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Welcome to the March edition of What's Emerging.

As you see below we have added a new member to our team. Syed is a research assistant based in Bangalore, India. This month's newsletter and business tip are about how we are adding value to our business by outsourcing some of our work through Syed who works for a business in India that specialises in providing executive assistants and other services. Syed is working on research for our book and newspaper articles, preparation of presentations, writing of reports, and some of the planned improvements to our website.

We hope you find the newsletter interesting and useful and please feel free to pass it on to anybody you think would like to read it.

Paul Higgins, Sandy Teagle and Samantha Kyle-Little and Syed Ahmed Muqthar

Business Tip

This month's business tip is the article on our website. We have hired a research assistant in India and Paul has written an article on the issues that such a move raises. We see this sort of outsourcing as the way of the future for small businesses that deal in information such as consultants, accountants, designers, etc. In fact anybody that deals in information that can be easily digitised and manipulated. Please read the article and contact us if you want more information.

Emerging issues from around the world

Click on the titles to read the full stories.

Promising Web 2.0 software

Following up from a couple of articles that we have had on the web 2.0 concept here is a blog reviewing some of the most promising web 2.0 software over the last couple of months.

Reducing costs of biomass ethanol

Most plant material is made up of cellulose and hemicellulose which are complex carbohydrates. If you can break these down into their component sugars then you can ferment those sugars into ethanol. So far it has been quite expensive to do so because of the barriers plants have to maintain their structural integrity. An MIT start up company called Agrivida is inserting genes into corn plants that produce enzymes that will break

down cellulose. The enzymes are inactive while the plant is growing but activate during the processing phase.

Methanol not Ethanol

Nobel laureate George A Olah argues we should be moving to a methanol economy instead of ethanol or hydrogen in his new book.

Novel fuel cell use

The coupling of fuel cells and hybrid technology is happening in an unusual place – the forklift. Developments in this area may assist implementation for other areas.

Terrorist attack on Oil Processing Plant

Two cars packed with explosives were driven into the gates of the Abiqaiq oil processing facilities in Saudi Arabia with Al Qaida threatening more attacks. With the tight supply situation for oil and processing capacity attacks like this have the ability to severely affect oil prices.

Super repellent plastic

GE has produced a super repellent cheap plastic where even honey rolls off the surface. A number of uses come to mind, especially for storage of materials and cleaning.

Paid sabbaticals help the bottom line

Some companies are giving paid sabbaticals to their employees and they insist that it helps the bottom line. The key appears to be a common understanding and agreement on the goals of the sabbatical which has generally been a feature of universities rather than commercial companies. Should you be considering this in your company?

Urban planning effects health outcomes

The type of urban environment that you live in can affect how healthy you are. For example people in urban areas that have a high walkability rating (promote walking over car use) walk more, and have lower body mass indexes than those living in areas where car use was promoted over walking.

Biodiesel priced cheaper than diesel

The Australian Biodiesel Group has announced its terminal gate pricing policy for biodiesel and is aiming to be 5c/L below the price of standard diesel.

Assessing websites in a flash

Research is showing that users assess website appearances in less than 1/20th of a second and the ratings are consistent. What does this mean for the design of your

website?

Super post it notes?

Scientists have examined the structure of the spider's foot that allows it to cling to a ceiling and measured that they can carry up to 170 times their own weight with the force of attachment. This is part of the process of biomimicry – looking how nature does things better than we can and copying the structure or processes involved. If you want to learn more on this subject then you can get a podcast from IT conversations with the author of several books on the subject – Janine Benyus at <http://www.itconversations.com/shows/detail241.html>

Space lift on the way

Liftport Group which plans to have a space lift in place by 2018 has put a mile long space lift cable into the air and has been able to get robots to go up and down the cable. This is the early stage of a program to build a 100,000km cable that can be used to ferry cargo into space via robots

Goat pharming

No, its not a typo, its about genetically modifying goats to produce human medicines in their milk. GTC biotherapeutics are seeking a licence in Europe to market an anti-coagulant produced in goat milk, replacing one that is currently extracted from plasma.

A film as hard as diamonds

Researchers at the Argonne National laboratory have won an award for their design of an ultra thin diamond film that is only 5nm wide but is as hard as a normal diamond. The film has a multitude of possible uses.

Do plants make global warming worse?

Research is indicating that plants may contribute a significant proportion of the world's methane emissions. If this is true it fundamentally alters the balance of plants used as carbon sinks under climate change policies

Pig poo to petrol

Researchers at the University of Illinois claim they are getting closer to producing oil from pig manure with an individual pig capable of producing 21 US gallons of oil during its normal growing life.

Cheap Hybrids?

Researchers at MIT have made advances with ultra capacitors that can charge quickly and hold power for longer. If they can commercialize what they are doing then hybrid cars could be significantly cheaper in the future.

What Are We Writing About

This month's article examines looks at outsourcing for small businesses that can digitise and manipulate their information. While this has long been the province of large businesses such as the big software firms and GE there are now opportunities for small businesses with only one or two employees to do the same. The article discusses the possibilities and the ethical issues associated with such a move.

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