Here are at least two competing narratives at work in the Irish tech sector today. First is the vision of Ireland not only as a great place to do business, but the centre of the web world. Being home to the European headquarters of giants like Google, Facebook and Microsoft doesn’t hurt; nor does, of course, the Web Summit.

The second is that Ireland is suffering a skills shortage in ICT and digital media, leaving posts unfilled, jobs not done and, potentially, projects outsourced.

The threat of the latter is not insignificant. A Digital Marketing Institute (DMI) report issued in September claimed that Ireland’s position at the centre of Europe’s web sector is threatened.

DMI co-founder Ian Dodson said changes in the wider economy were being felt. “In the boom times we could hire people and train them for a year, but now companies need people to hit the ground running,” he said.

The two themes aren’t mutually exclusive, of course. Ireland is home to an innovative and growing tech sector, both domestic and multinational, but a renewed focus on responsive web design, web applications, frameworks and, or course, apps, specific skillsets are in high demand, as well as the ever-attractive marketing and design sides of the business.

Longer term training opportunities do exist, though and Dodson says expanding areas are not limited to development, even mobile development.

“Four areas where the growth is are search, social, mobile and analytics,” he said.

He also encourages people to consider mid-career changes, noting that those with backgrounds in science or accounting will be suited to moving into search and analytics, while those with liberal arts or social science training are already immersed in social.

“Irish people have a little bit of a block, where they see not doing [in work] what you did for your primary degree as failure. That’s not true. The most important thing you can learn is how to learn. We see people coming across from geology, accounting, sociology and so on all the time,” he said.

Even those coming directly from a computer science background and seeking to go straight into development can find they lack the skills required to get the job, though.

Liam Hurrell of BigWave Media Training said the skills shortage was one area where Ireland differed from other parts of the world — and that it also varied nationally within Ireland.

“There is a real gap. The general IT understanding is not high enough in the workforce. From my experience from working in London previously, and Australia, it was apparent that in comparison our general level of understanding of the web and digital media was lower,” said Hurrell.

For Hurrell the question is how to move out of the academic environment, where a broad range of topics are studied, into industry where specific skills and workplace methodologies rule. Few computer science or digital design graduates come out of college ready for the job.

“Ireland has a lot of well-educated people, but there is a disparity between the academic side and what companies need. Also, when the recession hit a lot of looser roles where shed. Companies want them [employees] to have deeper sets of skills. Computer science degrees are quite broad. The gap that needs to be bridged is the way those technologies are used in industry, such as Agile development methodology.”

To this end BigWave has launched DevStream, a programme to address what Hurrell describes as the chicken-and-egg situation where graduates lack the experience employers expect.

“The job specs are always looking for a minimum of two years experience. How do you get that experience?” he said.

Available under the government’s Momentum skills scheme, DevStream offers the opportunity to work on long-term projects and devel-
op an understanding of the commercial model, including commercial turnaround times and processes like source control.

"Developers get the chance to work on real-life projects. Recently one team produced an Android app for a large promotions company and was able to showcase it as a portfolio piece. Both now have full-time jobs as software developers."

"We recreate that commercial environment allowing developers to work in teams and learn. That gives them the confidence to go out into the workforce or go on their own," said Hurrell.

Shane Broadberry of IACT, the International Academy of Computer Training, said universities did an excellent job but it was not reasonable to expect them to produce graduates who are immediately ready for industry.

"It's impossible and impractical to be at the very edge of everything that the industry is looking for. It can and will often take many years from graduation to becoming fully up to speed on a specific IT area, and individuals will have to work hard themselves to stay up to speed," he said.

IACT works with organisations to help upskill with specific technologies such as Java, C++ or Microsoft .NET.

"In some professions CPD [continuing professional development] accreditation and verification is used as a way to force practitioners to learn new skills and as a way of staying fresh and up-to-date," said Broadberry. "That's not the only way to create a learning-centred organisation.

"Successful IT companies require ongoing skills development for all staff and invest heavily in technology training to support their staff through training programmes and eLearning provided by IACT and at seminars and events like the recent Web Summit where a lot of active IT professionals learn and share ideas."

"The good news for prospective employees is that skills are rewarded. Dermot Daly of mobile development firm Tapadoo said the market was a competitive one for employers.

"Generally speaking, prospective employees are hard to come by, but this is more a reflection of the competitive market," he said.

Daly said the focus on the digital economy and ubiquity of technology in our daily lives did provide opportunities for continuing professional development, and those who wish to change career to what is arguably a growth sector.

"Absolutely [people can train to change careers]. I've been really disappointed with 'career change' courses, though," he said.

"Frankly, software development is hard. I think a six-month course doesn't prepare you properly, and I also think many people underestimate how difficult it will be. So, they take on the course, and are really surprised when it is very difficult."

You have to be serious to make the switch, according to Daly. "Frankly, a developer who is great at computer science would take up, say, mobile development quicker and better than someone with no background, and going on a mobile app development course," he said.
There is a real gap. The general IT understanding is not high enough in the workforce.

Liam Hurrell of BigWave Media Training.