

Online scams up 425% in H1 from year ago

Rising cyber scams make it tough for genuine businesses to get firm foothold

By **CAI YONG**
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FRAUDSTERS are operating through money mules and even using unwitting blogshop owners to scam online shoppers, said the Singapore Police Force yesterday.

New statistics indicate that cheating cases involving e-commerce jumped 425 per cent in the first half of this year from the corresponding period a year ago.

Lian Ghim Hua, the deputy assistant commissioner of police and commander of the Ang Mo Kio Police Division, said: "I think it's a general reflection of how more and more people have started to engage in e-commerce... And with that, criminals are also looking to exploit this space to pursue some of their illicit activities."

Multiple payment online purchase (MPOP) scams, for example, have risen from 13 in the first half of last year to 302 reported cases in the first half of this year.

The amounts swindled are now also larger – at least \$237,000 in the first half of this year from S\$28,000 last year.

In MPOP scams, the perpetrators put up online advertisements offering to sell items at heavy discounts. Their victims, drawn to the deals, contact them and are instructed to send payment, typically through bank trans-

fers. The cash goes to local accounts held by money mules, who then transfer the sum to the masterminds.

The goods are never delivered. When the victims enquire on the delay, they are told to pay additional fees in order to receive their orders; the victims pay until they realise they have been duped.

Police have stepped up efforts against these fraudsters. In a two-day operation that ended yesterday, they arrested six men and 12 women, Singaporeans aged 16 to 47 suspected of having been money mules for MPOP scams.

Preliminary investigations suggest that the masterminds are in Africa. Some money mules are recruited under the pretext of a work-from-home job, others, with promises of love.

In rare cases, scammers have also operated through blogshop owners.

These scammers contact blogshop owners, feigning interest their products. They then go to their victims, instructing them to deposit amounts far higher than the price of those items into the bank account of the blogshop.

The scammers then close in, telling the blogshop owners that they had mistakenly overpaid, and ask that these owners transfer the excess payment to their bank account.

Police have warned members of the public to be wary of deals that are too good to be true, and to buy only from sellers with strong track records.

Legitimate businesses will find it harder to get a footing in cyberspace; new online shops, with no history to speak of, will find it even more difficult to build their customer base.

Test case for space saving building method

UWC Dover campus office to also have energy-efficient solutions

By **JAN LEE**
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UNITED World College South East Asia's (UWCSEA) Dover campus will soon include Singapore's most energy-efficient office with space-saving techniques.

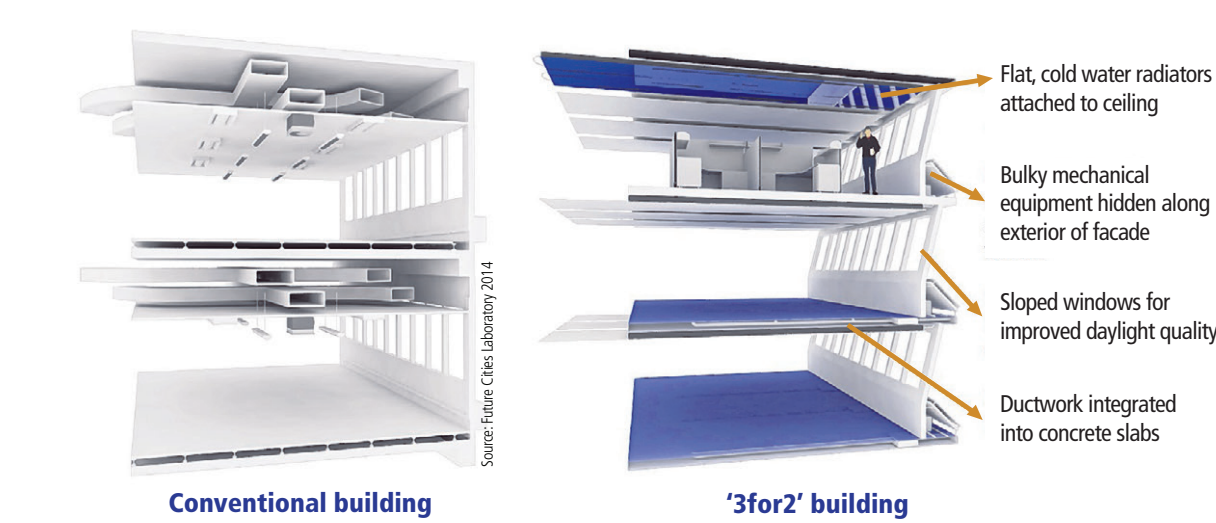
The project will be spearheaded by Future Cities Laboratory (FCL), a research programme focused on urban sustainability. FCL is part of Singapore ETH Centre (SEC), the only research centre outside of Switzerland under the umbrella of the prestigious Swiss Federal Institute of Technology Zürich (ETH Zürich).

The 600 sqm office situated in a 20,000 sqm building will be the first commercial application of the '3for2' architecture here when it is completed in 2015.

The '3for2' concept allows building developers to construct three floors within the standard space needed for conventional methods to construct two floors without any impact on perceived floor-to-ceiling heights.

Currently, up to a quarter of vertical spaces in local offices are occupied by ductwork, structures and other technical systems. However, the team behind '3for2' has found a way to greatly reduce the amount of ductwork needed and integrate the remaining ductwork into the floor, thereby saving on a large amount of headspace.

The '3for2' design also saves on space and energy



consumption through new construction technologies such as LED lighting panels and passively cooled ceiling tiles.

The new office will also employ a more energy efficient chilling system for its air-conditioning, which accounts for the bulk of energy costs in modern Singapore of-

fices. This is achieved via increasing the overall chilled water temperature required to chill a space from about 6 degrees to about 17 degrees. The office is expected to consume 40 per cent less energy than an average office in Singapore.

Reducing energy consumption while increasing vi-

able space seems to have hit architectural jackpot. Yet, as a new concept to local property developers, '3for2' has yet to gain traction. In fact, the UWCSEA '3for2' office is a mere 3 per cent of the new building's floor space. However, the FCL team believes that starting small is good enough.

Dr Adam Rysanek, SEC

FCL manager of the '3for2' implementation at UWCSEA said: "Before we can really consider applying our concept throughout a 50-storey skyscraper, we need to make sure we get the basics right. With our project at UWCSEA, we have to first prove that our system will deliver the most energy-efficient office space in the region."

More firms find CSR makes financial sense

By **LEE MEIXIAN**
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MORE companies across the world are engaging in environmental and socially responsible activities - not simply for brand building or altruistic reasons, but simply because it makes good financial sense.

This was according to the latest research by Grant Thornton which has been tracking business attitudes to corporate social responsibility (CSR) since 2008.

In Singapore, the top five drivers towards more sustainable business prac-

tices are: cost management (73 per cent), followed by client or consumer demand (62 per cent), "because it is the right thing to do" (55 per cent), tax relief (51 per cent), and recruitment and retention of staff (44 per cent).

For instance, over the last 12 months, more than half of Singapore businesses have started calculating their carbon footprint. This is the No 1 CSR initiative adopted here.

Singapore companies also donate products or services to community and charities (47 per cent), partner a charitable organisation for philanthropy (45 per cent) and donate money (43 per cent).

The survey of 2,500 businesses in 34 economies was conducted in May this year, and interviewed C-Suite and other senior decision-makers in mid-market businesses - of which 50 were Singapore business leaders.

It also found that more companies are also reporting on sustainability, while a majority now view integrated reporting as best practice.

Since Singapore Exchange introduced sustainability reporting guidelines in 2011, many major corporations in Singapore have included a CSR component in their business framework to align with the global investor expectations, it said.

Biotech firm a leader in cell-encapsulation

Austrianova runs a tight ship here as it grows its business of delivering medical treatments in 'capsules'. **AMANDA EBER** reports

TO the naked eye, the capsules produced by biotechnology firm Austrianova look like brightly coloured balls, each barely a millimeter in diameter.

But each one of these capsules is in fact a pod capable of containing 10,000 living cells.

Professor Walter Gunzburg, the chairman and chief technology officer of Austrianova, explained that the capsules are made of a special type of cotton, designed to protect the cells and cocoon them so they can grow and do the job they need to do – for these cells, contained in their pods, are to be injected into the human body for a variety of potential applications – from cancer treatment to probiotics, stem cells and cosmetics.

The special cotton of which the capsules are made also ensure that the body's immune system does not reject the cells, he said.

"We take living cells and we mix them with this cotton material – this special proprietary cotton derivative which we manufacture ourselves. When you mix the two together you form these capsules, with the cells inside."

This is what Austrianova's Cell-in-a-Box or cell encapsulation technology is about – and it could change the way medication is administered to patients.

The capsules are all porous, to allow for the movement of substances in and out. This way, the cells inside can draw nutrition from outside and expel waste; the porous membrane also enables useful substances produced by the cell to enter the body.

Prof Gunzburg said: "What we're doing here is making a mini implant. Instead of manufacturing a pharmaceutical product in a factory, putting it in a bottle, sending it to the hospital and then administering it to the patient, we are actually moving the factory into the patient."

Diabetes patients, for example, are injected with these capsules containing insulin-producing cells, which can be programmed with mechanisms to react to the body, only producing as much insulin as is needed each time.

Dosing in this way will be more precise, compared to the conventional method of making rough estimations for each dose, or relying on a fixed dose regardless of changes in the body.

The system is thus self-regulating, which takes some burden off patients from having to monitor their doses.

Austrianova's most advanced programme so far is in the treatment of pancreatic cancer, which has been in

two clinical trials in Europe involving 27 patients with advanced stages of the disease.

Prof Gunzburg said existing drugs have a small effect on one's survival and reduce pain, but cause a range of side effects.

The pancreatic cancer patients have been injected with capsules containing cells that have been genetically modified to activate the chemotherapeutic chemicals these patients are administered.

So the chemotherapy is activated only where these cells land up. Austrianova's chief executive Dr Brian Salmons said: "It's like a magnifying glass, focusing the effect on the tumour. This allows you to go in with a low dose, so that you don't really get many side effects. So you get better anti-tumour activity and fewer side effects as well."

Results of the trials have so far been promising: the patients have a median survival period of 40 weeks, double that of the current gold standard treatment. In eight of the 27 patients, the tumours shrank as well.

Cell-encapsulation pioneer

Austrianova is the only company in the world using its proprietary cotton material to advance cell-encapsulation technology.

The material of which the capsules are made enables the capsules to be frozen and shipped around the world and stored for up to five years. Most other cell products need to be used immediately, making logistics more costly and complicated.

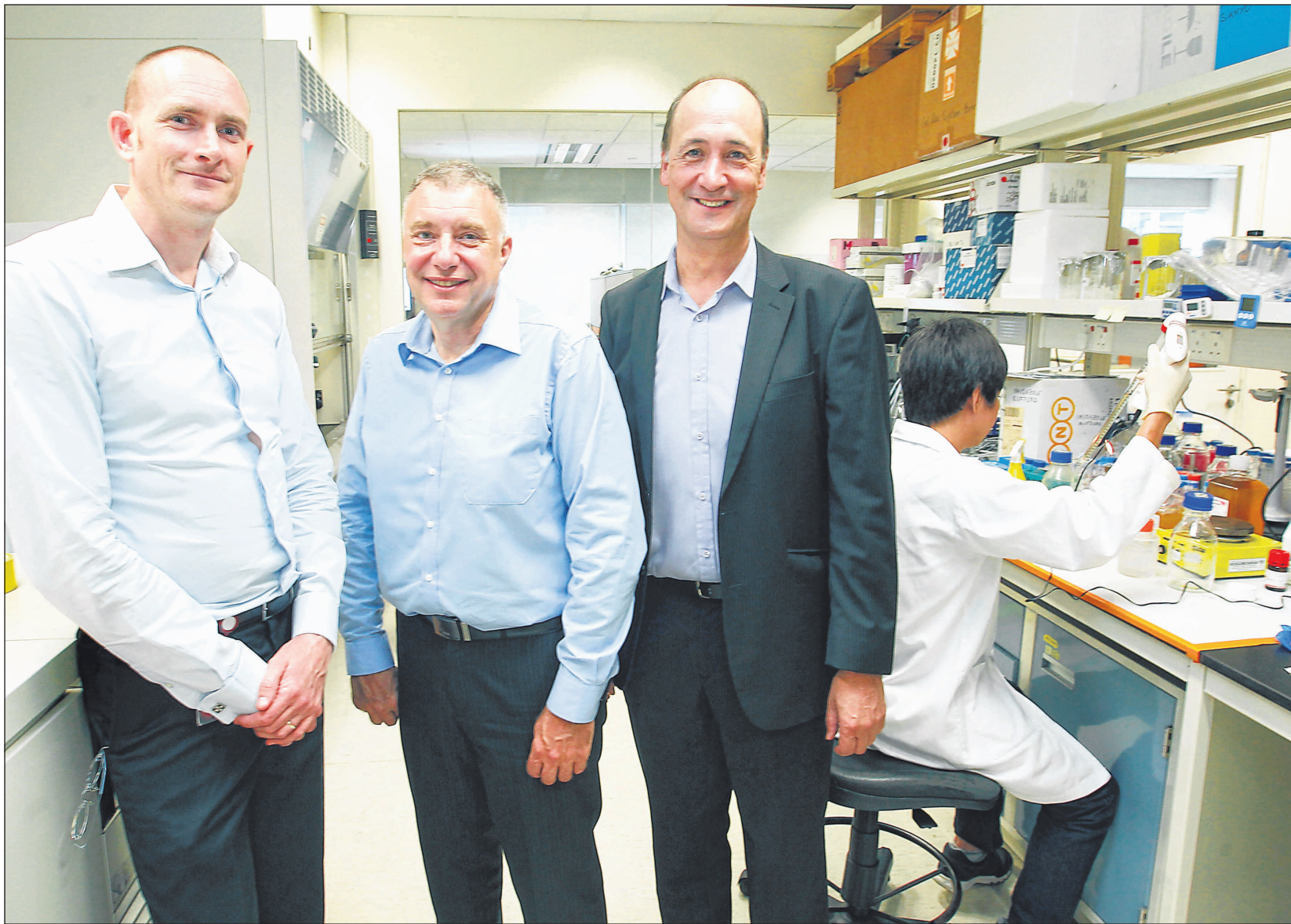
Austrianova's operations are primarily partner-based. The company has around 10 partners worldwide, with whom it conducts research and development and leverages on their expertise in order to deliver a customised product.

"It's very customised. Once the production process is set, it's very simple: you just put the cells and the cotton together at the beginning and the beads come out at the end. But how you tweak the cells, how you tweak the cotton to make the perfect bead for the perfect application, like the size of the bead, the size of the holes – that's all stuff that we tweak," said Prof Gunzburg.

Interestingly, this business model differs from what the founders of Austrianova initially had in mind.

The company rose in Austria, with its original focus being to develop all stages of its product for pancreatic cancer, but this was an extremely costly mission.

Austrianova thus went from devel-



Cell-in-a-Box know-how: The key personnel in Austrianova are (from left) chief operating officer Dr John Dangerfield, chairman and chief technology officer Dr Walter Gunzburg and president and chief executive officer Dr Brian Salmons PHOTO: YEN MENG JIN

oping its own product to being a technology platform, and this is how the company came to be in Singapore, known for its vibrant stem cell community. Singapore became the company's stepping stone into Asia when it set up here in 2007.

But what Singapore lacks, compared to Europe, was a venture capital culture.

Austrianova adapted. It has since built itself here by relying on financing from high-net-worth individuals. It has also placed a premium on avoiding risks and diversifying the company's offerings, instead of being focused on a single product as is the norm in Europe.

Dr Salmons said: "In the past, we used to focus on our oncology product, but now, we've got many horses in the race, different ways to make products and generate income."

"As a company offering a technol-

ogy platform, we work with other partners who have specific needs. So they have cells which they would like to use for some particular application; they come to us and we co-develop the product with them."

Prof Gunzburg agreed, saying: "The most important thing is to keep the company liquid and move the company forward, and you have to find a way to do that, whatever it takes."

Subsidiary in Thailand

The company's cash flow comes from its clients, who pay for every stage of their product development with Austrianova.

It also places an emphasis on minimising costs and keeping the company's burn rate low by outsourcing functions on a pay-by-use system; it does this with its financial services, business development and legal advice functions.

Austrianova has also set up a subsidiary in Thailand, which it fully owns. This unit concentrates on the manufacturing of medical products for global export and be off the ground by the end of the year.

Thailand was chosen because it is cheaper, more cost-efficient than Singapore, said Prof Gunzburg. The company hopes to begin manufacturing its pancreatic cancer product for further patient trials by the first half of next year.

Dr Salmons said: "Running a company is not just about making money. It is important to bring your investors a return, but it is also because there's a medical need out there for which we want to develop products that will actually help patients eventually."

Prof Gunzburg said: "We're building a company that should grow and be around in 10 years' time. We are trying to build something that is sustainable."

