

# 1 Origins

- First appearing in 1959, COBOL has been an enduring force in the IT and Business world
- Only 12% of the Fortune 500 from the 1950s have survived to today
- COBOL has remained in the top 30 of the TIOBE rankings since they began in 1989. Only C and C++ can boast the same.
- Estimates are \$1.7 trillion is wasted on failed projects yearly
- “COBOL is 60-years young. The language that powers the mainframes that run the world is as relevant today as it was in the 1960s. With the presence of new digital pressures, the mainframe and COBOL are back at the forefront for the modern developer enabling innovation and transformation” - Steven Dickens IBM LinuxONE

# 2 Applications

- Critical business systems are written using established technologies, not necessarily the new, popular technologies of the day.
- “**United Life Insurance Company** built its core life and annuity policy systems on COBOL.”  
- Jim Veglahn, ULIC
- Market analysts indicate a shift from replacement of systems to simple modernization of the systems, with half of respondents indicating projects starting within two years.
- The pace of change in the modern world leaves no time for replacements, just upgrades.
- The majority of today’s “buzzword” technologies integrate with COBOL, such as AWS, Docker, and PostgreSQL.

# 3 Design

- Modern COBOL is designed to run on any system configuration.
- **Robustness and validity:** COBOL’s type-rich language allows data to be described accurately with explicit scope and limits. This richness means you can meet your corporate coding standards, ensuring consistency and accuracy across your organization and third parties, including partners and industry specific compliance requirements.
- **Numeric arithmetic accuracy:** COBOL boasts arithmetic to 38 decimal digits. The accuracy of calculations cannot be a point of compromise, and powers the financial powerhouses of the world.
- **Strong data manipulation:**
  - Faster data access than any RDBMS
  - Support for many data file formats

- Data manipulation and reporting built into the language
- **Performance:** COBOL can be built for specific hardware and platforms, allowing optimizations unavailable to generic systems and solutions.
- **Accessibility:** COBOL code is portable across platforms, allowing access wherever it's needed
- **Readability:**
  - COBOL is designed to allow the reader to know at a glance what the code is trying to achieve
  - Ease of entry to learning and thus jobs