

CobolCloud - October 4, 2025

A Smart Approach to the Legacy Skills Challenge

CobolCloud and Organizational Skills

Measuring the Gap

According to a wide variety of sources, the headlines paint a bleak picture of the IT skills crisis. Reports published in IDC, CIO, and Information Week warn of a \$5.5 trillion global impact by 2026 due to IT skills shortages. The skills gap spans AI, machine learning, cybersecurity, data analytics, and blockchain. And, studies reveal, it is a global issue. The demand for digitally skilled professionals is outpacing the growth of the talent pool, and businesses are feeling the pressure.

The proliferation of modern technologies and rising importance of the tech sector across all walks of life has seen the demand for skilled technologists continue to outpace supply. And in corners of the tech sector, away from the bright lights of innovative technology, the workforce supporting these systems is aging, and younger professionals often perceive mainframes as outdated. Such is the challenge facing the so-called legacy systems world - mainframes, COBOL, mid-range, assembler. While these are great technologies, they do not feature in today's educational curriculum. As such the legacy world faces a genuine skills supply gap.

Skills: a strategic concern

Concerns over skills is, or at least should be, a strategic concern. Failure to provide the necessary expertise to manage critical IT systems creates long-term business exposure. And that stats underline that - separate market survey results published by Futurum Group, Forrester, Deloitte, and PopUp Mainframe reveal:

- 91% of organizations anticipate hiring mainframe talent within two years.
- 93% say acquiring the right resources is moderately to extremely challenging.
- 96% face development and testing challenges on the mainframe.
- 79% cite staffing limitations and poor tooling as barriers to meeting business goals.

The skills gap is affecting productivity, modernization efforts, and long-term planning.

What steps can organizations take to mitigate the skills risk?

In-House Training

Examples across the industry exist of successful organizations who have invested in robust, recurring technical training boot-camps and onboarding programs. These efforts include recruitment, training, role placement, and cultural integration. Studies suggest that these are strategic investments that pay off.

Academic Partnerships

Very few of the world's universities include mainframe or COBOL on their computing syllabus. The few who do are busy partnering with employers to produce skilled graduates, while the EMMA digital apprenticeship in the USA has seen tremendous levels of interest since it started a year ago, proof that demand exists when supply is visible. Despite the pockets of progress, however, organizations cannot necessarily expect trained graduates in sufficient quantity on the open market for all the skills they require.

Third-Party Training

Addressing specific skills gaps may require the assistance of third-party training organizations. One such example, Interskill Learning, delivered over one million hours of IBM mainframe training in 2023, suggesting a large industry appetite. In fact, 81% of organizations now leverage third-party learning platforms.

Consulting and Contractors

Boutique consultancy organizations can offer flexible, high-skill solutions, while larger system integrators also provide modernization services, helping bridge specific skills shortages quickly. More broadly, plotting the skills requirement now and into the future may highlight a necessity for additional organizational resources.

Are Tactics Enough? Strategic Planning Starts at the Top

The IT skills crisis is a C-level issue. An IT strategy is nothing without the skilled people—today and tomorrow—ready to execute it. With high turnover rates and generational shifts, long-term planning is essential. Millennials and Gen Z now make up a majority of the mainframe workforce. Their expectations differ,

and organizations must accept that new forms of training, motivations, and expectations are necessary.

There is hope. Generational shifts are natural, and younger professionals are acquiring hybrid skills that blend AI and legacy system knowledge.

The key lies in proactive investment and an acceptance that skills evolution sits squarely alongside technology investment.

The CobolCloud Perspective

For many organizations, the IT skills crisis is real. Importantly, leadership must accept the long-term requirement that their operations face in terms of training. Looking at isolated gaps tactically is just papering over the cracks.

CobolCloud recognizes not only the profound value of heritage IT systems, but that they must be able to evolve, grow, and support new business needs. With easy to use products, a robust customer-centric approach to modernizing and building those systems, plus investments in AI-based technology to assist with the vital ingredient of truly understanding the business systems, CobolCloud is looking to wrap the necessary support around the customer to enable them to organically develop and evolve their skills alongside their IT systems, retaining control of their IT destiny.

With smart planning, strategic investment, and a willingness to adapt, organizations can weather the storm and emerge stronger.