

INNOVATION

1,000 voucher projects completed
since the programme commenced in 2007.

VOUCHER

2,228 Innovation Vouchers
issued by Enterprise Ireland since the programme was launched in 2007.

SUCCESS

41 Knowledge Providers
across the whole country, including Northern Ireland.

STORIES

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Innovation Vouchers success stories

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Foreword



The success of the Innovation Voucher initiative since its launch in 2007 has been phenomenal. Over 2,200 small Irish companies have been introduced to the concept of innovation through this initiative, going on to collaborate with research partners.

Stimulating innovation, in both technological and non-technological small businesses is the main priority of the initiative which was established on the recommendation of the Small Business Forum in their report 'Small Business is Big Business', published in May 2006.

The Enterprise Ireland Innovation Voucher initiative was designed to facilitate small companies with a business opportunity or problem they want to explore to make contact with researchers in publicly funded research organisations, many of whom are featured in this publication.

The vouchers allow companies to tap into the available knowledge and expertise in their partner research organisation. The voucher opens doors to these 'knowledge providers' who can offer advice and expertise and who can come up with an innovative solution to a small company's problem.

Innovation Vouchers are the push that many small Irish companies need to explore what part they can play in building our knowledge led economy.

When the initiative was initially launched, Ireland proved itself as an early adopter of creative ideas being only the second country, following in the Netherlands' lead, to introduce Innovation Vouchers. In 2008, Northern Ireland became the third when Invest Northern Ireland launched the initiative in conjunction with Enterprise Ireland, bringing the innovation vouchers to all parts of Ireland.

This publication highlights the positive impact of a voucher on 18 Irish companies. Reading through them, I was particularly impressed with the value for money that companies received from their knowledge provider for their €5,000 voucher. I hope this publication encourages more small companies to apply for an Innovation Voucher and find out how a little innovation can go a long way towards business success.

Conor Lenihan T.D.

Minister for Science, Technology and Innovation
September 2010.

Introduction

Innovation Vouchers open doors to knowledge providers and give them the financial support to start on the innovation ladder.

Any small registered company in Ireland, in any sector can apply for a voucher, once the company can demonstrate that their project requires an innovative solution which will provide additional value for the company and have on-going benefits. The Innovation Voucher initiative is managed by Enterprise Ireland in the Republic, and more recently, Invest Northern Ireland launched the initiative in Northern Ireland. This enables successful companies to access knowledge providers from both Northern Ireland and the Republic of Ireland.

There are currently 41 knowledge providers involved in the initiative – 31 in the Republic and 10 in Northern Ireland. Feedback from voucher holders has been very positive to date, with most participating companies citing the 'lack of red tape' as one of the main reasons they would use the initiative again.

Some interesting numbers

2,228 Innovation Vouchers have been issued to small companies by Enterprise Ireland since the initiative was launched in March 2007.

The projects undertaken through the initiative fall into 3 broad categories

- ICT, digital media and telecommunications companies
- Lifesciences, biotechnology and food companies
- Industrial technologies, engineering, manufacturing etc companies

As of 31st July 2010, 1,000 vouchers have been redeemed. The remainder are being worked on by research teams in publicly funded research institutes, known as 'knowledge providers'.

Pooled voucher projects

The Innovation Voucher initiative has continually

adapted to suit the needs of the companies it seeks to help. The introduction of the 'pooled voucher', introduced flexibility for groups of up to ten companies to join forces and apply for a pooled voucher worth up to €50,000. This allows companies with common research agendas to be involved in much larger research projects and use the results to their advantage.

Maximising the amount of research for a voucher

The €5,000 spend is not a ceiling for those firms who want to go the extra mile and put some of their own cash behind research. Enterprise Ireland introduced the Co-funded Fast Track voucher option in 2010. This option is suitable when there is a **pre-existing agreement** with the knowledge provider to undertake the voucher project.

The company and the knowledge provider jointly agree on the work programme for the project and the company pays 50% of the project costs, so for example, if a project is going to cost €10,000, the company can use the €5,000 innovation voucher to cover 50% of the costs, and will agree to pay the other €5,000 themselves.

Once the project is complete

Companies can go on to apply for more substantial funding from programmes like Enterprise Ireland's Innovation Partnership programme, designed to support collaborative research in companies that do not have their own R&D department but want to develop a new product or technology using research expertise.

For more information on these options and full contact details for the knowledge providers visit our dedicated website where applications can be made www.innovationvouchers.ie

Atlantis Seafood

Ashtown Food Research Centre, Teagasc



Casting the innovation net far and wide

By availing of the expertise of food technologists, Atlantis Seafood has been able to develop its own ready-to-cook seafood meals and is on the path to further innovation.

Located close to the harbour in Kilmore Quay, Co Wexford, Atlantis Seafood has been in business for over 20 years, processing all types of white fish and shellfish, and distributing them fresh and frozen to hotels and restaurants around the country. Recognising the catering industry is under pressure in the current economic climate, the company was eager to expand by producing its own ready-to-cook meals. "We wanted to get more into the retail side of the market and then move to export our products to markets such as the UK, France and Italy," said John Kenny. "When we read about Innovation Vouchers, we knew there were definitely ways we could use one as we had been thinking of new ideas for adding value to seafood. A voucher seemed like a handy way to get the ball rolling."

Seeking to extend shelf life

Atlantis Seafood used the voucher to fund research at the Ashtown Food Research Centre (formerly the National Food Centre), which is run by Teagasc. "We worked with John Fagan at the centre and the voucher was primarily used for trialling modified air packaging on ready-to-cook meals. This involves taking out the oxygen and putting back a 60:40 mix of carbon dioxide and oxygen. Fresh fish under ice has a five-day shelf life, but with modified air packaging, you get 10 days. We also had microbiology testing done on the product to see how different mixes of ingredients would react under modified air."

Invaluable knowledge and support

Among the many benefits the voucher brought to Atlantis Seafood, Kenny said the one-to-one contact and support from the knowledge provider was particularly invaluable. "People like us have great ideas, but we are not technically-minded. You can have a great idea, but it's no good unless you can get on to the next stage. You need back-up support. Now we can pick up the phone to John Fagan and say 'This is not working' and he'll tell us to send up samples so he can do some work on them and figure out what is wrong. Now we know that if we come to a roadblock, there are ways and means around it. Before we would have dabbled at things, but would have been nearly half afraid of it. The centre has all the high-tech equipment needed. What that voucher has done for us is opened our eyes to the expertise that is there."

Taking on new challenges

Kenny and his colleagues are now enthusiastic about innovation and have applied for another voucher and a research and development grant from Enterprise Ireland to do more work with the National Food Centre. "The voucher gave us the confidence to move on and put more structure on our development. If we hadn't had that, we wouldn't have been so brave to go for additional funding. Now we know that with a bit of help, we can get there. If we get this R&D grant, we will definitely be broadening out to work with other knowledge providers. I've just heard there is a centre in Cork that is very good on packaging and material so we might go and talk to them next."

BC Lap Holdings

School of Electrical, Electronic and Mechanical Engineering,
University College Dublin (UCD)

Hot prospect for successful business

BC Lap Holdings knew there was an extensive market for its Flexiheat infrared heating product, but needed technical expertise to make it safe and adapt it for outdoor use.

While scouting for new business ideas in China, John Nutty of BC Lap Holdings Ltd came across an innovative new form of infrared heating system with a flexible element. Struck by the many possible commercial and residential applications of such a product, he decided to investigate it, but realised quickly he would have to get it analysed and vetted for safety in Ireland. "With any form of heater, there is potential for people to get hurt, so it was very important to test it. The original Chinese product had no control system, so if it went into a fault condition, there was no control to make it safe," said Nutty.

Student research gives results

BC Lap Holdings approached Professor Gerry Byrne in UCD and arranged for an Innovation Voucher to fund student research into the heating element materials and the infrared heating process. Once this research was done, it provided critical information the company would need for future product design and materials selection, and led to its first product.

"This is a wall-hung heater that is very lightweight and can be printed with any image the customers want," said Nutty. "It is based on infrared technology, so unlike a conventional heater or radiator, it doesn't heat the space, but is designed to heat the people directly. If you touch a metal radiator, there is a lot of heat stored in the metal, but this is a plastic-based product. The surface of

the heater gets to about 80 degrees, but it won't harm anyone when they do touch it as it's a thin element and the heat dissipates quickly."

Bringing out the best in Flexiheat

Nutty also wanted to develop an outdoor version of the product and obtained a second voucher for UCD to work on the wind barrier that would be needed to make it a success. "The outdoor heater would be based on the same technology, but it could be branded and used in smoking sections and outdoor cafés. Existing outdoor heaters use gas and are problematic. An infrared heater could be activated by sensors when someone approaches or turned off when they move away, so it would not have to be on all the time. We knew the demand for it was there if we could overcome certain technical difficulties," said Nutty.

Bringing credibility to innovation

"This has definitely changed our attitude to innovation," says Nutty. "We are a start-up and I've never done this before. Doing it in conjunction with UCD has given us insight. We didn't have the expertise or the knowledge to do this ourselves. If we had tried, with hindsight we know we would have spent a lot more money and made a lot more mistakes. Furthermore, working with UCD adds a layer of credibility to our business. I actually believe that there is a lot of scope for great co-operation between academia and business and an opportunity for everybody to benefit. It's great for companies and means students get real experience in the real world. Liaising with commercial enterprises does them the world of good."

Bellurgan Precision Engineering

Department of Applied Sciences, Dundalk Institute of Technology (DKIT)

New era of efficiency at Bellurgan

Bellurgan Precision Engineering used its Innovation Voucher to bring on board a DKIT expert to modernise its organisation, and recommend a state-of-the-art Enterprise Resource Planning system.

Despite being a successful supplier to the medical and aerospace industries, among others, Bellurgan Precision Engineering has been struggling to manage its inventory, resources and supply chain. The company has been using spreadsheets and an accounting package to try to keep track of its parts, labour and processes, but this software is utterly inadequate.

"With the volume of products we produce and the different types of material we use, it's very difficult to plan and easy to miss something," says Gabriel Murtagh, the quality manager at Bellurgan. "Our production managers spend 50 - 60% of their time trying to plan, when that should only take an hour a day, with the rest of their time going towards managing people and resources. The company is making money and doing well, but we could be doing it a hell of a lot more efficiently. I knew we needed to make changes to different, more modern ways of doing business."

Linking up with DKIT

Bellurgan was already in contact with Dundalk Institute of Technology (DKIT), which advised it of the availability of Innovation Vouchers. The company applied and was approved for a voucher, a process that was speedy, straightforward and seamless, according to Murtagh. Bellurgan then appointed Tony Lennon, a DKIT lecturer in supply chain management, to assess its needs.

Lennon visited the Bellurgan factory once a week or so over a four-month period, meeting with staff at all levels and identifying strengths and weaknesses across the company's processes.

"He came back with an interim report, outlining the issues and making recommendations," says Murtagh. "These included some quick fixes, such as creating a material storage area, but also emphasised that we needed some sort of Enterprise Resource Planning (ERP) system."

For the second phase of the project, Lennon reviewed the ERP software market and made a shortlist of packages that met Bellurgan's basic criteria. The company is now meeting with software providers.

Concrete results

"It's been very helpful to have someone independent coming in who got feedback from the staff and showed us this is where we have to go," says Murtagh. "The truth hurts sometimes and he gave it to us warts and all. For the management seeing that, it was a case of 'enough is enough, we have to do something'".

Bellurgan's Innovation Voucher project will have a huge cost - and time-saving impact on its business, he adds. "The ERP software will be an essential tool to help manage our company. We will have much more accurate data and will be able to do variance analysis, so we can amend prices and ultimately be more competitive. We will also be able to manage capacity and resources much better."

The current liaison with DKIT has run its natural course. "We have got as far as we can go with it," says Murtagh, adding the company had an excellent relationship with Lennon and DKIT. Bellurgan would be extremely happy to use Innovation Vouchers again, he says, if a suitably qualified academic were available to help with a specific problem.

Channel Content

School of Applied Languages and Intercultural Studies (SALIS),
Dublin City University (DCU)

Diversifying into the world of diversity

Through an initial stroke of luck, Channel Content was able to collaborate with DCU and significantly expand its business.

Business development can happen in odd ways. Through a conversation with a friend of a friend at a barbecue, Dermot Rogers learned the European Intercultural Workplace Project, based in SALIS at DCU, had a wealth of video material on diversity in the workplace. His company, Channel Content, which he describes as a publisher rather than a technology company, was already producing learning content for corporate clients and public bodies. His ambition was to grow its collection into "the go-to library for video-based training material". It occurred to him it might be possible to repurpose the DCU video footage as a Channel Content product. As he knew about the Innovation Voucher initiative, he pitched the idea of working together to DCU, where staff members were receptive.

Broadening horizons

Rogers likens his company's video-based content to a very large training manual of interpersonal business skills. "Working with DCU enabled us to create a new chapter," he says. "Throughout my career, I have often ended up working with various institutes of higher education, but none were as easy as this one. DCU was very easy to deal with. Staff members there were pragmatic and responsive and they had no agenda or issue about academic versus commercial values. Without the availability of the Innovation Voucher, we would have been a lot less likely to go through a full development exercise with DCU, because diversity content was not top of our list at that time. The voucher did not pay for the project, but it was the catalyst for it."

Project leads to growth

"We didn't seek out diversity content. Serendipity led us to it," says Rogers. He adds, however, that Channel Content did not get involved with DCU just because it could. He saw that having a diversity element would add value to the company's offering. "Most of our content up to then dealt with sales, communications, meetings and so on. To add this extra dimension of diversity was advantageous and potential buyers reacted well. With our second Innovation Voucher, we are embarking on more of this diversity-related content."

Engendering ambition

Rogers found the Innovation Voucher system highly efficient, pointing out that it does not require a huge amount of time and effort from the business owner. "The voucher can then be used as a stepping-stone to more extensive and more ambitious research and development funding. If an opportunity arose to work on a full collaboration with DCU, we would be happy to explore it," he says."

Not only has working with DCU enabled Channel Content to be more innovative in terms of the products it devises, it has also led it to new markets for those products. "We are now talking directly to the Equality Officer in DCU and those in other institutions. "We would not even have known that role existed before. We have a whole insight into a group of people that are focused on diversity and equality and they would not have known about us either."

Cultec

Centre for Nanotechnology and Materials Research (CNMR),
Athlone Institute of Technology



Cultec plays to win with synthetic hurleys

Tom Wright knew there was a need for a wider range of hurleys, but it was only with the help of Athlone IT that he could bring his new product to market.

A vocational school teacher of engineering for many years in Ferbane, Co Offaly, Tom Wright had long been involved with training local hurling and camogie teams. He noticed a difficulty in getting good quality hurleys for underage players and began to wonder about the possibility of a synthetic or composite alternative to the traditional ash hurley. He began to research the possibilities and gained a business partner, John Grehan. "We got to a certain stage, but we needed to test the material, which was very important to get validation for the product from the GAA. We found out Athlone IT specialised in plastics research and had this nanotechnology and materials research laboratory so we went to them."

Thorough testing in the lab and beyond

Researchers in Athlone IT carried out a huge range of tests on different aspects of the prototype Cultec hurleys, including flexibility, impact strength, striking distance, the forces generated when a ball was struck and the hurley's variable co-efficient of friction, or how it would grip a ball. Most of this testing was paid for with Innovation Vouchers. The test results enabled Cultec to modify the composition and design of their hurley. The company even had to decrease the efficiency of its product, as it was hitting balls appreciably further than an ash hurley would. It also had to be made breakable, as required by the GAA.

"The vouchers were essential for us," said Wright. "We were able to form a relationship with the people in the laboratory in Athlone and they took personal interest in the product, working above and beyond what would have been covered by the vouchers. It was absolutely essential for us to have testing done outside the lab to gauge the height to which balls would go, so they even helped do some tests in a barn belonging to one of us."

Making business dreams reality

When the Offaly camogie team won the junior All-Ireland in 2009, three of its players were the first ever to use synthetic hurleys on the hallowed ground of Croke Park. The product was a success, but Wright says there were "huge obstacles" in the way of making it to market. "It would have been impossible for us to develop the material and processes on our own. We could not have afforded to make the product moulds or known how to do the actual mixture of the materials. We could not have afforded any of it without the Innovation Vouchers from Enterprise Ireland and the support we got from Offaly County Enterprise Board."

He adds that he has learned greatly from the knowledge provider. "As I was teaching engineering, I had a mindset for it. I was familiar with innovation and I knew how to go about research for a project and evaluating a product. But I've learned a lot from this process. Where people share information, get together and help each other, there are great benefits."

Delicious Gourmet Foods

Department of Food Science,
Cork Institute of Technology (CIT)]



The sweet taste of success

By using Innovation Vouchers to fund research into the use of natural preservatives, Denise O'Callaghan boosted profits at her gluten-free food company.

When Denise O'Callaghan's father was diagnosed as a coeliac, the family soon realised the range of suitable food products was quite limited and many were not of particularly high quality. She spotted a gap in the market and, in 2006, set up a gluten-free bakery in Ballincollig, Co Cork, naming it Delicious Gourmet Foods. The new venture was self-funded, although Cork County Council provided support in the shape of an incubator unit, which it paid to have fitted as a kitchen.

Over time, O'Callaghan became interested in finding out how to extend the shelf life of her growing range of breads and cakes, which came to include small individually-wrapped products and 'celebration cakes' for Christmas, birthdays and weddings. Through a contact at another food company, she learned of Innovation Vouchers and approached the Department of Food Sciences at CIT to see if researchers there would work with her on a voucher-funded project, which they were happy to do.

Funding makes all the difference

With the support of two Innovation Vouchers, CIT researchers worked with O'Callaghan on how best to use natural preservatives to extend the shelf life of her products. O'Callaghan had previously been in contact with both Teagasc and University College Cork to avail of their expertise. While both were very helpful, she says Delicious Gourmet Foods received the most help by far from CIT because the company could afford to pay with Innovation Vouchers for its research.

The work done with CIT has enabled O'Callaghan to improve her existing product range and develop a number of new products. These include a recently-launched breakfast cereal made for Paddy's O'Granola, another Irish food company based in Co Laois. "They were already producing granola, but we were able to provide them with a gluten-free, wheat-free, dairy-free and yeast-free version," she said.

The benefits of expertise

"I do not come from a scientific or food science background," said O'Callaghan, "so there was only so much I could do. The researchers at CIT brought a lot of expertise to the project and their knowledge has helped us to move on with our own research. It's so much easier from our point of view to have a microbiologist working with us. If we are having difficulty with a recipe and something is not working, we can bring in the experts to advise us. They might suggest adding something or cutting back an ingredient to a certain percentage. That scientific expertise is very beneficial and it makes it easier for us to engage in new product development. We were pretty gung-ho about innovation already, but the vouchers have made us innovate faster and knowing there is a lot of expertise to fall back on is a huge help."

Boosting the bottom line

The voucher projects have led to concrete results for O'Callaghan's company. "The research has helped us to increase our turnover by launching new products and it has also increased our profitability. As we have extended the shelf life of products, we get fewer returns, which improves our margins," she said.

Drynights

Electronics Production & Innovation Centre (EpiCentre), Letterkenny Institute of Technology (LYIT) and Biomedical Diagnostics Institute, Dublin City University (DCU)

Electronic solution leads to dry nights

Not only were LYIT researchers able to revolutionise the Drynights product, they also brought DCU experts and technology on board.

Drynights already had an electronic urine detection device designed to alert carers to bedwetting in children, the elderly and disabled people. But the technology used in the product was out of date and had been copied endlessly as it had never been patented. John Stack of Drynights was anxious to develop an advanced, wireless version of his product that could be sold in bulk to crèches, nursing homes and facilities for the disabled. "We had an idea of what we wanted," he says, "but we ended up with something totally different, something we did not have the expertise to develop".

Cutting-edge technology

Stack applied for an Innovation Voucher, settled on LYIT as his knowledge partner and quickly built up a good working relationship with Simon Peter Johnston at LYIT's EpiCentre. "At LYIT, we talked, they listened and they had what I needed. They soon came up with a working model using radio frequencies. They had particular electronics knowledge and they knew what frequencies they could use in a hospital. They made a new prototype, using a machine they have that can make 3D parts from plastic or other materials. We would never have got there on our own. The expertise they had was worth a fortune to us. They also knew about industrial design and safety considerations."

Invaluable contacts

Johnston and his LYIT colleagues keep abreast of developments in their field around the country

so they knew Dr Tony Killard at DCU was working on a new type of high-tech sensor. "Tony Killard is developing extremely good, world-beating, patented technology and we are the guys on the outside that can use that technology," says Stack. "We never would have met him or known what he was doing without our connection to LYIT. They have existing resources and contacts that I could tap into. We have lots of meetings with seven or eight PhDs sitting around a table. There is nothing they can't solve, but without the voucher, they would never have got in touch with me either."

Transforming thinking

Stack cannot emphasise enough how the Innovation Voucher has changed his approach to business. "The idea of innovation is absolutely daunting from the outside. You have not got a clue who to ring or where to go," he says. "But this voucher scheme puts the people who have the ideas in touch with people who have the resources. It has certainly changed the way I think about innovation and the speed of it all was breathtaking. What I got back from this was worth €50,000, not €5,000. The third-level colleges have the knowledge and the resources at their fingertips, and I could not have done this without them."

For Drynights, the only way is up. "We have a world-beating product now. This is not a market we are filling. This is a market we are creating. After this, we are hoping to get innovation partnership funding from Enterprise Ireland to develop the product further and actually get it into a box".

Ecolight

School of Engineering & Construction Studies,
Institute of Technology Tralee

An illuminating change in direction

Dominic Grattan of Ecolight needed technical help to test the LED products he sold, but with the assistance of IT Tralee, he ended up developing new LED controls instead.

Dominic Grattan started Tralee-based Ecolight in 2008 to offer the commercial sector energy-efficient lighting for retail, display and other needs. He was buying LED products wholesale and selling them on to his clients, but wanted to test and verify the claims made for the products he sold. "I was looking for a local laboratory or institute to actually test the products," he says. "The market states that LEDs should last 2,000 hours but no-one had documentation to prove that these products lasted that long."

He contacted various third-level institutions before eventually ending up chatting to Dr Joe Walsh at Tralee Institute of Technology, who said testing wouldn't be a problem, but wondered if Grattan would consider developing products. "He explained about the Innovation Vouchers and I could hardly believe such support was available on my doorstep. LEDs are the most cost-effective and energy-efficient form of lighting, but there are massive gaps in the market."

Evolving into an innovator

Grattan had what he describes as "an intense briefing" with Walsh and colleagues David Lenihan and Dr James Prendergast. "They're a great bunch of people, all experts in their fields, and they helped me all the way. They understood exactly what I wanted and they had the intelligence in there to do it."

He realised he could fulfil his ambition of providing further control and cost-saving to LED

products and ended up getting two Innovation Vouchers, the first to develop a control mechanism for LEDs and the second to produce a working model with switch controls and a photovoltaic unit. "The vouchers have allowed me to sit down with experts in electronics, work out how to control LEDs and turn them into intelligent lighting for indoor and outdoor use. I do not just want to sell products. I want this company to be a leader-innovator in this technology," he says.

Shedding light on innovation

Having used the vouchers, Grattan believes they are an excellent way to bring out stymied creativity in Irish businesses. "I believe there is massive capacity in this country to innovate and the Innovation Vouchers enable someone like me who wants to develop a product, but may not have the technical knowledge. They have given us a springboard and allowed us to explore ways of adding value for clients. Now we can be innovative in what we are developing and not just take what is there in the market already and run with it.

"This is what I always dreamed about. I always wanted to add value, but the only way to do that before was to talk to manufacturers about customers' needs. Now we are actually able to develop products ourselves. I could not have done it without IT Tralee. The boost you get encourages your thought processes and means you are not afraid to talk to the market. I promote the Innovation Voucher scheme all the time to other small companies owners I meet. This scheme is a great opportunity to learn a huge amount and think about how your company can add value and solidify relationships with clients."

Eirgen

The Pharmaceutical and Molecular Biotechnology Research Centre,
Waterford Institute of Technology (WIT)



WIT helps to perfect anti-cancer drug

When Eirgen developed a generic drug in-house for the first time, mystery impurities threatened the whole project. Researchers at WIT were there to help.

In 2009, pharmaceutical firm Eirgen decided to develop its contract manufacturing business by producing its own generic product for the first time. "We formulated a generic, more cost-effective version of the third biggest breast cancer drug in the world," says Liam Byrne of Eirgen. "It's a specific anti-cancer compound, used in the treatment of breast cancer in post-menopausal women, usually after chemotherapy."

Regulations permit any drug to contain a tiny amount of impurities, but Eirgen realised its new breast cancer drug had impurities that were growing quite rapidly in certain conditions. "To claim shelf life on a product, you need to do stability studies that mimic global climactic conditions. At elevated temperatures and humidity, our product was degrading so much, we had to stop the development," says Byrne. "Obviously, we could not have marketed a product that was not meeting regulatory requirements. It was urgent. If you miss the patent date expiry, you miss the market. If you come on-stream six or nine months too late, nobody wants to buy it."

Accessing expertise and equipment

Eirgen already had strong links with WIT and Peter McLoughlin, the head of the Department of Chemical and Life Sciences, suggested an Innovation Voucher to fund research into the drug's impurities. "Had this been a commercial contract with a private company, the research would have cost us €1,000 a day so that €5,000 would have bought a week's work, which would not have been enough to solve a problem like this," says Byrne.

Most of Eirgen's voucher went towards accessing high-end analytical equipment at WIT, with the remainder going on consumables, reagents and other necessities for the laboratory work. "We are a High Profile Start-Up, but we do not have lots of expensive equipment lying around. The voucher gave us access to world-class equipment and knowledgeable staff. They came back to us within a relatively short space of time with a strong project action plan."

"Within four weeks, they had identified the two main impurities in theory. They went on to conduct confirmatory experiments. They were able to show the molecular structure of the impurities and confirm to a high degree of certainty what was going wrong."

From the laboratory to the market

With the 70-page report provided by WIT, Eirgen was able to conduct additional formula trials in-house. "We came up with a more stable tablet and consequently submitted a pan-European licence application," says Byrne. "That licence was successfully granted in Q1 2010 and we have already signed up 10 to 12 customers interested in taking the product. The anticipated sales volume is very high. We can safely say if it weren't for the voucher and the expertise, we wouldn't have done it."

Continuing in innovation

Eirgen has applied for and received a second Innovation Voucher and is currently working on another product with WIT. "We were a contract manufacturer, but we did this in-house. The voucher enabled us to continue to be innovative and encouraged us to become involved in product development," says Byrne.

Epona

Centre for Design Innovation, Institute of Technology Sligo and Microsensors for Clinical Research and Analysis (MICRA) Applied Research Centre, Institute of Technology Tallaght

Epona races for excellence in equine diagnostics

Innovation Vouchers helped this Sligo-based entrepreneur to structure his product development process and come up with an innovative product design.

Heinrich Anhold's background more than qualifies him for a career of innovation in the field of equine diagnostics. Not only has he a degree in physiology and a PhD in biochemistry from NUI Galway, but he is also a former international and professional showjumper. When he finished his PhD, he set up a company to design a portable point-of-care medical device vets could use to assess the health and performance potential of horses.

The product will deliver a complete blood count (commonly known as a CBC) at the stable door with laboratory-standard accuracy. At present, equine blood samples must be sent to a clinic or a reference laboratory for analysis or a horse is brought to a clinic for in-house diagnostics. These methods are both time-consuming and labour-intensive. "Epona's product will deliver equine blood analysis any time, anywhere by putting the technology in customers' hands. Veterinarians will be able to carry out rapid diagnosis at the horse's side and make better-informed decisions for immediate intervention," said Anhold.

Exponential growth of innovation

Epona had the technology in place for its product so used its first Innovation Voucher with the Centre for Design Innovation in Sligo to look at innovative product design. "Aside from the technology, I wanted to research how this device would look, feel and function. The Centre came up with all kinds of really novel ideas about how the software will work, how the buttons will work, how blood will go into the device and so on."

A second Innovation Voucher was used with Microsensors for Clinical Research and Analysis (MICRA) Applied Research Centre, which is based at the Institute of Technology Tallaght. Both vouchers have led to larger projects for Epona and the knowledge providers. "One led on to an innovation partnership with IT Tallaght and another one led on to an internal user-centred design programme that Epona is now running, where we focus on product design based on end-user requirements and specifications," said Anhold.

Fast, simple path to progress

Anhold describes the knowledge providers he dealt with as "fantastic" and cannot speak highly enough of Innovation Vouchers. "I thought the value for money was pretty amazing and I liked that the whole process is so easy. It is an absolutely excellent scheme," he said.

Although Anhold says he probably would have dealt with the knowledge providers without the vouchers, it would have taken him far longer to do so. "The vouchers helped me put a structure on my research. I ended up working with them much earlier than I would have otherwise because I didn't have the finances. The vouchers were good for testing the water to see if I wanted to work further with these people and they led to much larger projects. The vouchers give you a boost. They give you confidence. It's so simple. You tell the knowledge provider what you want to do, get your outcome and then decide if you want to go further with it. Things would have been much tougher without the vouchers."

Frozen Pet Zerts

The Food Technology Centre,
St Angela's College, Sligo

Barking up the right tree

American dog owners love to give their pets frozen treats. Seamus Sheeran hopes European doglovers will follow suit, now he has developed a similar product with help from St Angela's College.

While visiting a friend in America four years ago, Sheeran saw him give his dog a frozen treat and was fascinated by the product concept. He had worked for many years in sales and distribution of dairy products so knew the industry well. Over the next couple of years, he researched the market and found that, although the products were popular in the US, they were not available in Europe. He trademarked the idea and decided to develop a similar version that would be a health food for dogs. He visited Irish companies to try to find one that could develop a recipe and it was one of these that pointed him in the direction of Innovation Vouchers and the Food Technology Centre at St Angela's College in Sligo.

From idea to tasty reality

With his first Innovation Voucher, Sheeran asked St Angela's to develop a recipe for his Frozen Pet Zerts, which they did. Unable to use their usual trained taste testers – humans – the St Angela's researchers brought the prototype to local dog compounds and kennels for initial taste testing. The tasters were reported to be very pleased with their treats. A second voucher funded ongoing product and flavour development. The finished product is a frozen organic yogurt treat available in banana, blueberry, peanut butter and vanilla flavours. Donegal Creameries, which produces natural yogurt and has a potting machine, was recommended to Sheeran and is his main supplier.

The Frozen Pet Zerts were launched at Pet Expo 2009 in the RDS and are now on sale in about 40 pet shops. Sheeran is working on packaging and branding redesign at present and plans to expand shortly into supermarkets and exporting. He also wants to develop the range for other animals. As the company develops, he hopes to work again with St Angela's and other knowledge providers. "It's great because you can check online which areas and specialisms the different knowledge providers have."

Unlocking business potential

Sheeran is still grateful to the business owner that told him about Innovation Vouchers. "I would not have known about the vouchers or the knowledge providers beforehand. When I applied for the voucher, the decision was made quickly and there was no messing around. The voucher was sent to the knowledge provider and it was all very straight-forward. This has absolutely unlocked this business."

Helpful introductions

He also praises the networking facilitated by St Angela's. "The voucher has also given me access to the heads of different departments in Sligo IT. I got introductions to so many of them and they were really keen to help. It has opened up all that to me. Before all this, I had no inkling this knowledge was available to businesses. It offers really crucial help to anyone trying to get a small business off the ground."

Good Travel Company

Department of Computer Science,
Trinity College Dublin

Sharing the road to innovation

Peter Soutter had a good idea for car sharing software, but he needed the expertise of computer scientists at TCD to make his product a reality.

Having established and run the Good Travel Company, an online sustainable travel agent, Peter Soutter had the idea to develop software for car sharing companies. Car sharing involves renting a car by the hour and is popular in many European and American cities. "This was really a change of direction for me," he said. "I had developed a very simple, small piece of software to enable customers to book hotels through my site, but this is a lot more complicated. Through the Innovation Voucher initiative, I've been able to work with Trinity and have set up a separate company called Good Travel Software."

Putting maths expertise to use

Soutter approached Trinity's Department of Computer Science as it had already worked on some car sharing projects. He asked about the possibility of using an Innovation Voucher to develop a booking algorithm for his software and found Trinity was very receptive to this type of funding. "The first voucher was really exploring the possibility of developing a booking system that enabled one-way bookings within the car-sharing industry," he said. "At the moment, cars always have to be returned to the same spot. I wanted to develop a system that would allow users to drop a car to any location, just like the Dublinbikes scheme. All the car share companies want one-way bookings, but there is no software out there that can provide that. In Trinity, they looked at other work that had been done in that area and developed an algorithm from there."

Driving the project forward

With a booking algorithm in place, Soutter then needed a pricing algorithm to incentivise drivers to move the cars to different parts of a city. "The main reason there are no one-way bookings in car sharing is that you can build a booking algorithm, but all the cars will end up in the same area because everyone wants to go to the city centre. By varying the price according to demand, the car share companies don't have to drive cars from one point to another at the end of a booking." Soutter used a Fast Track Innovation Voucher to fund the development of the pricing algorithm at Trinity and is now using a third voucher so Trinity can join the two algorithms. "By the end of the voucher process, we will have something we can begin beta testing before selling it to car share companies," he said.

Vouchers create route to market

"Without the Innovation Vouchers, I probably would have ended up parking my idea," said Soutter. "They enabled me to do this. I was struggling, because I had this idea I thought would work but I couldn't figure out how to fund the research. It has created a route to creating a product. Trinity has been really brilliant. They are interested in the project as well and they have put in more time and work than the vouchers have covered. Furthermore, with other types of funding, I would have had to have given up part of the company or part of the intellectual property (IP). With the Innovation Vouchers, everything resides with the company and that is brilliant. When I'm looking for further investment, I can say I hold the IP."



Holfeld Graphics

School of Computing and Engineering,
University of Ulster

Bringing high-tech bar codes to the world

Holfeld Graphics could already produce new types of bar code, but needed the University of Ulster to help build an online retail system so it could sell its products globally.

The Innovation Voucher initiative is one of the few sources of funding that operates on a cross-border, inter-agency basis. That this was the case ended up being of incalculable benefit to Dublin-based reprographic firm Holfeld Graphics, which was in dire need of help to round out changes in its business model. "Our whole industry has changed radically from being a craft-based industry to a technology-based industry," says Rory Connaughton. "You survive in that by being able to reinvent yourself to accommodate the needs of the market. We wanted to try and achieve an online presence for supplying bar codes, not just a static website. We used the Innovation Voucher to gain knowledge and help with this huge change in our business model and processes."

Building online business

Holfeld Graphics was already able to produce the latest types of industry-standard bar codes – the Databar and the 2D barcode or data matrix (small pixellated boxes that appear on advertising and packaging). These are governed by GS1 (Global Standards 1), which oversees the design and implementation of new types of barcodes, and Holfeld Graphics is on the governing council of GS1 in Ireland. While it could produce the codes, it needed to be able to sell and deliver these products over the Internet. Connaughton and his colleagues knew they did not have the necessary skills to do this. They did not just want a website, but needed help with back-end technology, such as search engine optimisation, domain name procurement, a payment and ordering system, and a background monitoring system.

Connaughton applied for an Innovation Voucher and contacted the University of Ulster, where the Professor of Computer Science, Dr Maurice Mulvenna, and his team were able to help him, providing everything Holfeld Graphics required. "We are able to deal worldwide now, whereas before we could only cater to the domestic market. Ebusiness has no borders," says Connaughton. He adds that the voucher did not cover the design and creation of the final website. This was done by an independent web designer, who worked with the project results provided by the University of Ulster.

This was Holfeld Graphic's second Innovation Voucher. "The first was used on another project related to our website and in that case, we worked with the Institute of Art, Design & Technology (IADT) in Dun Laoghaire. We had a very positive experience with them, which led us to believe that we should apply for another voucher

Opening the way to achievement

Connaughton says it can be difficult for small company owners to tap into higher education institutions on their own. "The Innovation Voucher is extremely useful for companies like ours to access knowledge. Most people like myself are multi-tasking and you never get around to these ideas or projects. By having somebody academic to work with you, things get done. Our experiences with both knowledge providers were very positive and we would recommend it to others. We would certainly innovate further in future, having used the vouchers. They encourage you to explore ideas and have some assistance in thrashing them out."

In Hand Guides

Technologies for Embedded Computing (TEC) Centre,
Cork Institute of Technology

CIT steers In Hand Guides to success



Trevor Winckworth did not have the technical know-how to develop his handheld audio guides, but Cork Institute of Technology certainly did.

Anyone who has visited a major tourist attraction or museum in Ireland or abroad will be familiar with the expensive audio guides you can borrow to guide you around. "Often you have to pay for them or hand in your passport as security," says Trevor Winckworth. "I spotted a gap for affordable little audio guides using MP3 technology. I wanted to take advantage of the dropping prices for that technology, to produce a low-cost product that could be sold to visitors by museums, attractions and tourism bodies, without them having to worry about staffing and security."

Finding the perfect partner

When Winckworth read about the Innovation Voucher initiative, he thought it would be ideal for a start-up like his. "When I applied, I was looking around and found TEC centre at CIT, which specialises in embedded technology and sensors. I had found the perfect partners. I was right down their line and they were right down mine. I'm not a techie. The Innovation Voucher allowed me to build a relationship with CIT. If the TEC Centre didn't exist, I would have had to look elsewhere, maybe abroad. The Innovation Voucher did not so much help me to be more innovative, but it helped me to achieve that innovation. When you are starting up, it is difficult to get funding. I wanted to innovate, but the problem was how to do it. The voucher helped me along the way in achieving that."

Adding cleverness...and value

In Hand Guides has been given two Innovation Vouchers to use with CIT. With the first, they explored and refined the basic product. "But the TEC Centre wanted to add value and patents to the basic product. They did not want to copy

what was already out there, they wanted to develop it further. The TEC Centre's job is to add cleverness," says Winckworth. "With the second voucher, they added the capacity for ticketing into the audio device with an embedded RFID (radio-frequency identification) reader. It gave me this big opportunity and allowed me to develop the product further and incorporate ticketing, something I knew was needed from listening to clients. With the new technology incorporated into the product, the device will act as an electronic ticket as well. If the customer buys the device ahead of time, it can be used as both an audio guide and as a ticket, say if the guide is for a museum. Winckworth wants to develop the device so that multiple venues would be on one device. This will allow the customer who buys it to use it both as an audio guide and a ticket for multiple museums in the same area, therefore no need to queue to buy tickets in each location".

Further innovation

In addition to his tourism audio guides, Winckworth is also developing a similar product for the health and leisure industry, and is currently trialling devices for a large cancer charity and a big pharmaceutical client. That's not all, however. "I've just been asked to look at adding an FM receiver option as well by American clients, so we will be working on that next," he says.

Working with CIT also meant that Winckworth got to tap into a wider network of contacts. "We've actually got involved on some large European projects because of it. Normally, a small company like ours would never have got a foot in the door. I am now in discussions with one of the world's largest entertainment companies, but I couldn't do business with them without being able to access the technical help at CIT."



Neurosynergy Games

The School of Science and Computing,
Carlow Institute of Technology (IT Carlow) and the
School of Computer Science and Statistics, Trinity College Dublin (TCD)

Bringing sophistication to brain training

Neurosynergy Games was able to take a low-risk approach to software development with the support of TCD and Carlow IT.

Some companies that have availed of Innovation Vouchers were already at the forefront of innovation. One of those is Neurosynergy Games, founded in 2009 by two neuroscientists, Dr David Delany and Dr Lorraine Boran, to produce brain training software designed to help those with mental illness, autism and brain trauma. "We're predicting that our patent-pending approach will outperform existing drug and talk therapy treatments for mental illness and brain rehabilitation," explains Delany. "We've already obtained some very encouraging experimental results in research targeting autism and traumatic brain injury. The ultimate goal is to position the software as an active, side effect-free treatment that can be prescribed by clinicians for patients."

Encouraging innovation

While Neurosynergy had initiated clinical research collaborations with a range of colleges including TCD, UCD, Maynooth and Waterford Institute of Technology, it needed help developing a proof of concept version of its brain training software. "We obtained two vouchers, the first with Joseph Kehoe, the head of the degree in Gaming Computing in Carlow IT, and the second with Dr John Dingliana, the head of the masters in Interactive Entertainment Technology in TCD. Joseph Kehoe assigned several students to the project who developed a game prototype for us. We entered it into Microsoft's Imagine Cup 2009 (the world's largest student programming competition) and got to the Irish finals. Although we didn't win, we did receive one of three places on the Microsoft Innovation Academy, which was a nice consolation prize!"

The second voucher was to fund working with Dr John Dingliana and David Whelan, a graduate of the Interactive Entertainment Technology masters that John heads up in TCD. For this project we completely redesigned and rewrote the software from the ground up in C++ in order to include additional clinical functionality and maximise cross-platform interoperability. The prototype development work David carried out subsequently helped us win a place on the NDRC (National Digital Research Centre) LaunchPad Programme in the Digital Hub in Dublin for high potential software startups.

Benefits of the vouchers

Delany says the vouchers have helped Neurosynergy develop a considerably more complex software system design than its earlier prototypes. "The earlier work acted as necessary stepping stones to the current advanced design. Development of our current system is well under way and we should be ready to launch commercial brain training software by December 2010."

Not only did the vouchers help Neurosynergy to progress its software, but as a result of the initial collaborations, the company has continued to liaise with both TCD and Carlow IT on neuroscience-related projects it believes may have commercial potential, including a novel software-based stroke rehabilitation tool. "Research and development is fundamental to what Neurosynergy Games is about, so the Innovation Vouchers haven't changed our already very positive attitude towards innovation," says Delany. "The projects have, however, enabled us to develop useful prototypes of our software and develop our expertise in software development at low risk. The scheme has enabled us to bring in external expertise in a way that has definitely helped us accelerate the translation of our scientific creativity into practice."

Perch

Faculty of Design, National College of Art and Design (NCAD) and Medical Engineering Design and Innovation Centre (MEDIC), Cork Institute of Technology (CIT)



Sit up straight and take notice

With his first Innovation Voucher, Simon Dennehy was able to finalise the prototype of his ergonomic seating for primary school children. Now, with his second, he can test the product.

In recent years, Simon Dennehy's professional journey has taken him from a research masters project on seat design to meetings with senior executives at some of the world's leading furniture companies. "I did a research MA in Industrial Design at NCAD for two years," he says. "I was researching what was wrong with traditional seating used in primary schools. I designed and patented a new type of seat pan that would encourage open posture and a lot of movement, and get the kids to sit higher at their desks."

Furniture company takes shape

After the masters, Dennehy put his work on a website and immediately began receiving hundreds of queries a week from the US, the UK, Germany and Denmark, so he decided to take it further and met with Enterprise Ireland to discover how to move from having a proof of concept to an actual product and then set up a company. "This design is very disruptive to the industry, so people are really perking their ears up when they hear about it. We are really a healthcare company. This product looks after the health and wellbeing of students," he says.

To push the Perch project further, Dennehy needed a prototype. He applied for and received an Innovation Voucher to use at NCAD, where he was in the process of completing his doctoral studies. Third- and fourth-year students of Industrial Design worked with Dennehy and, over six weeks, the team was able to finalise a product prototype seat and back rest. This greatly helped to encourage the interest of already-keen international buyers.

Designing for innovation

"Many companies would not know what they could potentially get from the knowledge providers," said Dennehy, "but being very familiar with the college system, I knew exactly what I wanted to get. I would have to recommend NCAD very highly. I was looking for detailed analysis on the seat and detailed drawings. I needed assistance and I got it. It really provided closure on the design phase, which was crucial. For that, I would have to say NCAD provided me with fantastic service."

Testing times should lead to sales

Along with the furniture companies around the world, both Stanford and Berkeley universities in the US have taken an interest in Dennehy's work. In order to further pursue collaboration with them, however, he needed his product tested to world-class standard and applied for another Innovation Voucher to use with Cork Institute of Technology (CIT).

"I have my full prototype ready, but it needs testing. I found out the Medical Engineering Design and Innovation Centre (MEDIC) at CIT had a very good testing facility that could work on gait analysis and human posture. They have really good, top-end equipment. If I were to try on my own, it would take too long, but we need to scientifically validate our research. From what I have seen so far, CIT is capable of providing that world-class service I need. The CIT work is going to mean I will be putting myself in front of clients that should be licensing from me."

Rapid Response Security

Institute of Microelectronics and Wireless Systems (IMWS),
NUI Maynooth

Securing innovation through co-operation

Without the technical knowledge to develop his new CCTV product, Niall Reynolds was in difficulty, but support from NUI Maynooth has led him to become an innovator.

After retiring from An Garda Síochána after 30 years of service, Niall Reynolds was ready for a new challenge. He set up Rapid Response Security to develop a security system that could monitor building sites without the need for a security guard on-site. Having achieved this with the help of Enterprise Ireland, Reynolds moved to expand his business by introducing a CCTV product, but he ran into problems. His sons happened to be friends with Dr John Dooley, who works at the IMWS in NUI Maynooth, and he took an interest in the new Rapid Response Security project. When Reynolds explained the technical difficulties he was having, Dooley suggested researchers in Maynooth could work on it if Reynolds applied for an Innovation Voucher.

Developing a new product

Reynolds obtained a voucher and it was used to support Maynooth researchers as they sought to source suitable components. As there was nothing appropriate available, Reynolds applied for a second Innovation Voucher to enable Dooley and his colleagues to devise a product and develop a working prototype. "Our problem is still ongoing and we are still researching them in Maynooth. This is a long-term project, but we hope eventually to bring out a system that will be unique. We will have about four phases to this project. By Christmas 2010, we will have successfully completed phase one," he said.

Uniting dreamers and problem-solvers

"I did not realise a fellow like me could go in to a place like Maynooth, tell them my problem and have them find a solution," said Reynolds, explaining that he is of a generation that perceived academia as remote from ordinary people. "I would have just driven past the gate without even looking in. When we were young, it was a completely different time and we had a different attitude. You would have thought they would laugh at ordinary people like us. But they don't. They say, 'You're the dreamer and we are the problem-solvers'. This has helped our business so much and should mean we will eventually be able to employ a lot more people."

Real results and further innovation

"Even as a result of what we know at the moment, we are getting better results on-site. We have a better product and the company has definitely benefitted in every way possible," says Reynolds. "But what the Innovation Voucher does, and this alone would be fantastic if it never did anything else, is that it creates a bridge between us and Maynooth. Now we are not on our own. It opens the door for you. I could ring up nearly any of them at this stage, talk with them and get advice from them. I really find them very good and very helpful."

Innovation begets innovation. As a result of the work researchers in Maynooth are doing to help Reynolds, they believe they can develop a related but separate product and hope to roll out a company of their own eventually.

Wirelite Sensors

Tyndall National Institute, University College Cork & the Department of Computing at the Institute of Technology Tallaght

Engaging in electrifying innovation

From a modest start with its first Innovation Voucher, Wirelite has now graduated to a full-blown Innovation Partnership with Cork's Tyndall National Institute.

When Michael Phelan founded Wirelite in 2007, he wanted to examine opportunities in the market for energy management systems. Traditionally, such products were included in the construction of buildings, but the downturn in construction meant the company would have to focus on retrofitting existing buildings. This, in turn, meant Wirelite systems would have to be wireless. Phelan was aware that researchers in the Tyndall National Institute at UCC were working on wireless sensors. He applied for an Innovation Voucher to work with Tyndall on a trial that would prove wireless energy metering technology could work in a hotel. "I knew people at Tyndall already," said Phelan. "It was obvious they were the right people to go with for the large quantity of technology Wirelite was going to need. The voucher was a good way of dipping a toe in to see that it worked in the real world."

Adding functionality

The trial was successful and Phelan went on to obtain a second Innovation Voucher in order to work with IT Tallaght. His system could already issue various types of alerts to a laptop, but he wanted to develop it further so it could issue alerts to smart phones. As it happened, Wirelite was already based at the Synergy Centre, an incubation centre on campus in Tallaght. "Even though our office was here at IT Tallaght, we didn't know what capability was here," he said. "The second voucher gave us an opportunity to figure that out and see what people here could do. If you think there is some competence in a knowledge provider that could be of use to you, an Innovation Voucher provides a relatively easy way to investigate that."

Paving the way to an Innovation Partnership

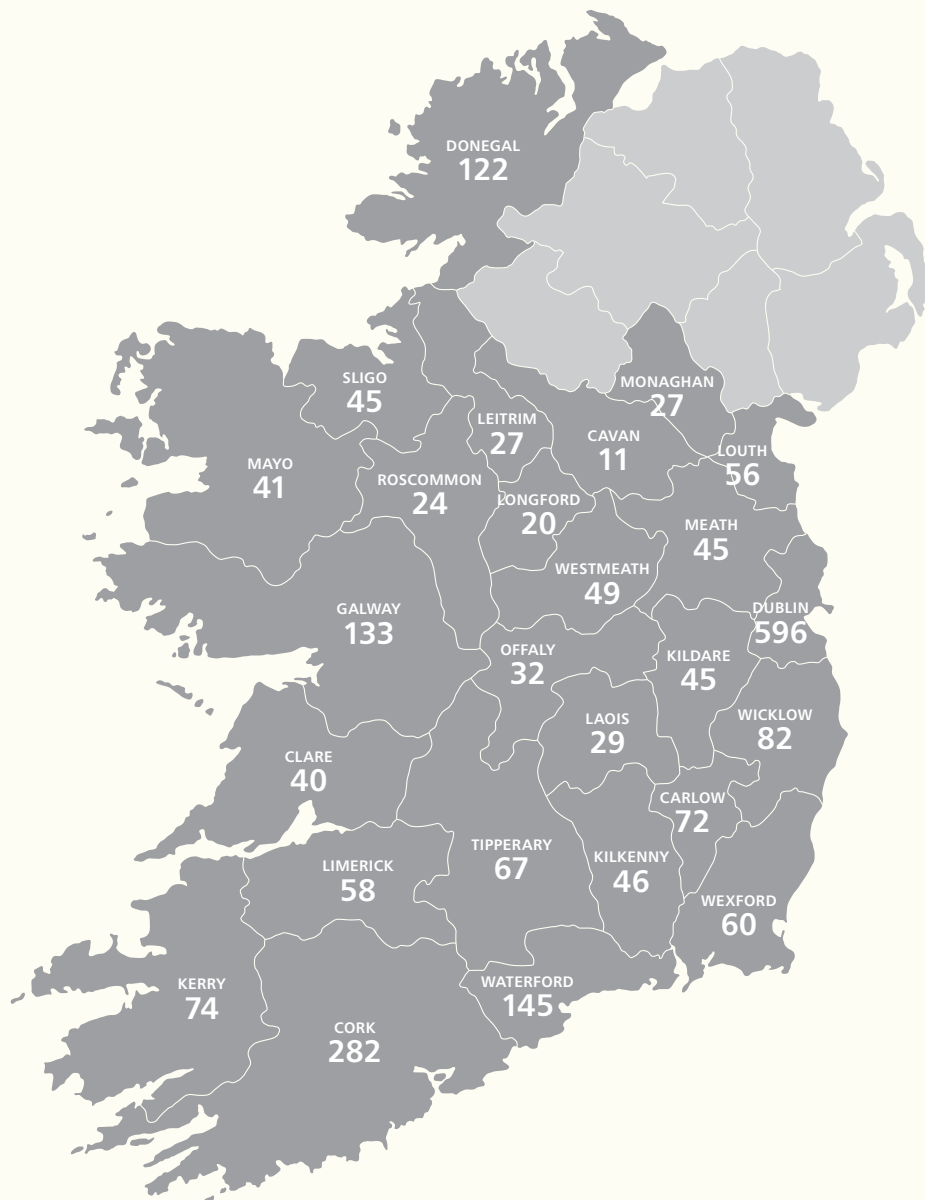
It was Wirelite's first Innovation Voucher, however, that kickstarted the plan for an Innovation Partnership with the Tyndall National Institute, which would focus on developing a demand response energy management system that would manage demand for electricity through the use of smart meters. The price of electricity varies substantially at different times, with night-time prices being a seventh or less of peak daytime rates. The new Wirelite system would allow businesses such as retailers, for example, to reduce their energy bills.

"Through a combination of smart algorithms and sensors, we are able to control a building against temperature, humidity, CO2 level, light level and the presence or absence of people," said Phelan. "The system consumes electricity when it is cheap and stores it. For example, a retailer could precool a fridge, then let the temperature rise across a peak. This is pretty advanced technology we are developing. We started with simple monitoring and have evolved it since. Of course, even with the use of smart tariffs, we have to make sure food is stored safely and buildings are comfortable."

Invaluable support for innovation

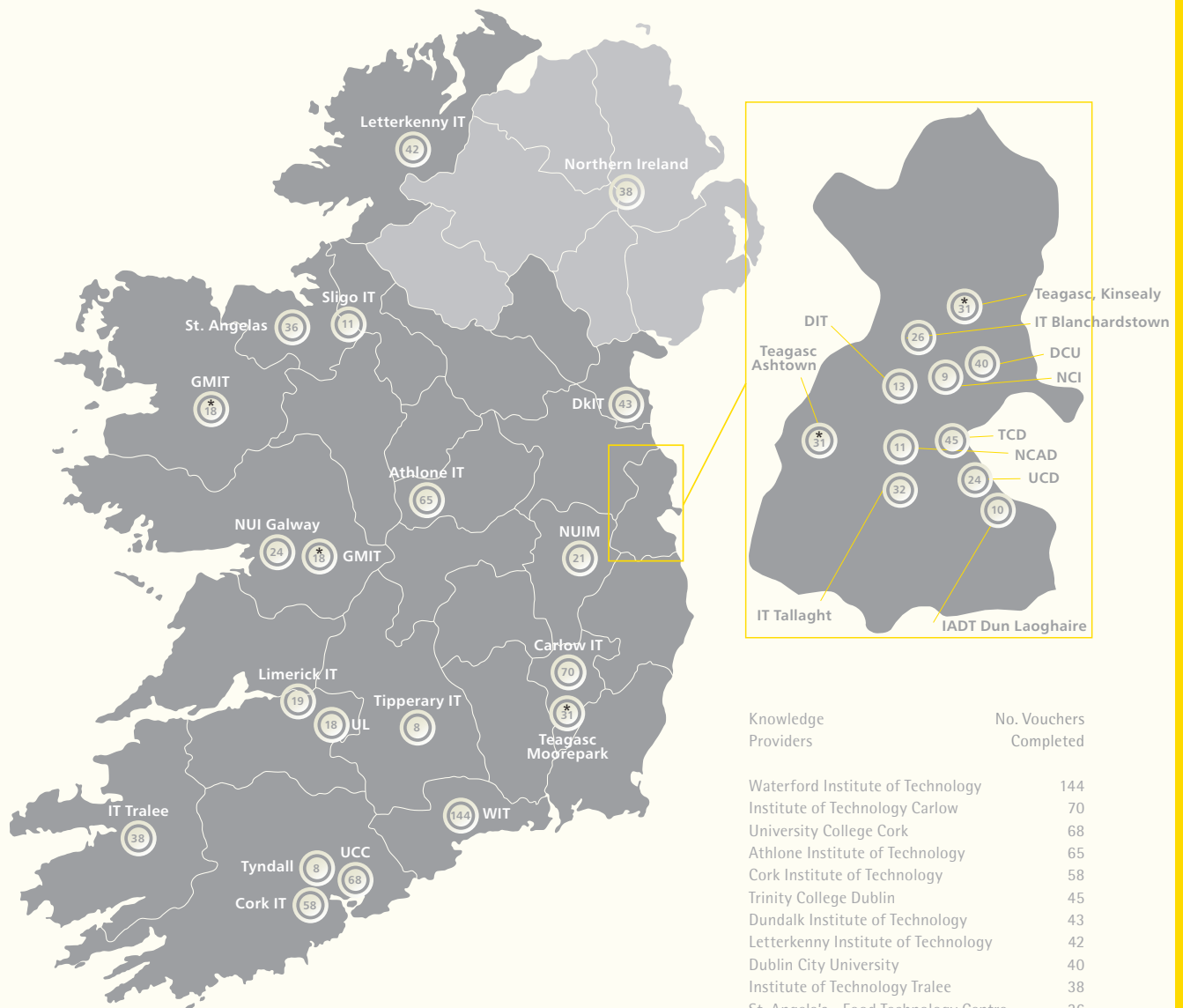
"As a start-up, you tend to have very little money so you need some level of help," said Phelan. "If we want companies to innovate, they need some encouragement to get started. It's important to give people a chance to do some innovation."

Number of Innovation Vouchers issued to each county between May 2007 – 31st July 2010



Total: 2,228

Number of Innovation Voucher projects completed by Knowledge Provider between May 2007 and 31st July 2010



Knowledge Providers

Knowledge Providers	No. Vouchers Completed
Waterford Institute of Technology	144
Institute of Technology Carlow	70
University College Cork	68
Athlone Institute of Technology	65
Cork Institute of Technology	58
Trinity College Dublin	45
Dundalk Institute of Technology	43
Letterkenny Institute of Technology	42
Dublin City University	40
Institute of Technology Tralee	38
St. Angela's - Food Technology Centre	36
Institute of Technology Tallaght	32
Teagasc	31
Institute of Technology Blanchardstown	26
UCD	24
NUI, Galway	24
NUI Maynooth	21
Limerick Institute of Technology	19
Galway-Mayo Institute of Technology	18
University of Limerick	18
DIT	13
National College of Art and Design	11
Sligo Institute of Technology	11
Institute of Art Design & Technology	10
National College of Ireland	9
Tipperary Institute of Technology	8
Tyndall National Institute	8
Northern Ireland Knowledge Providers	38
Total completed as of 31st July 2010	970

* In cases where a knowledge provider is based in more than one location, the figure given is the total for the organisation as one entity.

Knowledge Providers



Building Locally
Competing Globally



The Innovation Voucher initiative is managed by Enterprise Ireland in the Republic of Ireland, and Invest Northern Ireland in Northern Ireland.

Full contact details for the Knowledge Providers are available from the relevant agency websites;

Republic of Ireland

www.innovationvouchers.ie

Athlone Institute of Technology
St. Angela's Food Technology Centre
Bord Iascaigh Mhara
Cork Institute of Technology
Dublin City University
Dublin Institute of Technology
Dundalk Institute of Technology
Dun Laoghaire Institute of Art Design & Technology
Galway Mayo Institute of Technology
Institute of Technology Blanchardstown
Institute of Technology Carlow
Institute of Technology Sligo
Institute of Technology Tallaght
Institute of Technology Tralee
Letterkenny Institute of Technology
Limerick Institute Of Technology
Moorepark Technology Ltd.
National University of Ireland, Maynooth
National College of Art & Design
National College of Ireland
National University of Ireland, Galway
Royal College of Surgeons of Ireland
Teagasc, Ashtown Food Research Centre
Teagasc, Moorepark Food Research Centre
Teagasc Research Centre, Kinsealy
Tipperary Institute
University College Cork
Trinity College Dublin
University College Dublin
University of Limerick
Waterford Institute of Technology

Northern Ireland

www.innovationvouchers.com

Agri-Food and Biosciences Institute (AFBI)
Belfast Metropolitan College (BMC)
College of Agriculture Food and Rural Enterprise (CAFRE)
North West Regional College (NWRC)
Northern Regional College
Queens University Belfast
South Eastern Regional College (SERC)
South West Regional College (SWC)
Southern Regional College
University of Ulster

