

START-UP STORIES

Firms at the cutting edge of emerging technologies



GOOD TRAVEL SOFTWARE Preparing for an ownerless car world

Peter Soutter's lightbulb moment for his Good Travel Software start-up came when he was living in Sydney some years ago. "I would sometimes rent a car by the hour from a local car sharing company to go to the beach for the day or whatever," he recalls. "But I was spending \$10 per hour for the car and it was working out at \$60 for the day when it might spend most of the time sitting in a car park. It was actually cheaper for me to use a taxi."

That set him thinking about the need to

optimise the efficiency of car-sharing schemes so that people only paid for the vehicles as they used them and that the cars would be available when and where they are needed.

He set up Good Travel Software on his return to Ireland in 2010 and working with the computer science and statistics departments in TCD developed a predictive analytics algorithm to help car sharing businesses organise their fleets.

If you thought this was a niche business

you'd be very wrong. Car sharing is at the vanguard of a revolution which will transform the automotive and transportation industries in years to come, says Soutter.

"It's a really interesting industry," he says. "All the major car manufacturers are moving into it. They are doing this because of self-driving cars. They believe that when autonomous cars become widely available people won't really own cars any more. It's quite fascinating. The amount of

revenue the industry earns from car sales every year is around \$180 billion."

The world which Soutter is helping the industry prepare for is one where people will simply use and pay for cars when they need them.

"You will use a phone app to get an autonomous car to come to you and bring you where you want to go. When you are driving to work the vehicle could be made available for car sharing so that others would share the cost. And when you get to work the car will be made available for other users. The industry is putting billions into this."

While this sounds great it is actually quite complex. It's one thing to allow people use and pay for cars on demand but it's quite another to ensure that the cars are there when they are needed and to

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balance demand with supply. "With the help of the people in TCD and the backing of Enterprise Ireland we developed algorithms not only to work out one-way journeys but also to balance the fleet to meet demand. When you have a fleet of 30,000 cars in a city you have to be able to work out how many should be active at any one time, where they should be located, and where they should go at off-peak times."

The company has also developed a booking engine which caters for a variety of different car-sharing models and can adapt to meet the needs of the market.

Growth has been exceptionally strong since the formal launch of the company in January 2014. "We have grown from five people then to 20 now," says Soutter.

"We have been working on a major contract for one particular customer during that period and that has taken up a lot of our time. We are now taking on new projects and will continue to grow in the coming years."

See goodtravelsoftware.com



SIMVIRTUA

Real world uses for virtual applications

Founded by John Jennings and James Corbett Simvirtua builds virtual reality experiences and software. The company specialises in designing multi-user immersive simulations that can be used with head mounted displays, such as the Oculus Rift and has built a virtual reality platform – MissionV – that is used by clients for education and training.

James Corbett has been working in the area of virtual and augmented reality for many years. “People are just starting to become aware of how science fiction is now becoming science fact,” he says. “Now, thanks to wearable technologies such as the Oculus Rift, people in different locations can work together in a virtual office and actually see their colleagues working with them.”

His interest in the area goes back to the original Second Life virtual world simula-

tion which became hugely popular more than a decade ago. “Even the IDA had a virtual Second Life office at one stage,” he points out. “And distributed teams in IBM still use it to collaborate. When you look at the virtual reality Facebook which was demonstrated by Mark Zuckerberg recently you can see that it is really Second Life with virtual reality headsets.”

Simvirtua began life as a not-for-profit company in 2009 when Corbett was acting as a voluntary technical adviser to Gaelscoil Ó Doghair in Newcastle West, Co. Limerick. He had been assisting the school with game-based learning and received funding from the National Centre for Technology in Education (NCTE) to run a pilot programme of the learning concept in 20 schools across Ireland

The pilot was successful but unfortunately the NCTE ran out of funding due to the crisis in the public finances. “We couldn’t turn it into a viable business as a result so we decided to reboot it as Simvirtua in 2013,” says Corbett. “We got the first version of the Oculus Rift and went to a school in Co Offaly which had a project to build a virtual Clonmacnoise and we helped them with that.”

The main market for the company’s solutions will be industrial education and training, particularly in health and safety. “We are talking to a lot of people in different market niches for augmented reality and virtual reality at the mo-



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ment,” he says. “For example, in an organisation like the ESB, health and safety training requires a lot of physical choreography. Most of it is done in the classroom environment as it is too dangerous and expensive to do it in the field. You need something that simulates reality and we are able to provide that. We have developed a prototype application for this purpose.”

Another market he points to is construction and architecture. “Instead of a builder having to constantly refer to paper drawings when they are working on site they can wear a headset which superimposes the computer-aided design drawings over the physical environment so they can be sure they are doing exactly what is specified by the architect.”

The company is still in the start-up phase at present but Corbett believes growth prospects are bright. “It has taken longer to take off than we expected but I believe the market is about to lift off,” he says. “We are not chasing venture capital at the moment as we want to be sure that we have the right business model. But we are in a position where we can scale very quickly if we need to.”

See simvirtua.com

EUROCOMPLY

Mixing law with technology

The data security issue is about to turn critical for businesses of all sizes. New European regulations which will come into force in under two years' time will expose firms of all sizes, no matter how small, to onerous fines of up to 4 per cent of their turnover or €20 million for even the slightest breach of their data. The General Data Protection Regulation (GDPR) will require any organisation which holds personal data on individuals, from the smallest corner shop to the largest insurance brokerage, to report any data breach to the Data Protection Commissioner within days of it occurring.

Non-compliance will expose organisations to these quite horrendous penalties.

Dutch native Emerald De Leeuw has established Eurocomply to help organisations manage the impact of the GDPR and achieve compliance. The self-service software guides users through a step-by-step data protection audit of their organisation. The audit reports provide an enterprise-wide view of the current state of compliance while the audit trails allow firms to easily demonstrate the steps they have taken to meet the accountability principle of the GDPR.

Having qualified in law in The Netherlands De Leeuw came to Ireland on a scholarship to do a masters degree in UCD in 2012. "I did my thesis on data protection law", she says.

"The real problem for Irish firms with the new regulation is not just the fines. Large customers won't deal with them if they are not compliant because companies are also responsible for their supply chains. Companies will have to prove compliance if they are to retain their major customers."

Having become an expert in European data protection law she spotted the business opportunity which existed and switched focus and did a Masters in business to prepare for her new

venture. "Regtech, the use of technology to address regulatory challenges, will be the new fintech," she contends. "I have the skills and expertise to assist organisations to comply with the GDPR but I wanted to make myself scalable."

In other words, instead of acting as a consultant advising individual firms, she has developed a tool to make that expertise available to any number of organisations.

"In order to scale myself I created a gap analysis tool, an assessment algorithm which gives you a judgement on the current state of compliance in an organisation."

But this is just the basic benefit.

"The really interesting bit is not so much the audit tool itself but the data which is collected over time," she points out.

"This will allow organisations to analyse trends and to compare themselves with

peers and sectors. This will be very powerful information to show regulators."

Having had the initial idea for the business in 2013 she took part in the UCC Ignite business start-up incubation programme in 2015.

"It got to the point that the business development was going so well that Enterprise Ireland backed me under the Female Founders Programme and the NDRC backed me as well. We are almost finished testing the software and will launch in December.

"We have a strong sales pipeline already and we are going to scale up massively next year. We will be looking to raise seed capital from a mix of angel investors and venture capital funds.

"The beauty of the business model is that it is infinitely scalable across other regulatory areas. For example, with the e-pricing directive coming up we can adapt the software to assist companies achieve compliance with that."

See eurocomply.com



INTACT SOFTWARE

Rebooting for the next wave of growth



Intact Software has been in business for 24 years but has recently regenerated itself through a new product offering and sales strategy which has seen the company enjoy a period of remarkably strong growth. "It feels like a second start-up for the company," says chief Justin Lawless. "It was the right time for Intact 2.0. We built on what was there before and the great team we had in place. We have more than tripled our staff numbers since 2013 and turnover has grown from €2.6 million to almost €8.5 million."

The company develops enterprise resource planning software for medium to large-sized companies in the €2 million to €100 million turnover range. "For our customers our software is typically the next step up from an accounting package," Lawless explains.

"They have grown to a point where they need an all-in-one solution for their business. Our customers are mainly in the wholesale distribution sector in the UK and Ireland with some financial services and not-for-profits as well."

The Intact solution is sold in Ireland and the UK both directly by the company and through resellers. It is also sold in Malta, Cyprus and Australia. "We have come through several generations of the product over the years - all developed and tested here in Ireland. But we weren't great at shouting about what we do or our success. We were just focused on the product and our customers. Ninety per cent of our business came to us through customer referrals."

But this changed when leading

industry analyst said that Intact had a very special product and should be doing more with it. That triggered the reboot to Intact version 2.0 which saw the company make the product more accessible through the cloud and raise €1.5 million through the Employment Investment Incentive Scheme along with a further €400,000 from Enterprise Ireland to fund development and growth.

"A lot of our customers are in the construction sector and we had gone through some tough times after 2008," Lawless notes. "But we decided to invest in the business, build a new product and get out there and start selling it."

A key step was the acquisition of a UK reseller to give the company a direct presence in that market. "We wanted to have our own distribution channel in the UK," says Lawless. "Selling through resellers caused some brand dilution. We now have a direct presence there and 40 of our 100 staff are based in the UK."

The fact that the company's main competitors are multi-billion dollar global giants is testimony to its success and the quality of its product offering. The next targets are further growth in the UK and international expansion.

"We are building out our sales channel in North America. We are starting in Canada and will move on to the US after that. We have already been out to South Africa and India is a target as well. We are very focused on the UK at the moment, however, as we still see strong growth prospects there."

See intactsoftware.com