

Welcome to the September edition of What's Emerging. This month we have a book review on 'Physics of the Impossible' along with the usual tips and links.

We hope you enjoy this edition.

Cheers

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Business Tips

10 Firefox extensions you can't live without

Here are some great add ons for Firefox if you use that as a browser (and we recommend you do). Time Tracker is a great one for people who spend a lot of time browsing and Morning Coffee is a good one if there are a set of web pages you look at every morning (you can open them all with one click rather than opening all of them individually). On top of these we downloaded Read It Later and PDF Download from the comments list as well as No Squint which is great for those of us with less than perfect vision – you can set it so the text is larger while the images stay the same size

Mobile phones 'road death devices' - police

MOBILE phone records of drivers involved in fatal accidents are being routinely checked to see if they were talking or texting at the time. As a result of looking at the literature on the risks I no longer use a mobile phone when driving, with or without a hands free kit. You can see a good summary report [HERE](#) with the key statement being "Many studies have found that using a hands-free phone while driving is no safer than using a hand-held phone. Using a mobile phone while driving can increase the risk of being involved in a collision by up to four times."

The Fortune 500 4-Hour Workweek: Multiplying output in groups

This is from Tim Ferriss' Blog. He is the author of The Four Hour Working Week and we highly recommend you look at his stuff. Not all of it will apply to you but the principles are great, especially around email and interactions and its effect on productivity.



What's Emerging

Giant retailers look to sun for energy savings

Retailers are typically obsessed with what to put under their roofs, not on them. Yet the nation's biggest store chains are coming to see their immense, flat roofs as an untapped resource.

Thailand bans Grand Theft Auto IV

Copies of Grand Theft Auto IV have been pulled in Thailand after a teenager confessed to murdering a taxi driver by trying to copy a scene from the game. A disturbing potential future of virtual reality impacting real life or just one sociopath?

Can city dwellers be more self-sufficient?

There are multiple benefits from making our cities more self-sufficient. The obvious one is security. The nearer food is, the easier it is to get at in times of crisis. This article describes a range of projects aimed at increasing food production in cities in novel ways.

Xbox Live in youth voting drive

Americans will soon be able to use Xbox Live to register to vote in the November presidential elections. Microsoft has signed a partnership with activist group Rock The Vote to boost interest in the upcoming election among young people.

Chemotherapy gets personal

A gene-screening method can predict an individual's response to cancer drugs and may help better match cancer patients with the most effective chemotherapeutic drugs while also keeping side effects on healthy cells to a minimum.

The Large Hadron Collider

There has been a lot of discussion in the media on the Large Hadron Collider or LHC that has been built in Europe and not many people understand much about it. Here is a great video from YouTube that is a rap song about the collider that is easy to understand and fun as well. With thanks to Luke Naismith who put this on his blog at <http://knowledgefutures.wordpress.com/> . If anyone is interested in reading on advanced physics in a way that makes it relatively easy to understand then they should read Physics of the Impossible by [Michio Kaku](#).

Bike accidents decline as ridership rises

More bicycles on the road means more chances for drivers yakking on cell phones or gorging on McFood to hit one, right? Wrong. According to a study by researchers at the University of New South Wales, the number of collisions decreases as the number of bicycles in traffic increases.

Running the numbers

Running the Numbers looks at contemporary American culture through the austere lens of statistics. Each image portrays a specific quantity of something: fifteen million sheets of office paper (five minutes of paper use); 106,000 aluminum cans (thirty seconds of can consumption) and so on. It is extraordinarily striking.

10 trends that will transform IT over the next five years

The list was compiled from over 100 predictions that Gartner IT made over the past year.

USC's 'print-a-house' construction technology

Caterpillar, the world's largest manufacturer of construction equipment, is starting to support research on the "Contour Crafting" automated construction system that its creator believes will one day be able to build full-scale houses in hours.

Drink outside the box

Italy's Agriculture Ministry announced that some wines that receive the government's quality assurance label may now be sold in boxes. For some connoisseurs, the sky might as well be falling, but wine in a box makes sense environmentally and economically.

1% of Australia's geothermal power potential = 26,000 years of energy

The AGEA report says that under current government policy up to 2200 megawatts of geothermal power could be developed by 2020, representing 40% of the government's current renewable energy target of 45,000 GWh (20% of total electric demand).

Wireless networks mimicking biological systems

The goal of the EU-funded WINSOC project is to build self-organizing networks of wireless sensors by applying principles learned from living organisms. The result is a more reliable system that can be used for a wide range of environmental monitoring purposes including early warning systems for landslides.

Sleep on it: How snoozing makes you smarter

During slumber, our brain engages in data analysis, from strengthening memories to solving problems. Skimping on sleep stymies these crucial cognitive processes: some aspects of memory consolidation only happen with more than six hours of sleep. Miss a night, and the day's memories might be compromised—an unsettling thought in our fast-paced, sleep-deprived society. Something to consider for all those crazy people and organisations who believe in the culture of working all night to get things done.

Broken leg bones healed in stem cell first

Nine Victorians are among the first people in the world to have broken leg bones healed using their own stem cells. In a pioneering trial at the Royal Melbourne Hospital, patients with serious leg fractures have re-grown thigh and shin bones, recovering quickly with very little pain.

Brain will be battlefield of future, warns US intelligence report

The human brain could become a battlefield in future wars, a new report predicts, including 'pharmacological land mines' and drones directed by mind control.

Synthetic blood from stem cells?

Researchers at Advanced Cell Technology in Worcester, Massachusetts, working with scientists from the Mayo Clinic in Rochester, Minnesota, and the University of Chicago, A.C.T.'s team says it has developed a method for making potentially unlimited and scalable supplies of synthetic blood from embryonic stem cells. Could this be the "Killer App" that sways the debate on stem cells and their use?

More links

We have many more links than we can fit in the newsletter – this month's 'Additional Links' are available on our [website](#).



What We Are Writing About

Book Review – Physics of the Impossible by Michio Kaku

Given the issues that we face in relation to running out of oil, higher energy costs and the challenges of responding to climate change, we see a lot of possible solutions coming out of the woodwork. Although we do a fair bit of scanning in this area it is very difficult to keep up with what is happening because there are so many technologies and wild ideas that are suggested and pumped up by the media. Therefore it is a very good idea to have a better understanding of the basic physics involved if you want to participate in this area in an intelligent way.

Michio Kaku has a reputation of having a deep understanding of physics but also the ability to explain higher level physics in terms that the layman can understand. This book enhances that reputation but you still have to work hard in reading it because these are complex subjects and impossible to break down to a completely simple level.

In order to structure the book Kaku sets out three basic levels of “impossibilities”. These are: ...[read more](#).

Paul Higgins