



The shortlisted firms have been selected for this year's Irish Times InterTradeIreland Innovation Awards

WE MIGHT BE in the midst of a seismic recession, but the innovative nature of Irish entrepreneurs remains incredibly strong.

According to Aidan Gough, one of the panel of initial judges choosing the shortlisted finalists for this year's competition from over 100 entries which made it through from the first round, even in the midst of these challenging times, the breadth and depth of the talent on show would give you confidence for the future of our economy.

"Despite the economic situation, there is a really encouraging level of activity out there and that was particularly heartening to see," said Gough. "Nurturing and supporting this talent is the key role of development agencies like ourselves and it's great to see so many talented entries." He said that one key difference noticeable in this year's entries was "the extent to which the entries were market-led and market-focused". Not only were they strong ideas and innovative processes, but they were clearly focussed on answering the needs and demands of the marketplace, and supported by admirable business plans.

Another strong feature this year was the mix of entries, stretching from multinationals right through to individuals who spotted an unfulfilled niche in a market.

Gough was one of judging panel which assembled earlier this month to create the final shortlist of entries. He was joined by Prof Frank Roche of UCD Smurfit Graduate Business School, Dr Graham Love of Science Foundation Ireland (SFI), Colin Ryan of Accenture, Sean Wallace of Byrne Wallace and this correspondent.

From over 100 entries for this year's Irish Times InterTradeIreland Innovation awards, the final 21 shortlisted firms have been chosen. These firms will now be invited to make presentations to a final panel of judges early next month before the category winners - from which an overall "innovator of the year" winner will be chosen - are announced at an awards ceremony on March 2nd.

The shortlisted firms under the seven categories are detailed over the following pages.

Standards of innovation remain high



APPLICATION OF R&D

Equinome is a Dublin-based firm created on the back of work by equine genomics researcher Dr Emmeline Hill, which identified a gene found to predict sprinting ability and stamina potential in thoroughbreds. The Equinome Speed Gene Test has since been developed with the support of racehorse trainer Jim Bolger.

Amid the significant growth in 3D technology, **Realview** has created Deep Screen, an accessory for TVs and PC monitors that gives users a 3D experience without the need for special glasses. It has already recorded sales in the US, with coverage in national media there and won the Best in Show prize at the Retail Vision Europe show 2010.

Celtic Catalysts has for several years been working on the development of catalysts that allow pharma firms to formulate drug molecules without the creation of unwanted or potentially harmful traits.

Under the current process the harmful material created as a result of a drugs production has to be disposed of or recycled. Catalysts allows for the formation of desired drugs without the inherent waste. The problem is that these catalysts often only worked with specific molecules.

Celtic Catalysts claims to have come up with a chemical platform that enables catalysts to be easily "tuned" to suit the particular traits or idiosyncrasies of a given drug molecule.

PRODUCT INNOVATION

Intune Networks has created what it claims is the world's first web-enabled "tunable" telecom network, fundamentally changing the opportunities for service providers. Using its system it can evolve the existing telecoms architecture to cope with the massive increase in demand for information while controlling costs.

Specialty medical device company **Aerogen** has created a new drug delivery system, Aeroneb Solo II, for acute care patients. The vibrating mesh technology produces millions of specifically sized droplets per second enabling controlled deep lung aerosolised drug delivery.

Decawave has created an ultra wideband chip that allows users to locate any object indoors to a precision of 10cm, and at an affordable price point at very low levels of power consumption. A multitude of applications and potential uses for the chip, from tracking parts in a factory plant to security and personal tracking systems.

This year's judges: from left, Colin Ryan, Accenture; Prof Frank Roche, UCD Smurfit Graduate Business School; Aidan Gough, InterTradeIreland; Michael McAleer, The Irish Times Innovation Magazine; Sean Wallace, Byrne Wallace; and Dr Graham Love, Science Foundation Ireland. Photograph: Dara Mac Donnail

ORGANISATIONAL SYSTEMS & PROCESSES – the development of an original, or a significant improvement to, an existing system or process

Pfizer's Dublin operation has developed an e-Suite system that combines with a new Aseptic Operations clean room that allows the management of a paperless drug manufacturing process with expected cost savings of \$250,000 (around €186,800) this year, along with significant operational efficiency benefits. Used in the manufacture of sterile injectable drugs such as anaesthetics, antibiotics and anti-epileptics, the system developed at its Irish operation is now being transferred to other aseptic sites within the global firm.

Mentaga Learn is an online portal that allows students to build a personal profile, assess and receive feedback on the capabilities and

interests and matches students against 800 potential career choices. Aimed at helping students make choices for further learning and career options it has been developed in conjunction with several second-level schools and the University of Ulster.

FitzGerald Nurseries has developed a range of plant products that has changed the focus of the business from sales on the Irish market to sales worldwide by using plant sciences and intellectual property registration. The firm has brought together science, IP registration and scaled production and has gone on to access 18 international markets. It has registered seven different plant breeders rights.

➔ continued on page 44

← continued from page 43

NORTH/SOUTH COLLABORATION

Dundalk-based IT firm **Vennetics** has created Mozzler, a new internet-based telephony company that lets users make cheap internet calls and have them charged against their mobile phone bill rather than have to create a new billing account with an Internet company.

While current systems like Skype requires users to get a new username or phone number that they must then share with their contacts, Mozzler allows users not only to use VoIP services online but also to swap between devices without interrupting a conversation. Vennetics created the system in co-operation with Instil in Belfast.

When Antrim-based medical supplies company **Moorings Mediquip** decided to become a design and manufacturing firm it collaborated with the Centre for Bioengineering and the School of Engineering at Trinity College Dublin (TCD) to create a range of walking aids for children with physical disabilities.

The end result was the Buddy Roamer, a walking aid for children with cerebral palsy that was developed in just over 12 months and for which orders have already been received from several countries across Europe.

InvistaTech is a joint venture operation between Newry-based water treatment equipment firm FM Environmental and Limerick-based IT firm Central Solutions delivering turnkey waste water treatment plant management.

With environmental legislation imposing ever-increasing obligations and penalties on waste water plant operators, InvistaTech aims to combine FM Environmental's expertise in plant equipment and servicing with Central Solutions skills in data management.

Its new product suite has been rolled out at several water and wastewater plants on the island and an international launch of the product is underway.



The Innovation Awards will be held on March 2nd, 2011. Photograph: Alan Betson

GREENTECH

ManageCO₂ is a software development company with a new product to help organisations measure, report and reduce their carbon footprint in response to growing legislative and voluntary reporting requirements. Founded by three former Dell employees, it aims to overcome the static information output from annual inspections by carbon consultants, replacing them with an ongoing information system.

Verteco Energy has developed a simple process and methodology that allows the reduction of energy use in large building within the built environment. The aim was to create a system to allow non-engineers to effectively manage and reduce energy use. Its process, Closed Loop Energy Analysis (CLEAN) has been adopted in one of the leading shopping centres in Dublin, where it claims to have achieved at least fivefold improvements in energy savings over expectations.

Kingspan Renewables, part of the Kingspan Group, is a Portadown-based green-tech company which has developed a new modular vacuum tube solar energy collector system called Varisol. The end result of three years of research and development it incorporates Kingspan's Thermomax vacuum tube collectors but offers far greater flexibility in terms of installation. Unlike traditional vacuum tube collectors and solar flat-plate panels, the Kingspan system allows vacuum tubes to simply "click fit" together to create solar thermal collectors of varying sizes, meaning the collectors can be sized to the exact needs of the end user within the space available.

PUBLIC SERVICE INNOVATION

While completing an electronic discharge summary for patients seems simple, it involves a very complex integration of systems and the various functions and departments within a hospital. At the **Adelaide and Meath Hospital**, which incorporates the National Children's Hospital, there are about 25,000 patients discharged annually.

The hospital, in conjunction with the Ergo Software Group, has created a more content-rich discharge summary for doctors that in turn has brought greater efficiencies across the system, from billing operations to a reduction in administration demands in the hospital. The product is built on a number of national health IT platforms and it's hoped it will be transferable to other HSE sites.

With hundreds of laboratories and thousands of researchers, the third-level sector still manages the vast majority of its purchases and supply contracts individually. It has resulted in uncompetitive or

informal pricing agreements and a lack of common product categorisation. **Trevor Kerley of Trinity College and Turlough Kieran of UCD**, both responsible for laboratory-based procurement at their respective institutions, combined the negotiation power of the third-level sector to create economies of scale and secure the best deals. So far the project claims a 20 per cent saving in costs and a 60 per cent reduction in the supply base. It is working with suppliers to create eCommerce platforms for institutions that will let end-users in labs search and locate product, identify contract pricing and place a purchase order directly.

The Environmental Protection Agency (EPA) was given enforcement powers over all 900 public water supplies in the same year that there was a cryptosporidium outbreak in Galway city water supply. In three years there has been an almost two-thirds reduction in the presence of e.coli in public drinking water supplies.

SERVICE INNOVATION

According to **AirTaxBack**, airlines retain over €3 billion of tax fees and charges paid by passengers who book flights but don't travel. They only pass the taxes on to Governments and the charges to airports when passengers do travel. Under the firm's web-based service, passengers can retrieve, return or recycle unused taxes and charges in Ireland, Europe and worldwide.

Bankhawk is a new analytic system launched in the international corporate sector to enable corporate treasurers to manage their banking activities with greater efficiency. It estimates client savings in the order of €10 million annually. Endorsed by leading accountancy firms, it has already engaged several blue-chip clients including Irish Government agencies.

Ammado provides an easy-to-use website "widget" which allows visitors – particularly employees using a company intranet – to donate to a host of different charities using a single point of entry that handles 75 currencies, 12 languages and allows for one-off or recurring donations, with 30 global payment methods. It's a one-stop donation point for charities and non-profit organisations.