

The Digital Edge

Technology Skills and Competencies Model



The Future CA: Beyond Numbers

Automation and the Evolving Role of Chartered Accountants

Automation is transforming the finance profession, creating both challenges and opportunities.

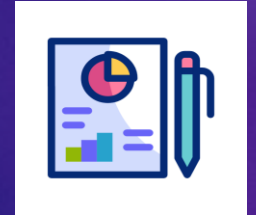
For Chartered Accountants, this shift expands their role from traditional financial management to becoming data guardians and strategic business partners.



Advisory



Ethical Oversight



Strategic Analysis

Professional Skepticism | Ethical Oversight | Contextual Understanding

Frontiers of the Tech Empowered CA

4

Technological Proficiency

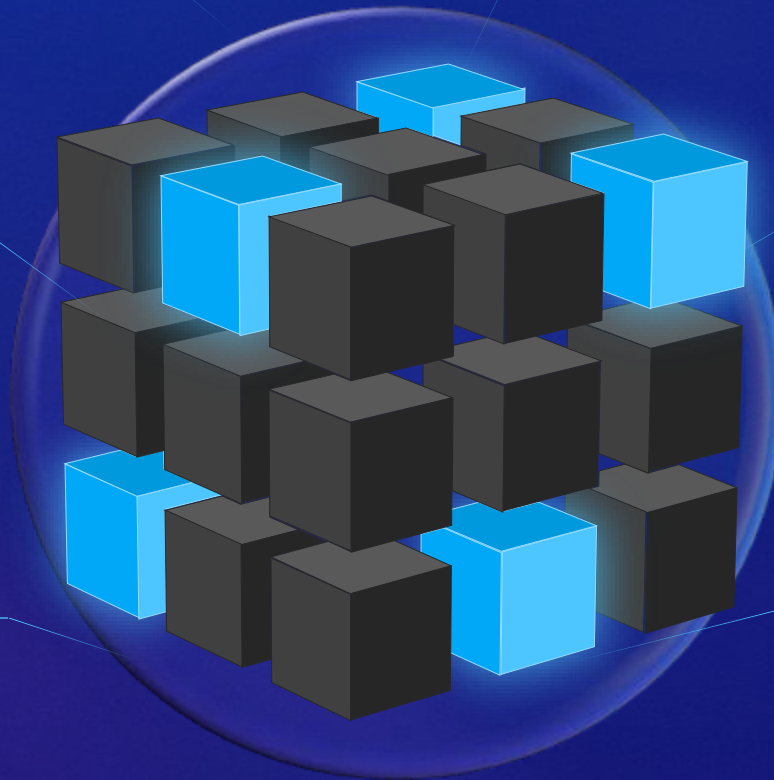
Speaking the universal language of the digital world with confidence

ERP Systems Application

Connecting processes, people, and performance through ERP excellence

AI and Emerging Technologies

Harnessing the power of innovation to shape tomorrow's business.



Data Science

Turning data into decisions, and decisions into impact

IT Governance and Compliance

Steering businesses with integrity, control, and compliance in the digital age

IT and Cyber Risk Management

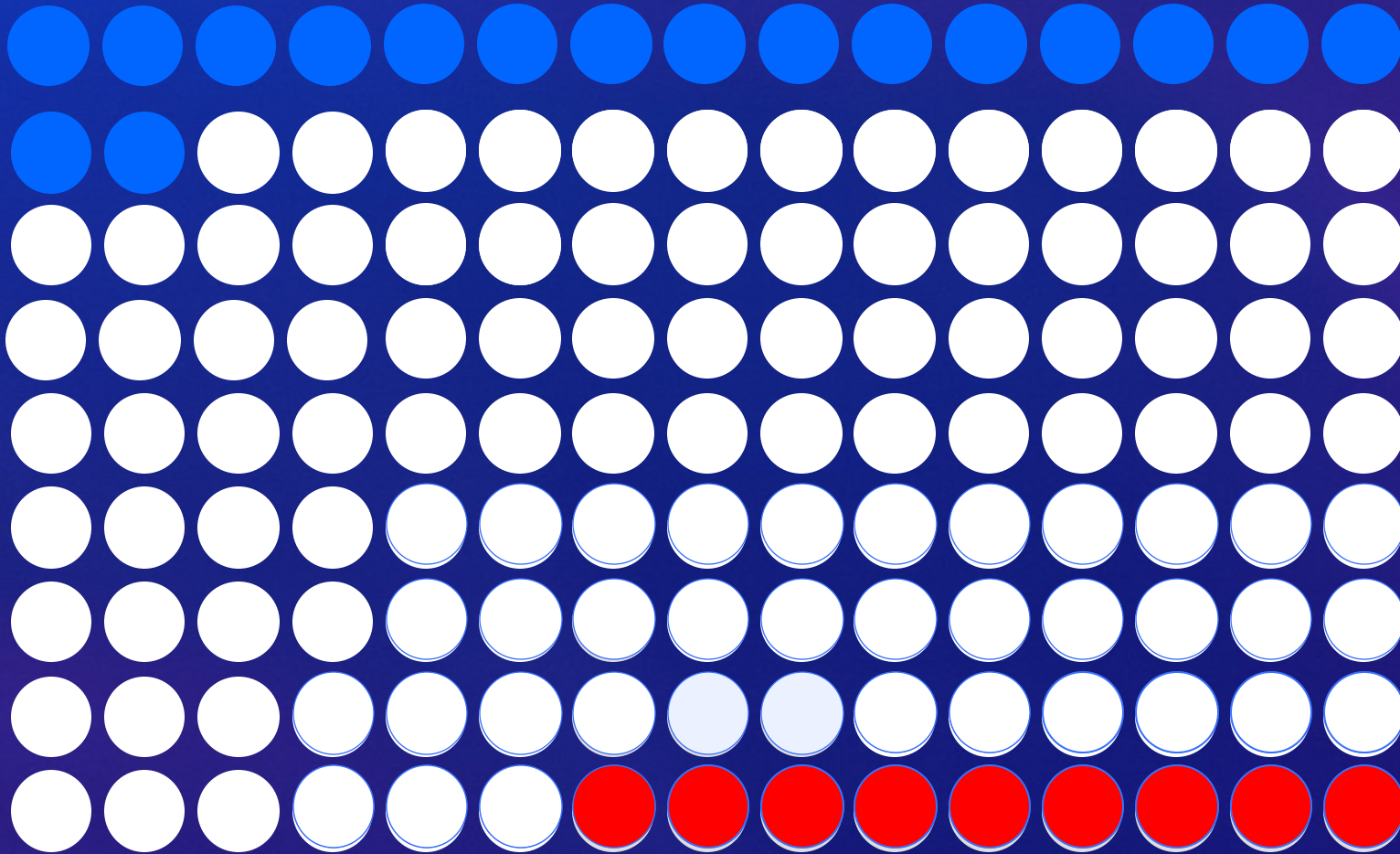
Protecting value by managing risks before they become threats.

The AI Revolution

The AI Revolution

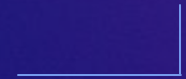
New Jobs - New Skills

170
Million Jobs
Created



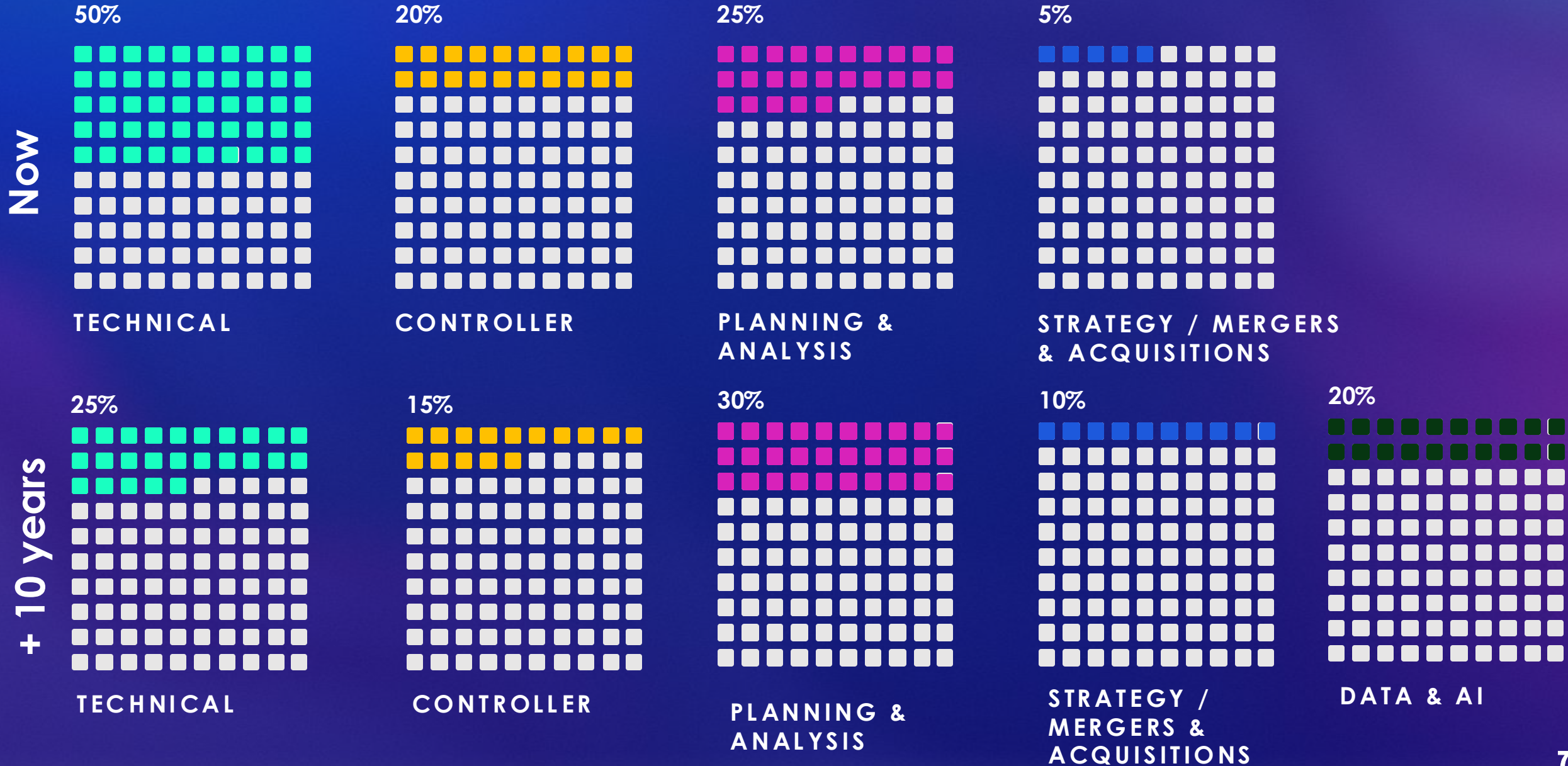
1,090

Million Jobs
continue in an
evolving labour
market



92 Million Jobs Displaced

THE ROLE OF FINANCE IS CHANGING!



ICAP's Digital Horizons

Strategic Alliances

Forging global partnerships with tech leaders, accounting bodies, and firms to drive knowledge exchange, digital adoption, and global recognition



Next – Gen Learning Pathways

Specialized certifications in Data Analytics, Technology Assurance, and Digital Transformation to prepare professionals for leadership in the digital era



Initiatives

The Digital Learning Hub

Expanding digital platforms across all learning stages with interactive tools, technology workshops, and mentorship to cultivate digitally empowered professionals



Academia – Industry Synergy

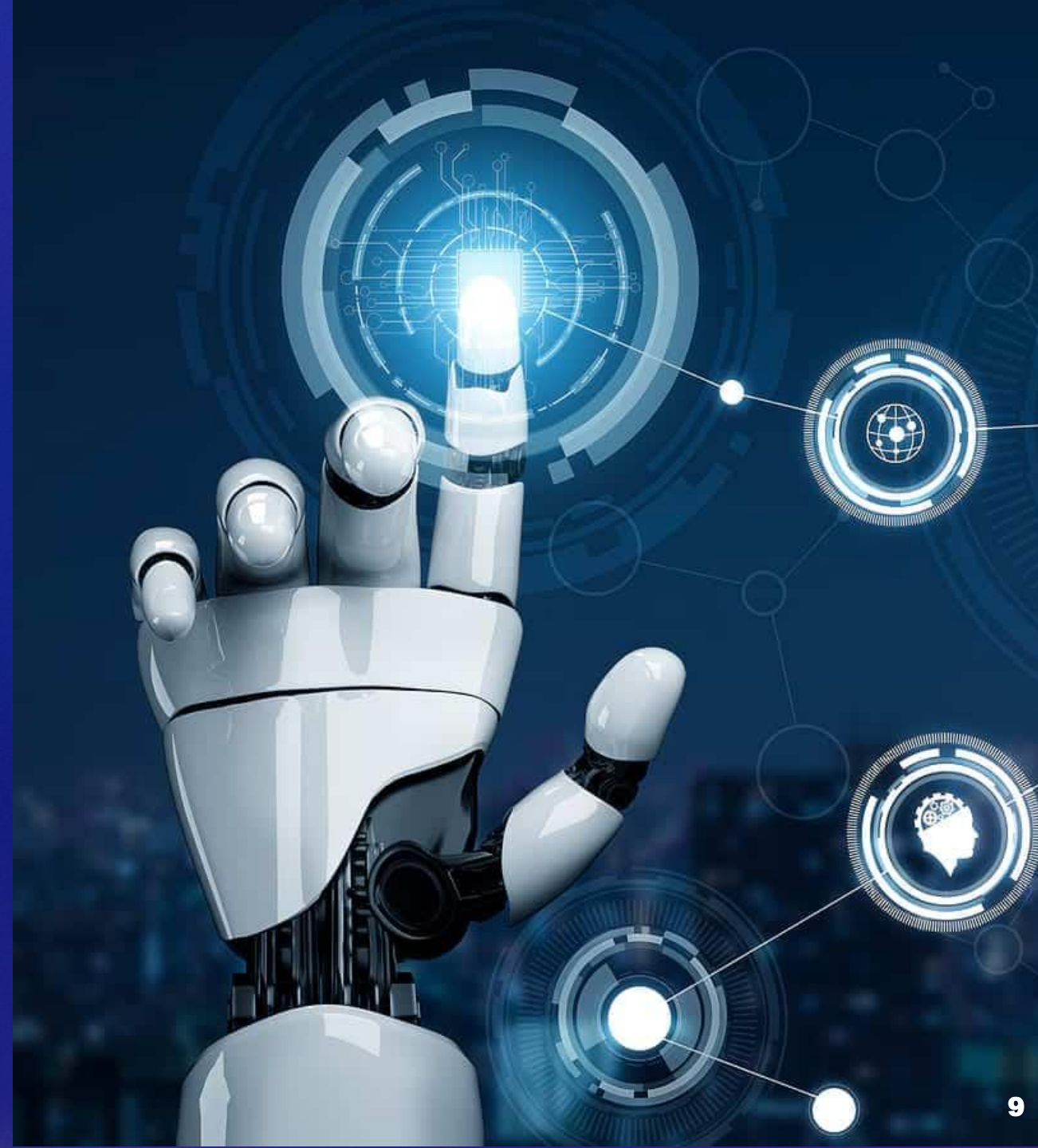
Partnering with academia and industry to enrich curricula, foster research, and integrate future-focused learning



Technology Skills and Competencies Model

ICAP's Technology Skills and Competencies Model for Chartered Accountants is a roadmap for finance professionals for acquiring the skills and competencies in a digital era.

ICAP has defined clear technical skills and competencies at each stage of the career journey to ensure relevance, consistency, and practical applicability.



ICAP's Approach for Digital Fluency

01

Global Best Practices



02

Competency Development

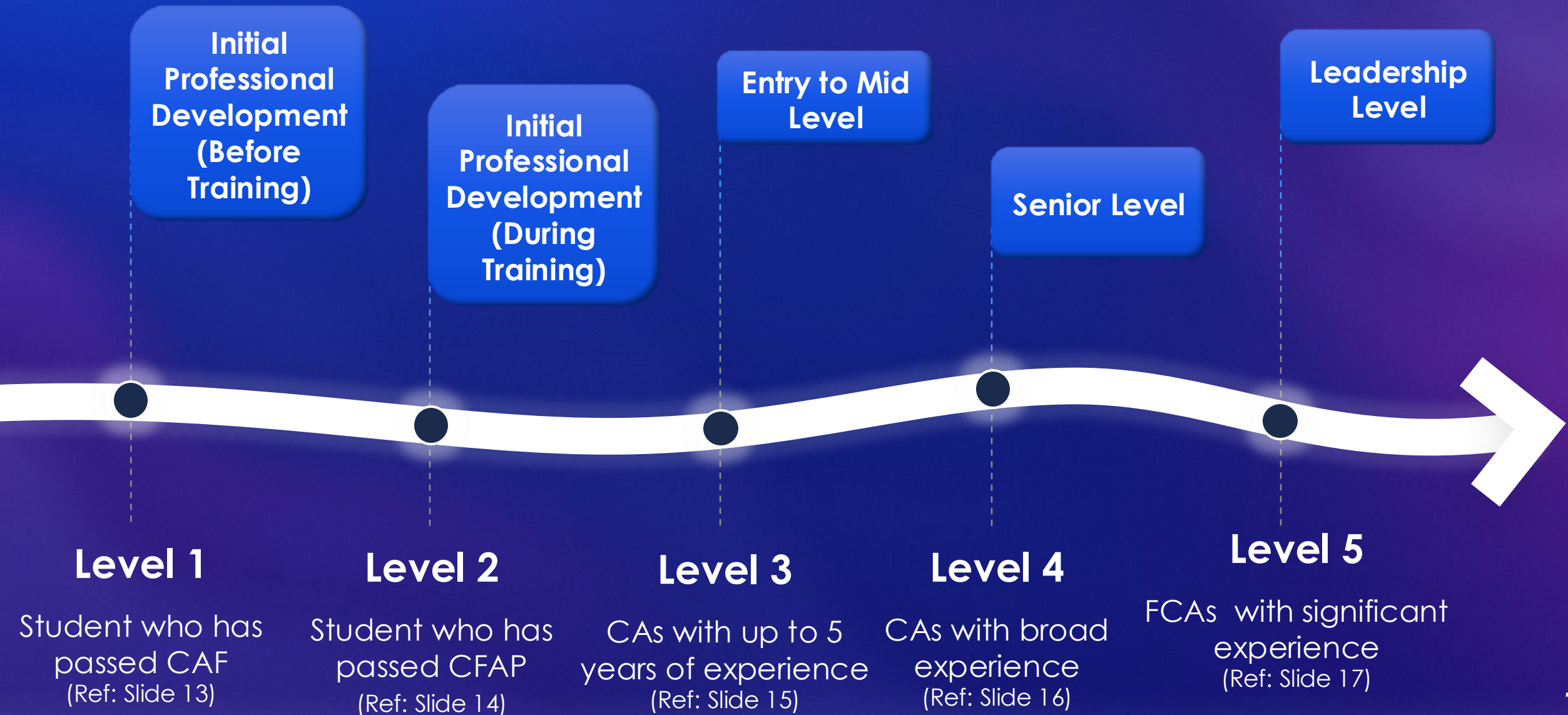


03

Career Journey



The Career Journey



TECHNOLOGY SKILLS AND COMPETENCIES MODEL



Initial Professional Development Before Training

WHAT IT TAKES

Completed PRC & CAF levels with tech-focused learning

Trained in data, systems, risks & MS Office for business

Building strong foundation in professional competencies

Equipped for practical application in business settings

ROLE TITLES

- This is the first step in their career journey; they do not assume any positions yet and rather focus on studying.
- These students have a foundation level of knowledge in Quantitative Methods , Business, and Economics, while they possess an intermediate level of knowledge in Accounting, Finance, Tax, Business Laws, Audit, and Technology.

Initial Professional Development During Training

WHAT IT TAKES

CA trainees with
CFAP, AI & Data
Analytics
training

Developing
advanced
technical and
professional
skills

Apply principles
to routine and
some complex
tasks

Work with
autonomy
under guided
accountability

ROLE TITLES

- Assistant Trainee
- Associate Trainee
- Senior Associate Trainee

These students have advanced-level knowledge of Accounting, Finance, Tax, Corporate Laws, Audit, and Sustainability.

Entry to Mid - Level

WHAT IT TAKES

Freshly
Qualified CAs
with up-to 5
years of
experience

Builds expertise
through hands-on,
cross-functional
roles

Develops
leadership and
strategic
thinking while
supporting
teams and
guiding others.

Expands
networks across
functions and
external partners

ROLE TITLES

- Assistant Managers, Managers or Directors in Audit or Advisory firms
- Accountant/ Senior Accountant
- Finance Analyst / Senior Financial Analyst, Business Analyst
- Risk & Compliance Officer/Company Secretary
- Financial Controller, Internal Audit Manager, Accounts Controller, Financial Operations Manager, Assistant Manager Audit/ Finance / Accounts

Senior Level

WHAT IT TAKES

CA with broad range of professional experience

Leads teams/functions with direct reports

Manages finance operations across units or clients

Balances delivery, people, and performance oversight. Drives financial results and contributes to strategy

ROLE TITLES

- Audit or Advisory Partners with over 5 years' experience
- Finance Director, Treasurer
- Accountant/Senior Accountant
- Manager/Senior Manager
- Financial Controller

Leadership Level

WHAT IT TAKES

FCA with significant experience	Must have a comprehensive industry knowledge.
Responsible for the governance, drive the strategic direction of the organization and influencing its long-term direction.	Drive compliance in accordance with the business charter, ensuring communication of the strategic plan and empowering others to deliver

ROLE TITLES

- Senior Partner in Audit, Tax or Advisory Firm
- C-Suite (CFO, COO, CEO)
- Senior Finance Director

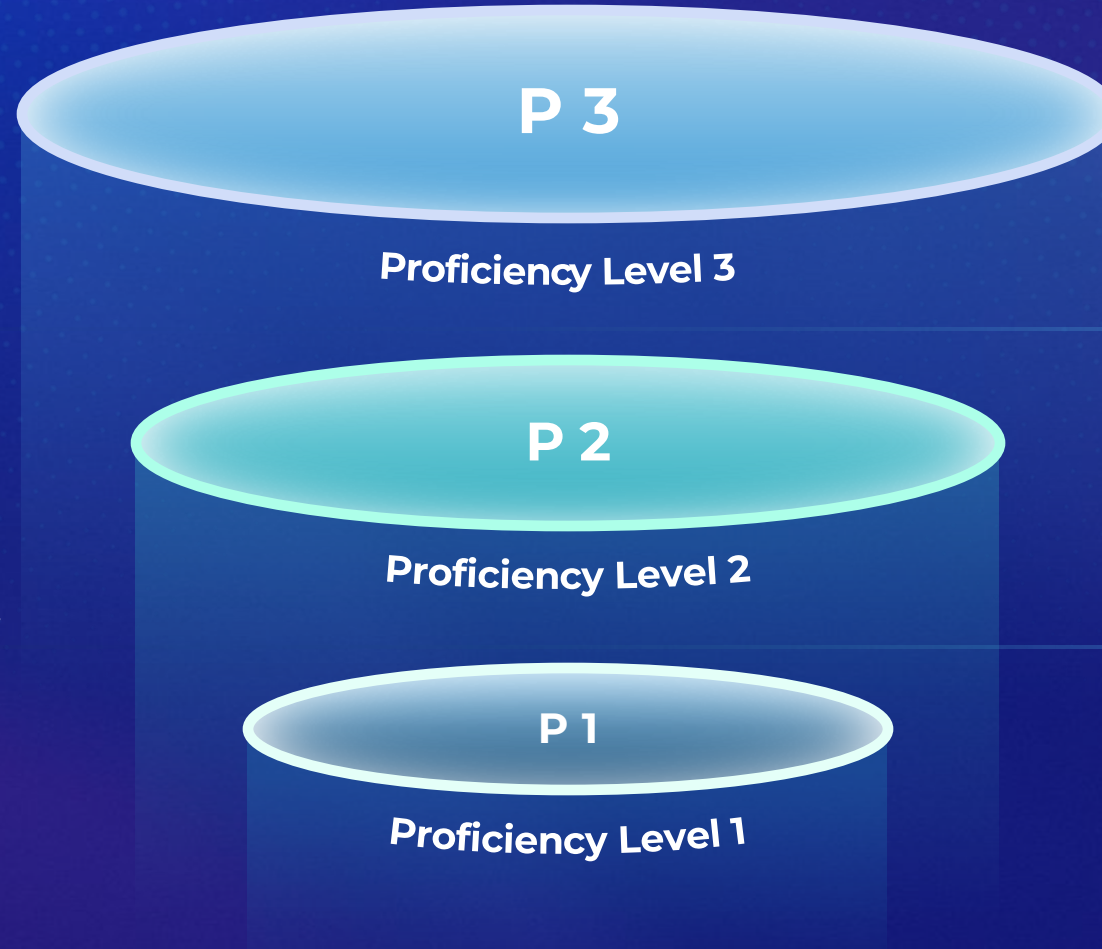
Career Progression of IT Technical Skills Across Different Levels

Proficiency Levels

At the advanced level, learners **lead projects, solve complex problems, provide strategic advice with ethical judgment, and communicate persuasively** across diverse audiences.

At the intermediate level, learners **independently apply and analyze** technical knowledge, integrate skills with ethical judgment to complete assignments, and communicate effectively with diverse stakeholders.

At the foundation level, learners **apply basic concepts under supervision**, focus on ethics, communication, and simple problem-solving, and refer complex matters to supervisors



ICAP's proficiency levels, aligned with IFAC's global standards, define performance expectations across career stages by **outlining complexity, autonomy, and professional growth in the CA journey, consistent with internationally recognized IESs..**

DATA SCIENCE

IPD During Training

Gain practical expertise in data science, analytics, and automation using tools like Power BI, Python, AI, and RPA.

Senior Level

Proficiently use data analytics tools and apply predictive analysis for decision-making.

1

3

5

2

4

IPD before Training

Understand Data Science and how to use data (including for big data) effectively.

Entry to Mid - Level

Develop organization-wide predictive analytics strategies and analyses to support decision-making.

Leadership Level

Direct organization-wide predictive analytics strategy, and support

IT GOVERNANCE & COMPLIANCE

IPD During Training

Apply IT governance frameworks to align technology with business goals while ensuring compliance and cybersecurity.

Senior Level

Lead organization-wide IT governance, ensuring compliance with strategy and regulations while leveraging advanced tools like AI, big data, and fraud detection systems.



IPD before Training

Understand IT strategy, systems, and project management to align technology with business strategy and compliance.

Entry to Mid – Level

Implement IT governance frameworks to align technology with business strategy, ensure compliance, and strengthen decision-making and reporting.

Leadership Level

Drive enterprise-wide IT governance and digital transformation by aligning strategy, implementing frameworks, and leveraging AI, big data, and analytics to enhance performance, efficiency, and resilience.

IT & CYBER RISK MANAGEMENT

IPD During Training

Apply IT risk assessment and use digital audit tools to evaluate controls, mitigate threats, and support audit conclusions.

Senior Level

Lead IT and cyber risk assessments, implementing controls, data protection, and risk management in digital transformation and operations.

1

3

5

2

4

IPD before Training

Understand IT risks and controls while learning data analytics, CAATs, and audit software.

Entry to Mid – Level

Identify IT and cyber risks and support projects to implement effective controls and policies.

Leadership Level

Oversee enterprise-wide IT risk management, embedding controls, data protection, and privacy into audits and reviews.

TECHNOLOGICAL PROFICIENCY

IPD During Training

Apply ICT tools effectively and adapt to evolving technologies with awareness of their business and global impact.

Senior Level

Lead IT/ERP implementations and digital initiatives, applying project management to ensure secure, policy-compliant technology that drives competitive advantage.



IPD before Training

Use basic ICT tools effectively (Word, Excel, PowerPoint) while understanding their business impact and adapting to evolving technologies.

Entry to Mid – Level

Apply IT strategy and digital tools to enhance performance while ensuring information and cybersecurity compliance.

Leadership Level

Leverage cloud-based financial applications to enhance scalability, efficiency, and business impact..

ERP SYSTEMS APPLICATION

IPD During Training

Apply ERP tools, including cloud-based, to enhance reporting, inventory, compliance, and decision-making.

Senior Level

Lead ERP adoption to ensure reporting integrity, drive automation, and leverage cloud solutions for scalability and efficiency.

1

3

5

2

4

IPD before Training

Understand ERP tools and their role in supporting financial reporting.

Entry to Mid - Level

Gain hands-on experience with ERP systems such as SAP, Oracle, and Microsoft Dynamics, including cloud-based solutions.

Leadership Level

Champion ERP adoption with Agile leadership, ensuring accurate reporting, automation, and scalable cloud-based solutions.

AI & EMERGING TECHNOLOGIES

IPD During Training

Apply AI, RPA, and emerging technologies for analytics, decision-making, and blockchain adoption in business.

Senior Level

Drive adoption of emerging technologies with ethical governance, applying AI, RPA, ML, blockchain, and cloud solutions in business operations.

1

3

5

2

4

IPD before Training

Understand AI, RPA, and emerging technologies, gaining exposure to tools and their impact on finance, data analytics, and business.

Entry to Mid – Level

Apply AI tools under guidance for fraud monitoring, compliance, and analytics while gaining skills in RPA, ML, blockchain, and digital currencies.

Leadership Level

Lead tech-driven business transformation by adopting AI, RPA, blockchain, fintech, and digital finance while evaluating IT maturity through Digital Competency Assessments.

SUMMARY

	Level 1	Level 2	Level 3	Level 4	Level 5
Competencies	IPD Before Training	IPD During Training	Entry to Mid Level Roles	Senior Roles	Leadership Roles
Data Science	Understand and use data effectively.	Develop skills in data science, analytics, and automation.	Design predictive analytics strategies to aid decisions.	Use analytics tools for predictive decision-making.	Lead organization-wide predictive analytics strategy.
IT Governance and Compliance	Understand IT strategy and systems to align tech with business goals.	Apply IT governance to align tech with business goals and ensure compliance.	Implement IT governance to align tech, ensure compliance, and enhance reporting.	Lead IT governance to ensure compliance and leverage AI and big data.	Drive IT governance and digital transformation using AI and analytics.

SUMMARY

	Level 1	Level 2	Level 3	Level 4	Level 5
Competencies	IPD Before Training	IPD During Training	Entry to Mid Level Roles	Senior Roles	Leadership Roles
IT and Cyber Risk Management	Understand IT risks, controls, and audit tools.	Apply IT risk assessments and use digital tools to evaluate controls.	Identify IT and cyber risks and help implement controls.	Lead IT and cyber risk management during digital transformation.	Oversee IT risk management with embedded controls and data protection.
Technological Proficiency	Use basic ICT tools effectively and adapt to new technologies.	Apply ICT tools and adapt to evolving technologies effectively.	Apply IT strategy and digital tools to boost performance and ensure security.	Lead IT/ERP projects to ensure secure, compliant, and competitive technology.	Leverage cloud financial apps to boost scalability and efficiency.

SUMMARY

	Level 1	Level 2	Level 3	Level 4	Level 5
Competencies	IPD Before Training	IPD During Training	Entry to Mid Level Roles	Senior Roles	Leadership Roles
ERP Systems Application	Understand ERP tools and their role in financial reporting.	Use ERP tools to improve reporting, compliance, and decision-making.	Gain practical experience with ERP systems like SAP, Oracle, and Dynamics.	Lead ERP adoption to enhance reporting, automation, and scalability.	Champion ERP adoption with Agile leadership for accurate, scalable solutions.
AI and Emerging Technologies	Understand AI, RPA, and emerging technologies and their business impact.	Apply AI, RPA, and emerging tech for analytics and decision-making.	Apply AI and emerging tech for fraud monitoring, compliance, and analytics.	Apply AI, RPA, ML, blockchain, and cloud ethically in business operations.	Lead business transformation with AI, RPA, blockchain, and digital finance.

**THANK
YOU**