A LACK OF PREPARATION IS NO DEFENCE

It's a no-brainer that ICT professionals require upskilling in cybersecurity. If this is not part of your company culture yet, there is plenty of training available to fit all budgets, reports **Fiona Alston**

The ransomware attack on the HSE last year brought cybersecurity to the attention of everyone in Ireland. The hacking of such an institution proved that anyone is vulnerable to an attack, at any time.

In February this year, a survey commissioned by Typetec, a managed IT service provider, found that 95 per cent of Irish SMEs had experienced a cyber attack in the past year.

In 2022, no business is exempt from the continuous threat of a cyber attack. It has become imperative that cybersecurity becomes second nature to ICT professionals.

"I think the HSE attack brought it to people's attention. It's definitely becoming a core part of the knowledge base for people working in IT, and IT professionals," said Mary Cleary, secretary general of the Irish Computer Society (ICS).

"All professionals are duty bound to upskill themselves and keep themselves abreast of the latest developments. It's part of the integrity of the profession and the trust that people have in it."

Cybersecurity is for everyone, at all times, in all areas. It's not just one person's responsibility, an annual update or only for sensitive data.

Just one crack in the system is all it takes for a hacker to infiltrate the business and break down its defences. Continuous personal development is key to keeping the threat at bay, and this needs to apply company-wide.

"It's not only the technical team that needs the expertise, it is also as important as the C-suite level and the board level," Cleary said.

Referring to a report from last year which found "shocking results on cyber resilience at board level", Cleary said there must be a clear understanding throughout the whole organisation to ensure cyber resilience in the company.

Cyber Skills project

The Cyber Skills project is the result of four universities – Munster Technological University, University College Dublin, University of Limerick and Technological University Dublin – collaborating to provide pathways and micro-credentials to address skill shortages in the area of cybersecurity.

Working closely with industry, these programmes aim to upskill working professionals and are delivered in a way that allows students to instantly put skills into practice in their workplace.

"We have three courses at the moment. One is for network professionals to enhance their cybersecurity skills and the other two are really aimed at the software development side of the house," Jacqueline Kehoe, project manager at Cyber Skills, said.

With only two modules per semester, these lecturer-led courses have been developed with input from MasterCard and Dell to ensure the content is up to date and keeps relevant in the constantly changing landscape of cyber vulnerability.

It's no longer if an attack happens, it's when, and your company-wide skills base must be prepped for it.

"There's such a lack of cybersecurity professionals," Kehoe said. "The larger companies in particular should be looking at their staff and saying, we can't hire these skills, they are just not out there. How do we take people and upskill them?"

Apprenticeships in the north-west

Security in the north-west is getting a boost thanks to the introduction of an apprenticeship programme which will offer anyone, from school leavers to those looking to change their career, the opportunity for on-the-job cybersecurity training. Fastrack Information Technology (Fit), an industry body aimed at growing talent in ICT, is working with local bodies to develop these programmes.

In collaboration with Mayo, Sligo and Leitrim Education and Training Board (ETB), Fit launched the Tech Alive Northwest initiative. Apprenticeships are available in the roles of ICT associate software developer, ICT associate network engineer and cybersecurity with the first cohorts to start in late April.

"I always call it the golden ticket: not only do you earn a qualification, but get work experience and get paid. So, it's a win-win, all ways around," said Declan Foley, ICT cybersecurity apprenticeship instructor at Mayo, Sligo and Leitrim ETB.

The two-year apprenticeships will deliver full-time training for the first six months in the training centre in Ballina or through connected hubs in the area.

These are not solely for school leavers, and anyone who has a basic understanding of IT can apply.

"Cybersecurity apprentices will go through a suite of industry qualifications including CompTIA IT Fundamentals, CompTIA Network+ CompTIA Security+ and CompTIA Cybersecurity Analyst," Foley said.

"It's not just about developing their technical skills, it's also about developing their soft skills. There's no point being technically gifted when you can't communicate to put it into practice in the workplace."

SME training

There is are also specific actions that SMEs can take. Andrea Manning is the founder of CyberPie, which provides cybersecurity training for small business delivered in bite size palatable chunks for a smaller budget.

"You can't protect all of your data all of the time," Manning said. "It doesn't matter whether you're big or small, you have to decide where you're going to put your resources. What are you going to protect? What's the most valuable? What's the most sensitive?

"And then just do what you can within your means. But the basics, like passwords, and two-factor authentication, all of those things don't cost any money or time, it's the will to do them."
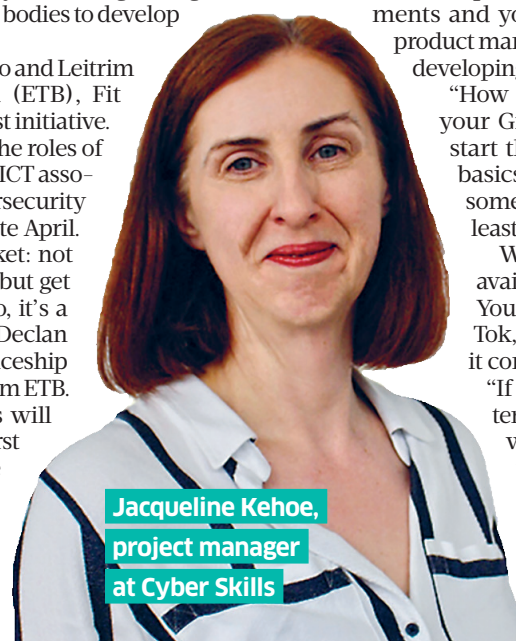
Manning is keen to see the basics of cybersecurity and GDPR being taught in every 'start your own business' course in the country.

"It's as important as your vision statements and your marketing and your product market fit: especially if you're developing IP," she said.

"How secure is it, or is it just in your Gmail account? It should start there, that should be the basics. And then it should be something that you review at least annually."

With the wealth of content available to use for free across You Tube, LinkedIn and TikTok, budget is no excuse when it comes to cybersecurity.

"If some guy puts out a great ten-minute video, share that with your employees. In those ten minutes, that is your cybersecurity ticked for that week. Instead of the annual tick-box compliance training: little and often is best," she said.

> **Jacqueline Kehoe, project manager at Cyber Skills**

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