachets. 32,640 Mageu Number 1 sachets. 9 tons of bananas. 4.5 tons oranges. 500 kg energy biscuits. 500 kg Salticrax. 20,000 race food energy bars. 1.5 cooked potatoes. Up to three months to recuperate? Don't you wish you'd invented the 'Thirsti Water Sachet?'

Many museums now have “touchable” versions of art for blind people.



Can you imagine not being able to see? We take so much for granted until you read about a smart and practical idea that has led to solving something most take for granted – being able to see magnificent works of art.

Ideas for INVENTION or INNOVATION on a current available product are about solving problems. Sometimes all it

takes is an understanding of things outside our experiences to realise something new.

For art appreciation we are taught to look for colour, composition, light and subject matter but how can painted art be appreciated by someone blind, other than by listening to audio descriptions?

We actually use all our senses ‘to see’ and now many museums across the globe have touchable art. Rendering paintings into fully textured 3-D models of the original as well as producing famous sculptured works, also 3-D, means that art is revealed to the blind

or partially-sighted in ways never before considered. The brain is an amazingly adaptable organ and the study of

neuroplasticity shows that touch stimulates the visual cortex.

Blind people can now touch a painting, perceive aspects of it by using their other senses and ‘see’ something that was not possible to appreciate in quite the same way before.

And imagination and creativity just start to fly when tipped off in the right direction! It is not only the old masters that are made available in this tactile format. Many modern works of art have been produced to be touched and savoured as well as other subjects for general educational uses.

It seems too that by extending your thinking (and research if you choose to do any) you will find out that people who were not born blind but who lose their sight during their lives (for whatever reasons) forget many memories because they can’t refer to or be reminded by the visual imagery of photographs and the like. There are now 3-D companies who are turning old family photographs into real objects so the blind people can ‘see’ those forgotten moments with their fingers. This way they are reminded of and can recall sounds, emotions and ‘things lost’ by touch. What a great gift that must be for Gran and Gramps!

For someone enterprising, this could be a good entrepreneurial business idea for South Africa.



ENJOY THE BENEFITS OF MEMBERSHIP



An **executive decision** was taken by the Trustees of the Institute that as from March 2019 (the beginning of the financial year for III), members who had joined the Institute before this date would **need to renew** their membership just once more and on doing so, will be awarded a LIFETIME membership of the III. What this means is that **on renewal, there would be no future fees due** or renewable on an annual basis as has been the practice in the past. People who have joined since March 2019 have paid R350 and are LIFETIME members.

There are two categories where membership is free. The first is the **YOUTH** category which includes anyone below the age of 25. Once a person reaches 25 years old, membership fees will become payable – and again will be paid once only for LIFETIME membership. The original YOUTH certificate issued will expire and a LIFETIME certificate (and new number) will be issued pending payment.

The other is the **SENIOR** category (63 years plus) where new members joining will be awarded a LIFETIME membership at no charge. If you currently fall into this age group then you will not be required to renew your membership with payment.

For **ALL** categories, you need to go to the website to **UPDATE YOUR DETAILS** and if you fall into youth or senior sections provide proof of age (send a copy of your ID to info@iii.org.za)

Soon there will be MEMBERS ONLY areas of the website and extra member benefits for events and similar. The entry code for you to access these will be your unique membership number.



PLEASE HELP US TO HELP YOU! Our membership drive for renewals and new members just means that the Institute will be able to do more for you so – DO IT SOON.

The chief function of the body is to carry the brain around. Thomas Edison

VALUE PROPOSITIONS

What is a Value Proposition? A value proposition is a statement about your company or service or product that describes the **value** that will be delivered to your customer if they use **your** services (product etc.) and **not** those of your competitor.



It also reflects the perceptions your customers have about how they access and experience what you have to offer. A VP is short, succinct and focused.

To Write a Value Proposition - Identify all the benefits your product offers; describe what makes these benefits valuable; identify your customer's main problem; connect this value to your buyer's problem and differentiate yourself as the preferred provider of this value.

You use your Value Proposition if you meet someone in the lift; when speaking to funders and manufacturers and other persons of interest; on your website; in all social media, in fact anywhere or anyhow you need to so that you can promote what you have done, achieved and have to offer!

the **tax**
shop
ACCOUNTANTS

Contact Us
Marissa Burness
Cell: 060 567 0225
Tel: 011 609 8509
bedfordview@taxshop.co.za
www.taxshop.co.za

MAKE LIFE EASIER

**THE NEXT EUREKA! Newsletter will be out by 5 December ... look out for it.
Greetings to you all.**

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The Institute of Inventors and Innovators

18 St. John Rd. Houghton 2198: info@iii.org.za 011 487 1536 www.iii.org.za

Inventors working on behalf of Inventors



Got something on your mind? Let us know.

Send an email to info@iii.org.za

