Organisations to experience [disruptions](#) due to skills gaps

Two-thirds of organisations are not adequately addressing the infrastructure and operations (I&O) [skills gaps](#) that will impede their digital business initiatives, according to Gartner, Inc. Successful I&O organisations will need to implement vastly different roles and technologies during the next five years. [Gartner](#) forecasts that, by 2019, [IT technical specialist](#) hires will fall by more than 5 per cent. Moreover, by 2021, 40 per cent of IT staff will hold multiple roles, most of which will be business-related rather than technology-related.

"What made I&O leaders successful in the past is not what will make them thrive in the future," said Hank Marquis, research director at [Gartner.](#) "Instead of focusing on the 'what' of I&O jobs — such as technical knowledge, education and training — I&O leaders need to shift their focus to the 'how' — the behavioural competencies required."

According to Marquis, IT operations organisations are being forced to redefine their roles and value propositions from those of technology providers, to become trusted advisors and differentiated business partners. The challenge is that most I&O professionals do not yet have the broad skillsets that organisations will need from them.

[Gartner](#) predicts that, by 2020, 75 per cent organisations will experience visible business [disruptions](#) due to I&O skills gaps, which is an increase from less than 20 per cent in 2016. Given the lack of digital dexterity for hire, I&O leaders must begin by developing these skills with the talent they already have. Most [companies](#) don't have an accurate inventory of the available skills of their current IT workforces, so this must be a first step.

"Corporate digital business universities will eventually emerge to close the skills gap. Experience-based career paths with formal mentoring for and within I&O will become standard for individual development," said Marquis. "In the meantime, I&O leaders should work hand-in-hand with HR to shift away from position-based development, develop a tactical skills gap analysis, and utilise tools and methods for improving I&O skills in-house."

Balancing skills of tech & team building key for new IT rank

The relatively new IT position of site reliability engineers (SRE) is best served by those with a mix of technical and non-technical skills, particularly team building centred on problem solving, according to the findings of a global survey by digital experience monitoring (DEM) expert Catchpoint.

[LinkedIn](#) currently features over 1,000 job listings for SREs, but there is often confusion regarding exactly what this position entails. The survey of 416 professionals with the title or responsibility of an SRE was conducted by Catchpoint in January and February with the goal of creating a current, real-world profile of an SRE: What is their role? What skills are required? How is their time spent? Core survey findings include: Problem-solving, teamwork, composure under pressure, and strong written or verbal skills regarding incident resolution, are needed to be an effective SRE.

Sixty-five per cent SREs are deploying code at least once a day, and almost half (47 per cent) report deploying new code multiple times per day. [Automation](#) was flagged as the most important technical skill for an SRE; and availability is the most important service indicator,

with alerting and notification solutions topping the list of must-have tools. Also, SREs both write code and support existing systems, yet most of them report to software engineering as opposed to IT operations; this is surprising since a larger proportion of SREs have an IT operations background.

"The SRE role is still evolving. We found that some SREs are very happy with their position, but others are struggling to explain their role within the organisation," said Dawn Parzych, director of product and solutions marketing at Catchpoint. "We also found that SREs are present in companies of all sizes and hail from a variety of backgrounds, and the ideal SRE doesn't need to be a generalist."

Google established the formal position of SRE in an attempt to bring stability to its fast-moving production needs.