

Inventique

The newsletter of Wessex Round Table of Inventors November 2003

Inventors' website is launched this month

WRTI HOSTS A GROUND-BREAKING, ONE-STOP INNOVATORS' WEBSHOP

WESSEX ROUND TABLE of Inventors is delighted to announce the launch of its website: www.wrti.org.uk

Described as "the most informative website for inventors in the UK", the site hosts pages of crucial information for innovators seeking investment, patenting, intellectual property, manufacturing and marketing advice.

In addition, links to local, national and international inventors' clubs and associations provide worldwide networking opportunities.

By logging-on to the address www.wrti.org.uk, inventors and other innovation professionals can easily access dozens of related sites (such as Business Link Wessex or The Trevor Baylis Foundation) and

read NESTA's Inventors Handbook (which contains excellent advice for anyone seeking to take their initial idea to market).

Fast, simple and user-friendly

"The website is focused on the practical needs of inventors," said Mike Overy, WRTI's webmaster. "It is intended to act as a fast, simple, user-friendly one-stop shop, linking innovators to the best and most useful information available."

It is possible for visitors to the site to access WRTI membership information and to download or subscribe to *Inventique*, which is emailed to over 850 inventors, innovation professionals, businesses and universities at home and abroad.

"Future enhancements might include downloadable membership

packs, a discussion forum, a search capability and members' profiles," Mike enthused.

Formed by and for inventors, innovators and entrepreneurs (from lone beginners to experienced professionals), the WRTI acts as a catalyst for ideas and a forum for like-minded individuals to meet and share views. It also serves to stimulate, encourage and promote the development of members' innovative concepts or products. ■

www.wrti.org.uk

WRTI diary date

WEDNESDAY 10 DECEMBER

Professor Phil Nelson hosts a club visit to Southampton University's Institute of Sound and Vibration Research

www.wrti.org.uk

The website of Wessex Round Table of Inventors

"THE MOST INFORMATIVE WEBSITE FOR INVENTORS IN THE UK"



VIEW FROM THE CHAIR

THE OCTOBER MEETING was, in my view, one of our best ever. We had a superb speaker – Peter Milner – who managed to explain the intricacies of continuously variable transmission (CVT) systems in a manner that even a Welsh naval architect could understand. Peter also gave us an insight into the difficulties involved in dealing with large (in his case, Japanese) corporations; it was very revealing.

A number of other happenings occurred that evening. Bob Hudson of Vision Limited gave us a preview of his Smart Glass project, where the introduction of an impregnated film can be used to regulate the level of tint in any glass structure – and all driven by a torch battery.

Then there was Brian Stickley, who in his matter-of-fact way announced: “Incidentally, I’m off to Hong Kong and China next week. If you’ve any problems you would like checking out there, just let me know”.

Were that not enough, Les McCall then popped up with a tale about a novel valve he has developed – which could have a huge potential in the catering industry.

And to cap it all, Mike Smithard and his business partner Dr Hamid Rassoulion – a recent WRTI guest lecturer – have just won two Smart Awards. It all illustrates the range of skills and talents our members have.

You will already know that Mike Overy has successfully presided over the launch of our own website (www.wrti.org.uk). This contains a significant amount of data which will be read with interest – not only by WRTI members, but also by the 850 subscribers to *Inventique*. You’ve done a wonderful job, Mike.

Sincerely,

David

PROFESSOR DAVID NICHOLAS MBE, Chairman

INVENTORATOR Frank Landamore/Les McCall

Rebuild Menlo Park

REVIVING EDISON’S ‘INVENTION FACTORY’

CONCEPT COULD PAY COMMERCIAL DIVIDENDS

YOU MAY HAVE heard this one before: *When is a lone inventor not an inventor?* Give up? The answer is: *When s/he’s an accountant, entrepreneur, financier, fund-raiser, industrial designer, IPR and IT expert, market analyst, networker, patent lawyer, PR journalist, manufacturer, sales and licensing wizard and general techno-head.*

Oh, and incidentally – you’ll have to sell your house to afford it.

It’s interesting, isn’t it, that as soon as a lone inventor says: “I’ve thought of this great idea which could make me and the country millions,” s/he then has to *stop* thinking about it and take on these other roles to get the idea to market.

But the question is: why? What other profession (oh, yes, it *is* one) imposes such an appalling burden on its practitioners, a burden which appears to be accepted as the norm by everyone, inventors included?

Which is not to deny that there are any number of entrepreneurial innovators out there making a very comfortable living from their ideas, thank you. We’re assured that the National Invention Strategy is being promulgated in order to identify and support just such successes in the future: there are, apparently, umpteen millions of pounds earmarked for inventors and innovative businesses.

“Just watch,” the cry goes out, “– it’ll be alright on the night.”

Only it won’t, because the emphasis is in all the wrong places. What we actually have is a cumbersome, over-bureaucratized system which demands that inventors take on as many roles as possible when they seek funding – as they must (one successful WRTI member has fifteen viable projects to pursue).

If, for instance, NESTA’s online Initial Proposal form requires

budget forecasts, marketing plans, project timetables and an input of 5,000 words per idea (which it does – for an *initial* proposal, remember), then even with a modest £10,000 R&D budget and equally modest 1000 man-hours per project, our member won’t ever achieve the money, time or administrative skills to pursue his concepts by such a route. And what if he were dyslexic?

Just imagine if one of his ideas turns out to be the cure for cancer.

Edison’s secret

And yet, and yet. When Thomas Edison created his famous ‘invention factory’ at Menlo Park in 1876, it presaged the most extraordinary blossoming of inventive industry in history; at his death in 1931, Edison had successfully filed 1,093 US and 1,239 foreign patents.

Edison’s secret was to make the inventor a crucial – but nonetheless equal – member of a hard-nosed, professional, ‘creative business team’, whose job it was to both devise products and concepts *and* drive them to market, with each team member bringing their individual professional knowledge to bear upon it – and share in its success. (Trevor Baylis is valiantly trying to achieve something similar with his ‘Breakout Rooms’ and *Baylis Brands* shop in Richmond.)

To turn Santayana’s famous dictum on its head, surely we must not forget Edison’s lesson from the past in order that we *can* repeat it?

One day, perhaps, you’ll have heard this one before: *When is a lone inventor an inventor? When s/he’s in a symbiotic relationship with a team of business experts who’ll take the invention to market while s/he’s dreaming up another one – because that’s the inventor’s role...* ■

USING TRIZ PRINCIPLES

HERE ARE another eight of the 40 TRIZ Principles developed by Genrich Altshuller, for you to include in your problem-solving matrix.

29. Using pneumatic or hydraulic systems In its most general form, this principle is about replacing solids with liquids or gases, which can easily be channelled and have different properties such as their flexibility, which can be useful for cushioning. Pneumatic and hydraulic systems are particularly useful for channelling energy to a desired place, using flexible pipes. By changing the bore of the pipe, pressure can also be easily increased or decreased.

30. Flexible film or thin membranes Thin films have a number of useful properties, such as low cost, low space, flexibility and usage. They can be used to separate, isolate and protect, such as the 'cling film' used to wrap food. The film can be bought in a roll but can also be created in situ (paint is just such a useful thin film).

31. Use of porous materials Porous materials allow some substance through them and block others, which allows them to be used for separating and filtering-out desired or undesirable elements. As with mops, they can also be used for absorbing and collecting liquids or gases, which can subsequently be released in a controlled manner as required. Where porosity is an undesirable effect, you may want to clog up the pores rather utilise them.

32. Changing the colour Colour can be an aesthetic factor or have practical uses such as signalling danger. It can also be used as a detection mechanism, as in the use of litmus paper to determine acidity levels. You can also change colour transparency, as in optical filters.



GRAHAM RAWLINSON CONTINUES HIS SERIES ON HOW TO INVENT (ALMOST) ANYTHING

TRIZ (pronounced 'trees'), is an acronym from the four Russian words 'Teoriya Resheniya Izobretatelskikh Zadatch', which stands for the Theory of Inventive Problem Solving – a theory developed by Russian patent officer, Genrich Altshuller, who noticed similarities in invented solutions from different fields.

In analysing over 200,000 patents, Altshuller discovered that most patented ideas use a number of objective principles and are based on a finite number of physical, chemical and geometric effects, so he developed 40 TRIZ Principles as being common to many inventions. Using one or more of these Principles as tools can help solve any inventive problem.

33. Homogeneity A homogeneous substance is made up of the same material. So what if you made your device out of different materials? What would be the effect of each part? How would these interact? What if you used all the same materials? The principle of homogeneity can also be used in other areas, such as the behaviour of parts of the system. In an electronic system all plugs could be the same to reduce costs, or they could be different to prevent accidentally plugging things into the wrong place.

34 Rejecting and regenerating parts When a part has been used and is no longer needed, what do you do with it? Typically you either throw it away, restore it or recycle it. Whichever approach you use, you will probably need to include some system to cope with this.

35. Transforming physical or chemical states Sometimes changing the object is some way, such as its temperature, density or concentration, is useful. Think of the chemical composition of the substances. What is the relationship between the atoms and molecules? Are they tightly bound together, or do they slide around or come apart easily? Look at the effects on flexibility, load-bearing, chemical reactions and so on.

36. Phase transition Substances often go through changes, such as expanding, evaporating, cooling or changing shape. Think about how this happens and how you can start, stop or otherwise control the change. Is the effect reversible? Can you use a simple catalytic effect? ■
Next month: Principles 37-40.

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● *Innovation consultant Dr Graham Rawlinson is co-author with David Straker of How to Invent (Almost) Anything, 310 pages, Spiro Business Guides, ISBN 1 904298 87 7*

HUMORESQUE

from Dave Challice dchallice@bournemouth.ac.uk

Answers provided by Year Six during a written test: Gutenberg invented removable type and the Bible. Another important invention was the circulation of blood. Sir Walter Raleigh is a historical figure because he invented cigarettes and started smoking. Sir Francis Drake circumsized the world with a 100-foot clipper.

Inventique

www.wrti.org.uk

"Imagination is more important than knowledge." – Albert Einstein

WEBSITE OF THE MONTH

http://www.nesta.org/howtoapply/inventorshandbook/ii_handbook1.htmlk

Here is a web-based step-by-step guide to the process of invention and innovation. It includes guidance on pitfalls to avoid and sources of advice to pursue, tips on developing an idea into a real product, an overview of protecting your intellectual property and advice on ways to get an idea into the commercial world – from license deals to making and selling a product yourself. Commissioned by NESTA, the handbook was written by Peter Bissell and Graham Barker.

CENTRE OF EXCELLENCE The Business of Invention

Tome to take stock

SIX YEARS ON AND IT'S STILL THE BEST IN ITS FIELD

The Business of Invention

The essentials of success for inventors and innovators

by Peter Bissell and Graham Barker
190 pages, Wordbase Publications, £15.
ISBN 0951 3856 31

TED PROSSER, inventor of Ronseal's *Paint and Grain* product, claims that this book is his 'bible', and it's easy to see why.

Witty and comprehensively informative, the authors have gone out of their way to call a spade a scatalogical digging device when it comes to describing what is required to get an idea to market.

Publishers of its precursor, *A Better Mousetrap*, and authors of the NESTA Inventors Handbook (above), Bissell and Barker relate how, when running a local authority innovation centre in the early 1980's, they desperately

needed something they could hand out and say: "Read this first, *then* come and talk to us."

This book *is* that 'something'. The first three chapters, for instance, help readers define exactly what an invention is, assess the demand for their idea and show how they can prove it works.

Only after this are they taken through what many people imagine are an inventor's main tasks: finding the right kind of help (and avoiding the wrong kind), IP protection, licensing, contacting companies, patenting, 'the art and craftiness of negotiation', raising capital, calculating royalty rates, starting your own business, joint ventures – they're all in these pages.

There is no better guide through the labyrinth inventors enter after that first 'eureka moment.' ■

● Contact: www.wordbase.co.uk

MEMBER SERVICES

Entries in this column are free to WRTI Members, who should mail their details to the Editor (see panel at foot of page).

CONCEPT TO MANUFACTURE.

Help with presentation, prototyping, technical & manufacturing issues.

Contact: Innovate Product Design,
01722 410 295

EDITOR/DESIGNER/JOURNALIST

30 years book, magazine and partwork experience. Contact:
Frank Landamore, 01273 475 184
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ELECTRONICS CONSULTANT

with 30 years experience, specialising in wireless and positioning technologies.

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ELECTRONICS ENGINEER

Concept to proof of principle. Ex scientific civil servant. Own lab.

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Wessex Round Table of Inventors meet at 6pm on the second Wednesday of each month at Southampton Institute, East Park Terrace SO14 0RP