

# The CIO Guide to Essential Skills for Technical Teams

Adaptable. Future-ready. AI-powered. Everything your team needs to execute IT leadership vision and strategy.

Discover core, valuable and emerging skills and team competencies across all IT areas, including:

- 1

Agile development
- 2

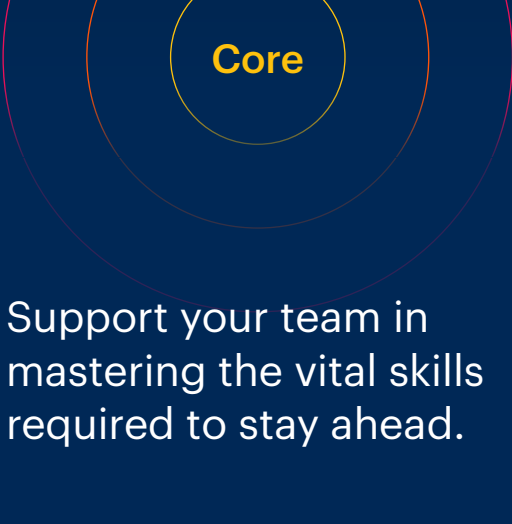
CRM architecture
- 3

Infrastructure automation
- 4

Cloud security
- 5

Data engineering
- 6

Identity and access management



Support your team in mastering the vital skills required to stay ahead.

## CIOs and IT leaders face a widening workforce skills gap

**85%** of IT leaders say their current IT workforce is unprepared to meet their enterprise's future skills requirements.

**84%** of CIOs and IT leaders are reskilling current employees due to the difficulty in recruiting critical skills.

**61%** of IT employees expect their organization to offer skills development opportunities to keep pace with the rapidly changing skills landscape.

**80%** of large enterprises that outperform their competition will have built outcome-driven agile learning capabilities to provide needed skills by 2027.

## Accelerate outcomes by prioritizing skill development for each critical IT function

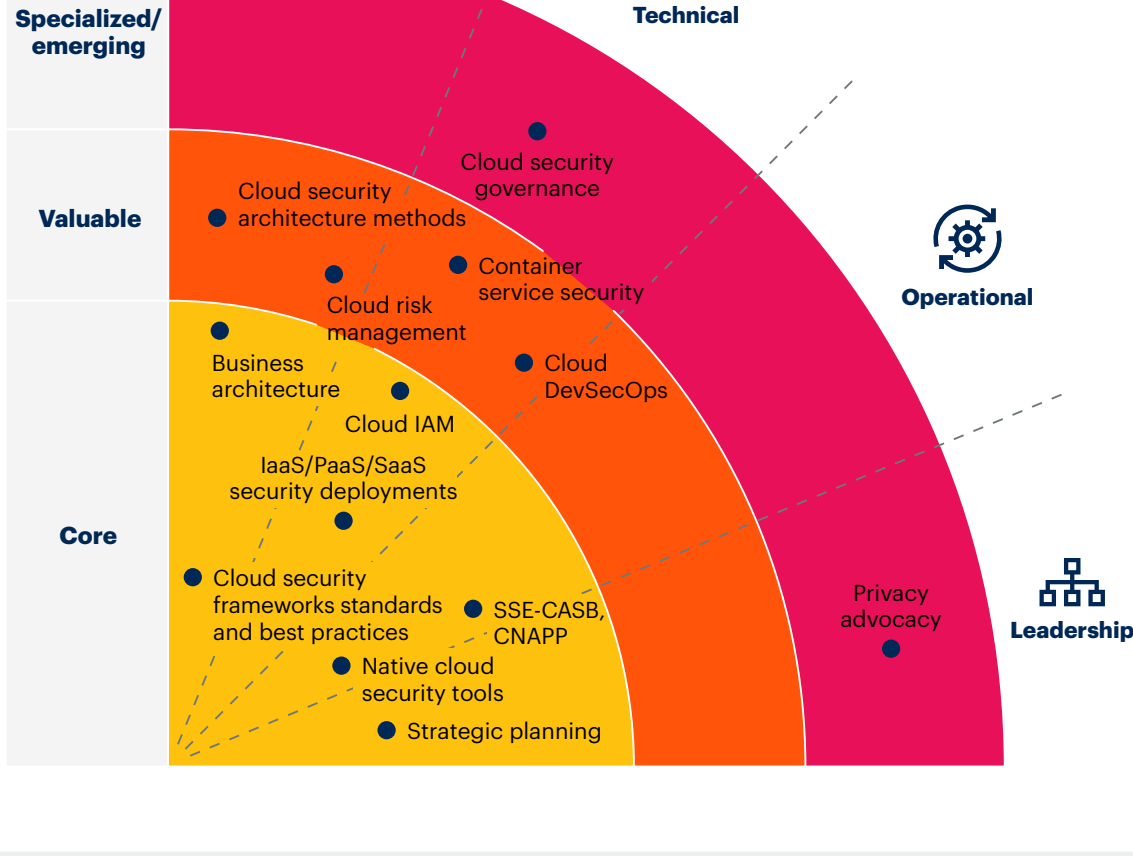
### Cybersecurity

Managing cloud security infrastructure safeguards data and ensures compliance. Clearly define the **architectural, technical, operational** and **leadership** skills required for your cloud security architects.

#### High priority skills

- ✓ IaaS/PaaS/SaaS security deployments
- ✓ Cloud IAM
- ✓ Cloud DevSecOps

#### Essential skills for cloud security architects



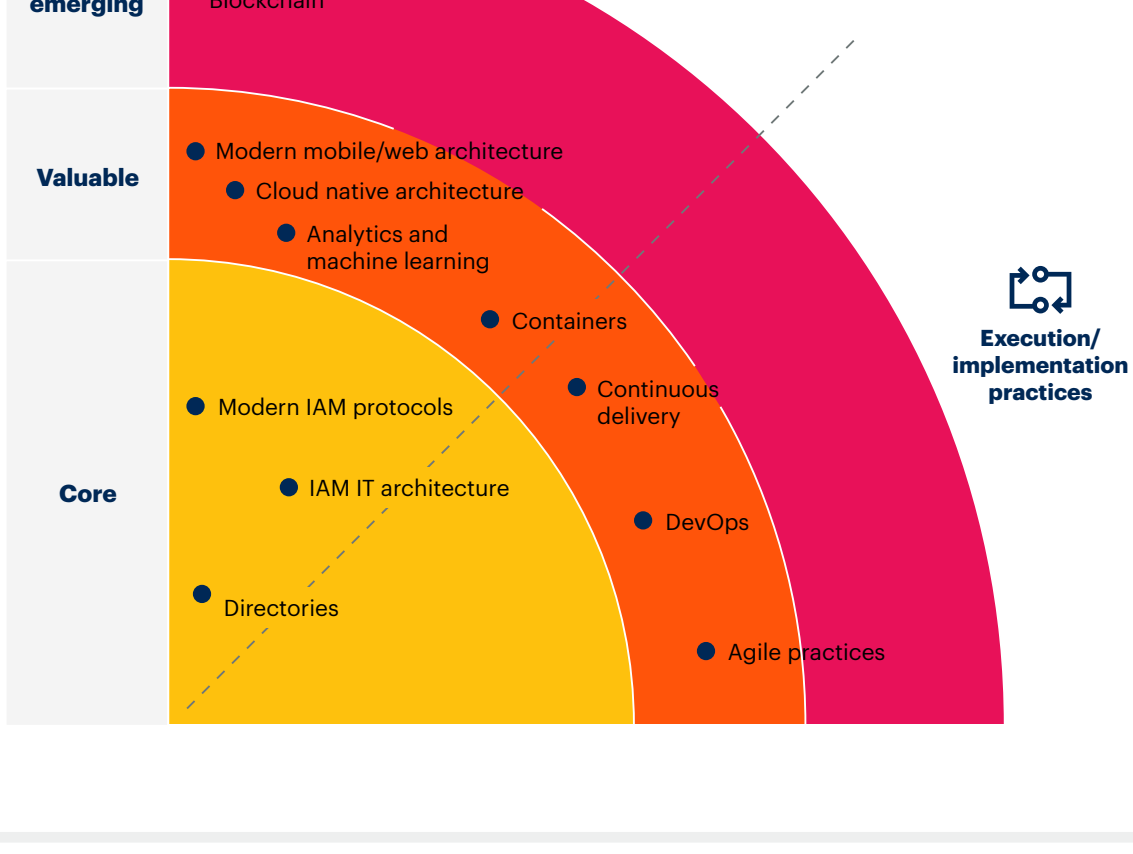
### Identity and access management

Digital transformation requires IAM architects to think strategically to provide appropriate access control for humans and machines. Identify the **technical, business** and **implementation** skills and technologies they need.

#### High priority skills

- ✓ IAM IT architecture
- ✓ DevOps
- ✓ Analytics and machine learning

#### IAM architect skill scope



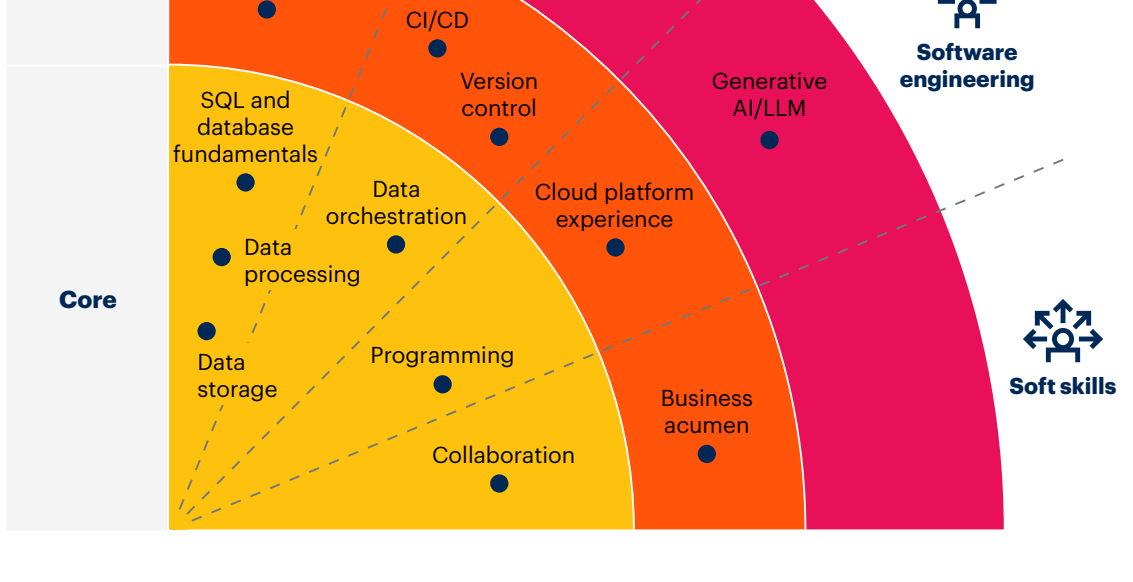
### Data and analytics

Data engineers unlock data value by building foundational yet scalable data systems. Focus on essential **data management, operations, software engineering** and **soft skills** for their success.

#### High priority skills

- ✓ SQL and database fundamentals
- ✓ Data orchestration
- ✓ Generative AI/ large language models

#### Essential skills for data engineers



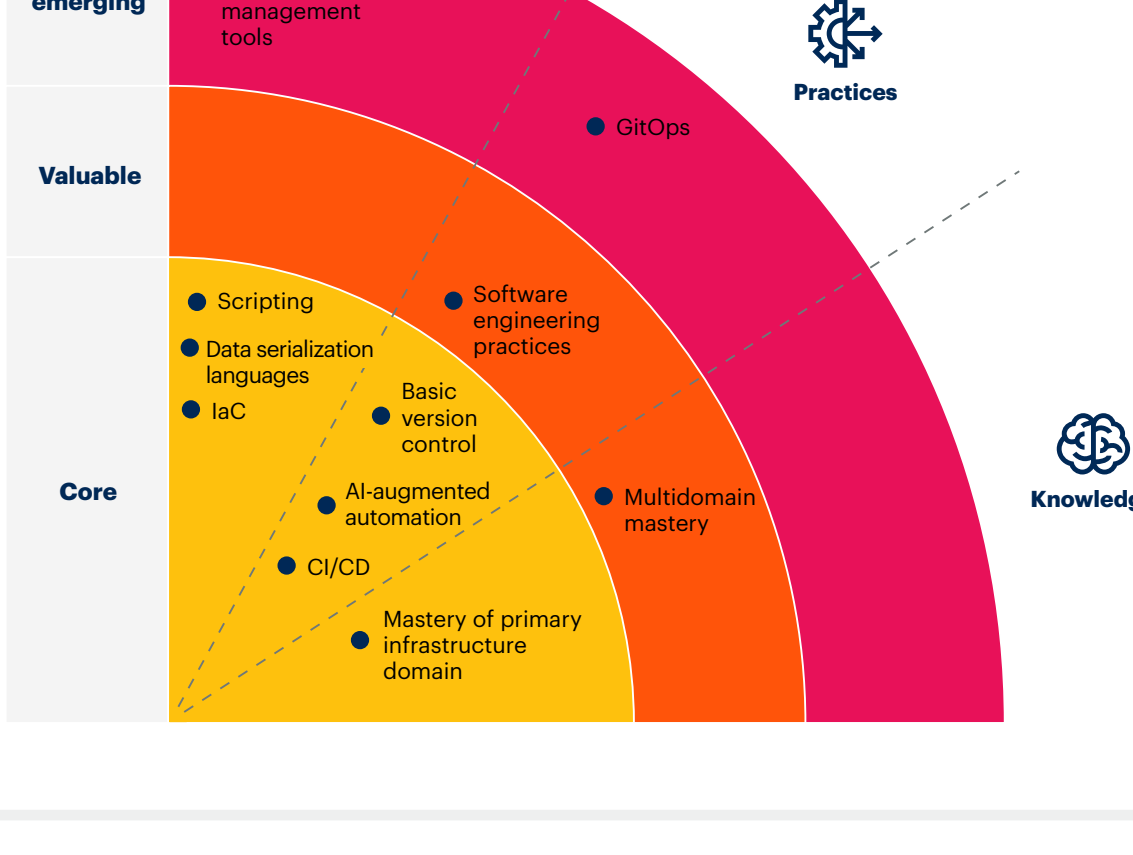
### Infrastructure and operations

Automating IT resources enhances efficiency, reliability and scalability. Equip infrastructure automation engineers with the essential **tools, practices** and **knowledge** for a strong automation foundation.

#### High priority skills

- ✓ Infrastructure as code
- ✓ AI-augmented automation
- ✓ Software engineering practices

#### Essential skills for infrastructure automation engineers



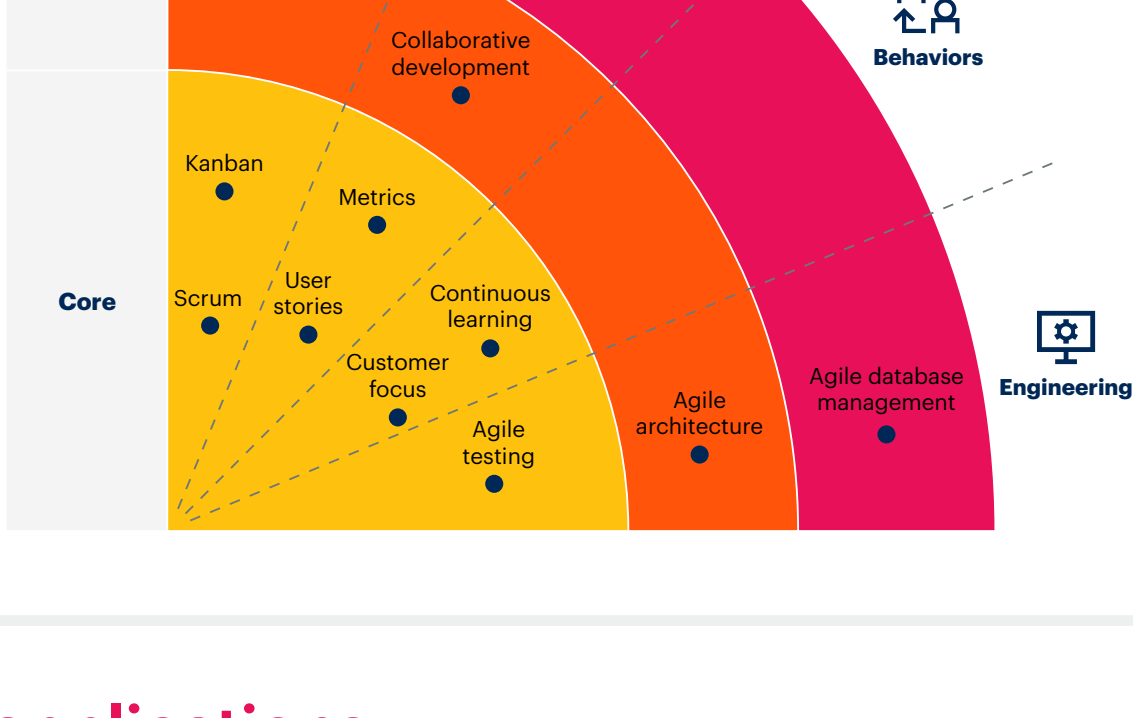
### Software engineering

High-impact software development demands adaptive planning, rapid feedback, empowered teams and continuous improvement. Prioritize the **methods, techniques, behaviors** and **engineering** needed for agility and innovation.

#### High priority skills

- ✓ Scrum and Kanban
- ✓ Agile testing
- ✓ AI for agile

#### Essential skills for agile development



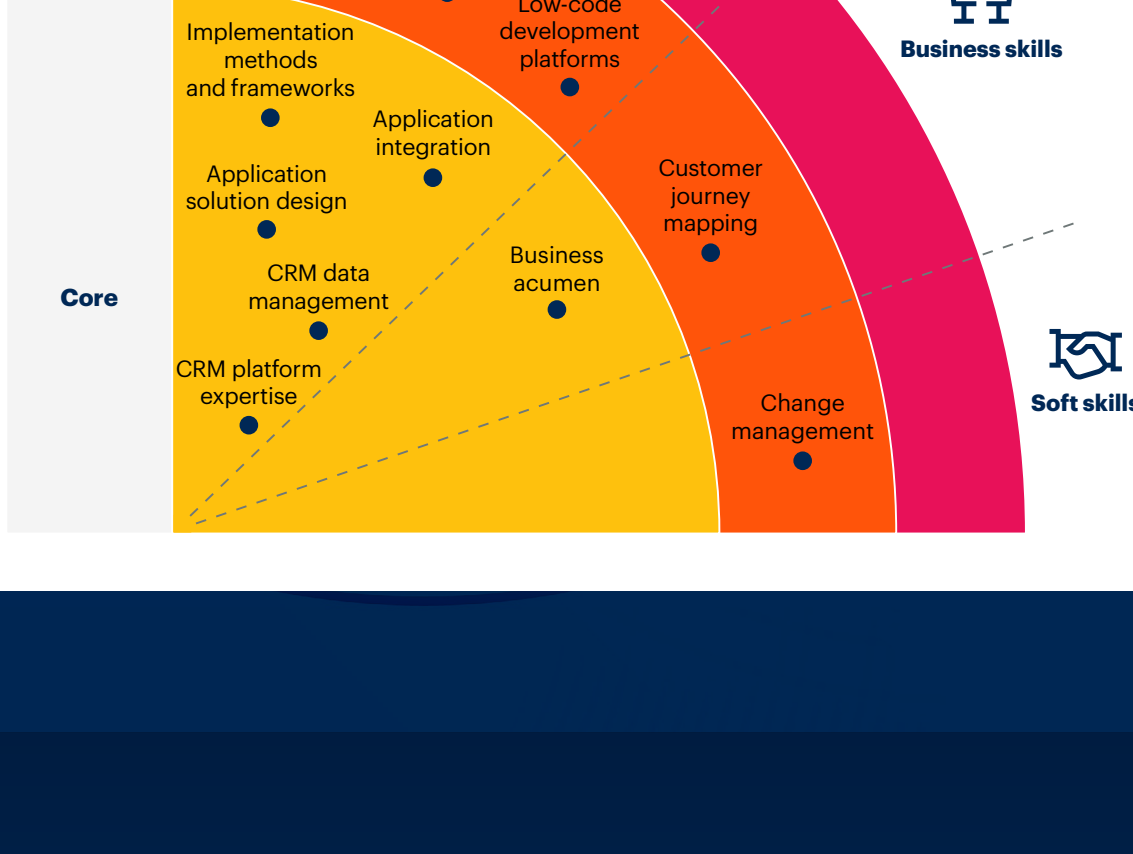
### Enterprise applications

Customer relationship management (CRM) systems manage customer relationships integrated across multiple enterprise applications. Ensure CRM architects have the **technical, business** and **soft skills** to build effective solutions.

#### High priority skills

- ✓ CRM platform expertise
- ✓ Security and access management
- ✓ AI/machine learning application architecture

#### Essential skills for application architects responsible for CRM



# The technology landscape is changing rapidly.

Is your team equipped to keep up?

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Elevate your teams' technical execution and expertise.

Gartner for Technical Professionals (GTP) supports the development of essential skills and strategies to drive innovation, enhance efficiency, and stay ahead in a dynamic tech landscape. Align workforce technical capabilities with organizational goals for sustained success.

Access 520+ publications including essential skills guides, planning guides, comparison assessments and reference architectures with GTP.

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