



Association
of International
Certified Professional
Accountants®

The unified voice of AICPA and CIMA

Hot topics in accounting education

Technology and Analytics & ESG

Joshua Stopek, CPA

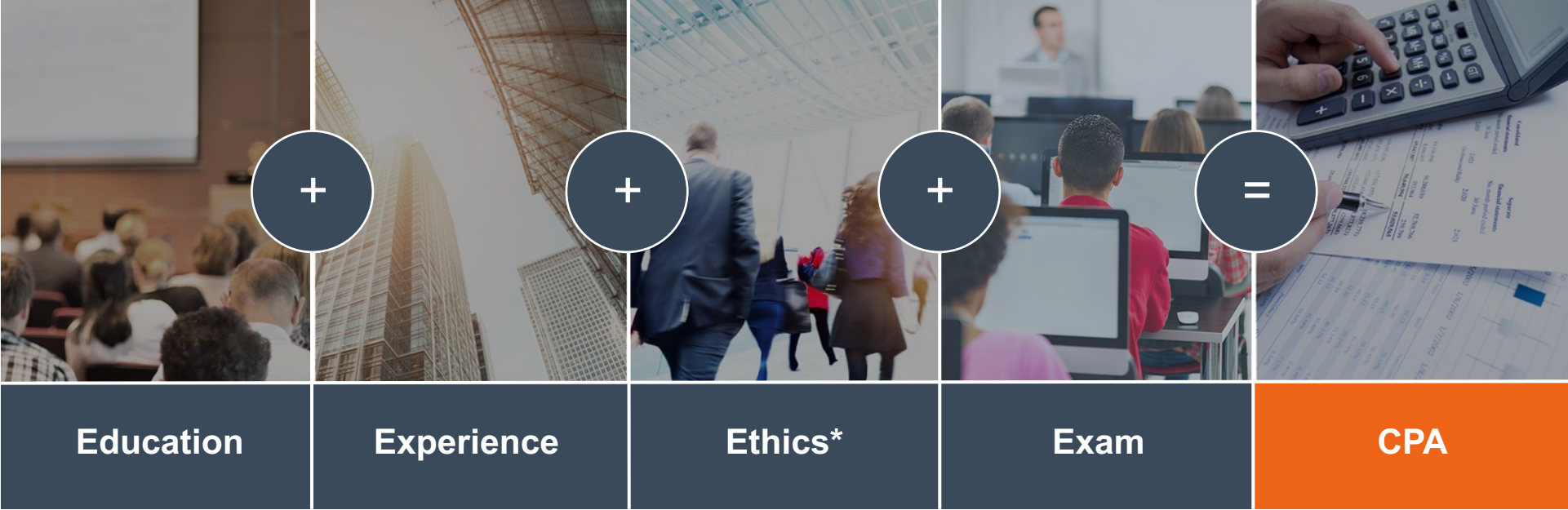
Senior Manager, Research - Examinations

There's nothing so stable as change.

Bob Dylan

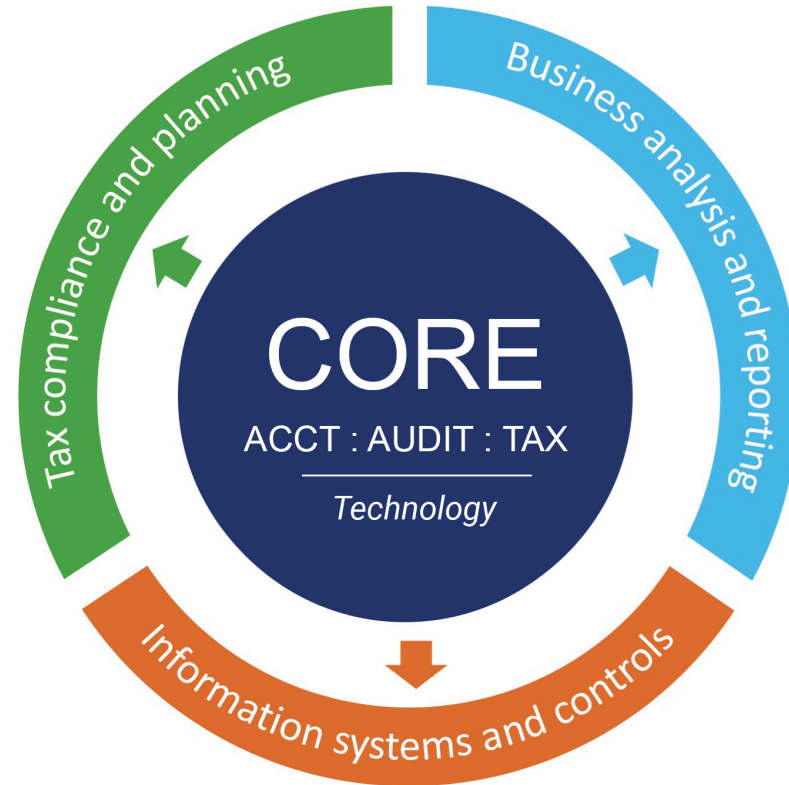
Interview with the Brown Daily Herald, 1964

What do you need to become a CPA?



* Certain states require a separate ethics assessment in addition to what is tested on the CPA Exam.

New US Uniform CPA Examination licensure model: Core and Disciplines



Strong **Core** with accounting, auditing, and regulation/taxation along with a recognition of the impact of technology

Knowledge & skills in three **Disciplines**

Reflects reality of practice

Adaptive and flexible

One CPA license

Enhances public protection

Who might be interested in each discipline?

ISC



- For candidates interested in advisory, information systems, IT audit, cybersecurity and System and Organization Controls (SOC) engagements.

BAR



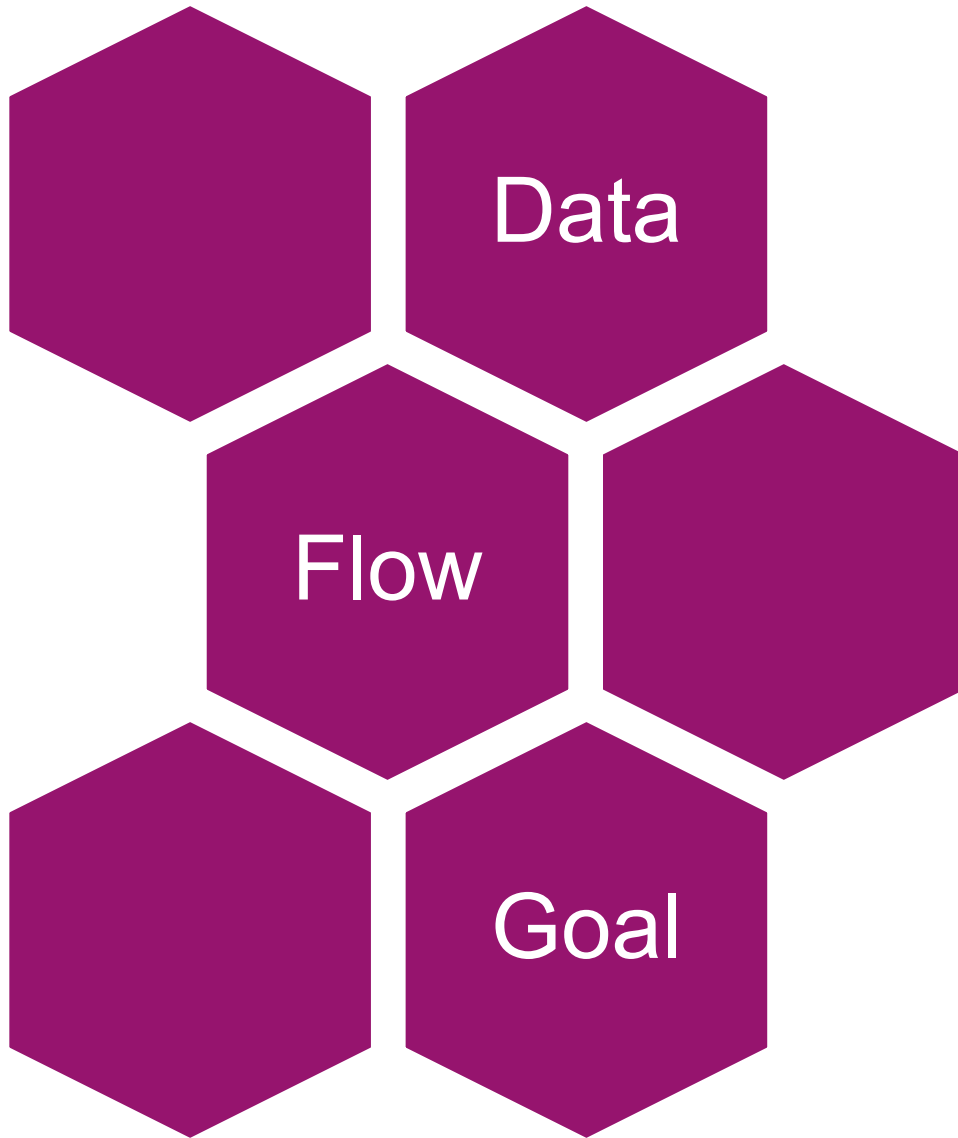
- For candidates interested in financial statement audits, financial and business analysis, including the use of analytics, technical accounting and financial reporting, and client accounting services.

TCP

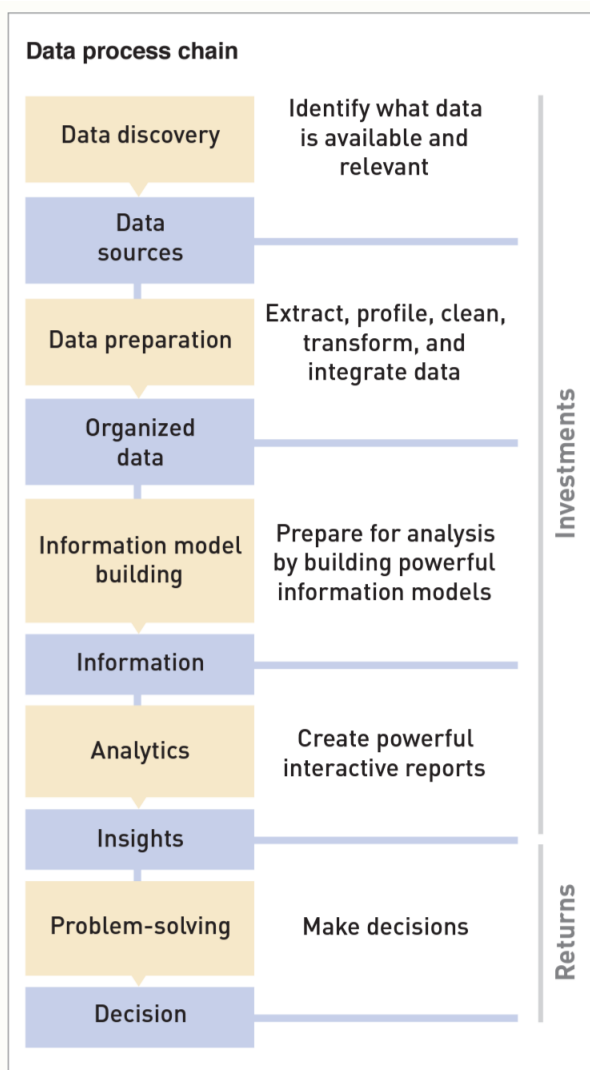


- For candidates interested in taxation and personal financial planning.

Analytics & technology



How can you think about data, analytics & technology?



How do you put together the pieces to **solve accounting problems?**

Do I need fancy tools or software to teach
and test analytics and technology?

NO.

...but is it helpful?

YES.

Answers are easy...asking the right questions is difficult...

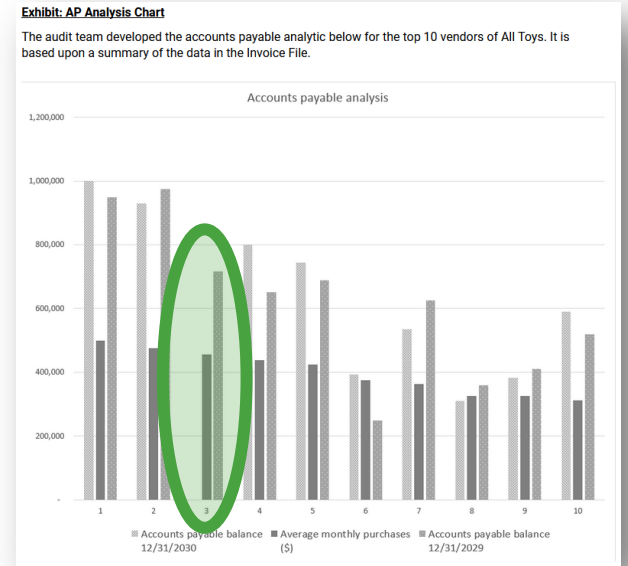
Vendors File

Description: This file lists individual approved vendors by row with fields as described below.

Data field	Description
VendorID	Unique system ID of vendor
VendorName	Product vendor
Address	Street address
City	City
State	State
Zipcode	Zip code
ContactName	Name of All Toys point of contact
ContactPhone	Phone number of All Toys point of contact
EndingPayableBalance	Balance as of requested date
ACH Data	Bank transfer information

Permit Number	Account	DOING BUSINESS AS NAME	Year	Quarter	Month	Day	ADDRESS	STREET TYPE	NEIGHBORHOOD	CITY	STATE	ZIP CODE	SITE NUMBER	WARD PRECINCT	LATITUDE	LONGITUDE
144843	10112	AUGIE'S	2020	Qtr 3	July	8	1721 W WRIGHTWOOD AVE	AVE	Backtown	CHICAGO	IL	60614	1	32-20	41.93	-87.67
144289	10329	EDUARDO'S PIZZA	2020	Qtr 2	June	9	1212 N DEARBORN ST	ST	Gold Coast	CHICAGO	IL	60610	1	Feb-36	41.90	-87.63
144618	10368	N	2020	Qtr 3	July	28	2977 N ELSTON AVE	AVE		CHICAGO	IL			33.7	41.54	-87.69
144410	10493	BERNIE'S	2020	Qtr 1	March	6	3664 N CLARK ST	ST	Alta Vista Terrace	CHICAGO	IL	60613	2	44-50	41.95	-87.66
144988	10778	BLACK SHEEP	2020	Qtr 2	June	18	2535-37 W PETERSON AVE	AVE	Peterson Park	CHICAGO	IL	60659	1	40-15	41.99	-87.69
145037	10875	CLUB LUCKY	2020	Qtr 1	March	25	1514 N LAUREN ST	ST	Central Station	CHICAGO	IL	60625	2	17-Apr	41.87	-87.63
144977	10777	ANGEL, TAVELI & GRILL	2020	Qtr 2	June	29	1212 N LAUREN ST	ST	Noble Square	CHICAGO	IL	60622	1	32-35	41.91	-87.67
143727	11210	DOBBY'S BAR & GRILL	2020	Qtr 1	February	28	1050 N STATE ST	ST	Gold Coast	CHICAGO	IL	60610	1	4-Feb	41.90	-87.63
143576	113	Murphy's Bleachers	2020	Qtr 1	February	10	3653-55 N SHEFFIELD AVE	AVE	Alta Vista Terrace	CHICAGO	IL	60613	2	44-28	41.95	-87.65
144111	11344	VINCI	2020	Qtr 2	June	12	1732 N HALSTED ST	ST	Backtown	CHICAGO	IL	60614	1	43-13	41.91	-87.65
144144	11381	SOUTHPORT LANES INC	2020	Qtr 1	March	18	3325 N SOUTHPORT AVE	AVE	Belmont Harbor	CHICAGO	IL	60657	1	44-9	41.94	-87.66
144258	11491	CORCORAN'S GRILL & PUB	2020	Qtr 1	March	13	1615 N WELLS ST	ST	Backtown	CHICAGO	IL	60614	1	4-Feb	41.91	-87.63
146076	11700	TRADER TODD'S RESTAURANT & BAR	2020	Qtr 3	July	23	3016 N SHEFFIELD AVE	AVE	Belmont Harbr	CHICAGO	IL	60637	1	44-39	41.94	-87.65
144277	12115	THE PONY INN	2020	Qtr 2	June	17	1638 W BELMONT AVE	AVE		CHICAGO	IL		2	47-38	41.94	-87.67
144539	12119	GEO. NOTTOLI & SON, INC.	2020	Qtr 2	June	11	7652 W BELMONT AVE	AVE	Portage Park	CHICAGO	IL	60634	1	38-31	41.94	-87.62
145586	127	CAROL'S PUB	2020	Qtr 2	June	19	4659 N CLARK ST	ST	Uptown	CHICAGO	IL	60640	1	46-16	41.97	-87.57
144037	12719	HUGO'S FROG BAR	2020	Qtr 1	March	3	1024 N RUSH ST	ST	Cathedral District	CHICAGO	IL	60611	1	42-24	41.90	-87.63
144898	14272	LIZZIE MAC NEILLS	2020	Qtr 3	July	22	400 N MCCLURG CT	CT	Cathedral District	CHICAGO	IL	60611	1	42-54	41.89	-87.62
143780	14398	ROSSCOE'S SWEETS LTD	2020	Qtr 2	May	13	3354-56 N HALSTED ST	ST	Belmont Harbor	CHICAGO	IL	60657	1	44-42	41.94	-87.65
144645	14417	COFFEE & TEA EXCHANGE	2020	Qtr 2	June	16	3311 N BROADWAY	ST	Belmont Harbor	CHICAGO	IL	60657	2	44-15	41.94	-87.64
144415	146	BUTCH MC GURE'S, INC.	2020	Qtr 1	March	19	20 W DIVISION ST	ST	Gold Coast	CHICAGO	IL	60610	1	Feb-30	41.90	-87.63
143914	14714	O'LEARY'S PUBLIC HOUSE	2020	Qtr 1	February	26	541 N WELLS ST	ST	Gold Coast	CHICAGO	IL	60610	1	42-46	41.89	-87.63
145743	14747	OMNI CHICAGO HOTEL	2020	Qtr 3	July	30	674-678 N MICHIGAN AVE	AVE	Cathedral District	CHICAGO	IL	60611	4	42-23	41.89	-87.62
Total													4852			

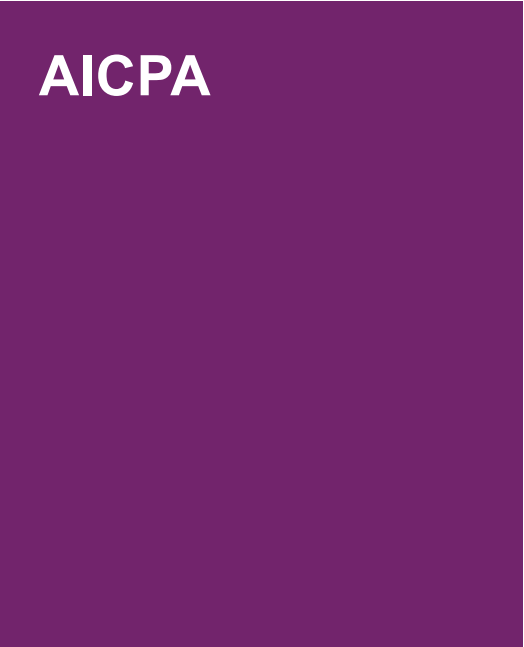
How do I clean data for use?



How do I identify outliers?

Data and cases are out there for use.

Data & Technology across the globe



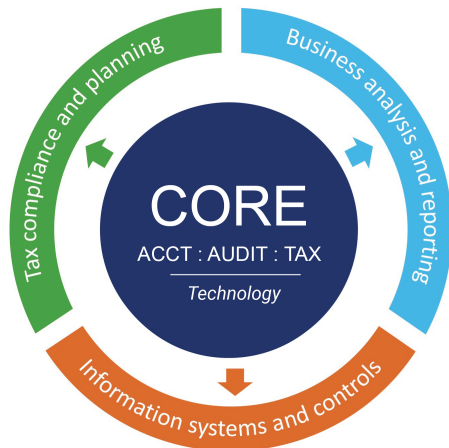
In the US

Foundational Competencies Framework

Technology, systems and process management

- Compare technological tools to recommend best option(s) given time and cost constraints and job specifications.
- Leverage relevant technologies to facilitate data analyses that supports organizational goals.
- Evaluate frameworks to design systems of controls that facilitate efficient and effective operations.
- Design systems to perform processes for reliable and verifiable analyses and reporting.

Throughout the US CPA Examination



How can it
be added
into syllabi
or test
blueprints?

A note on ISC

ISC



- Information systems
- Data management
- Business processes
- Information security, confidentiality and privacy
- IT audits
- System and Organization Control (SOC*) engagements

SOC engagements are designed to develop “internal control reports on the services provided by a service organization providing valuable information that users need to assess and address the risks associated with an outsourced service.”

<https://us.aicpa.org/interestareas/frc/assuranceadvisoryservices/socforserviceorganizations.html>

ESG

ESG – What are we talking about?

Environmental

- Energy
- Water
- Waste
- Climate/GHG
- Biodiversity/Nature

Social

- Health & Safety
- Diversity, Equity, Inclusion
- Talent
- Brand/Reputation
- Privacy/Cybersecurity

Governance

- Ethics/Conduct
 - Anti-Corruption
 - Executive Compensation
 - Board Composition
 - Risk Management
-

Alphabet Soup



MAPPING GLOBAL REPORTING AND ASSURANCE PRACTICES

Reviewed 1400 largest companies across 22 jurisdictions.

Frequency of reporting ESG information is high.

The incidence of assurance is not.

The profession has close to 2/3rds market share for assurance.

Significant differences in reporting and assurance practices exist between jurisdictions.

KEY FINDINGS

91%

of companies reviewed report some level of sustainability information

51%

of companies that report sustainability information provide some level of assurance on it

63%

of these assurance engagements were conducted by Audit or Audit-Affiliated Firms

88%

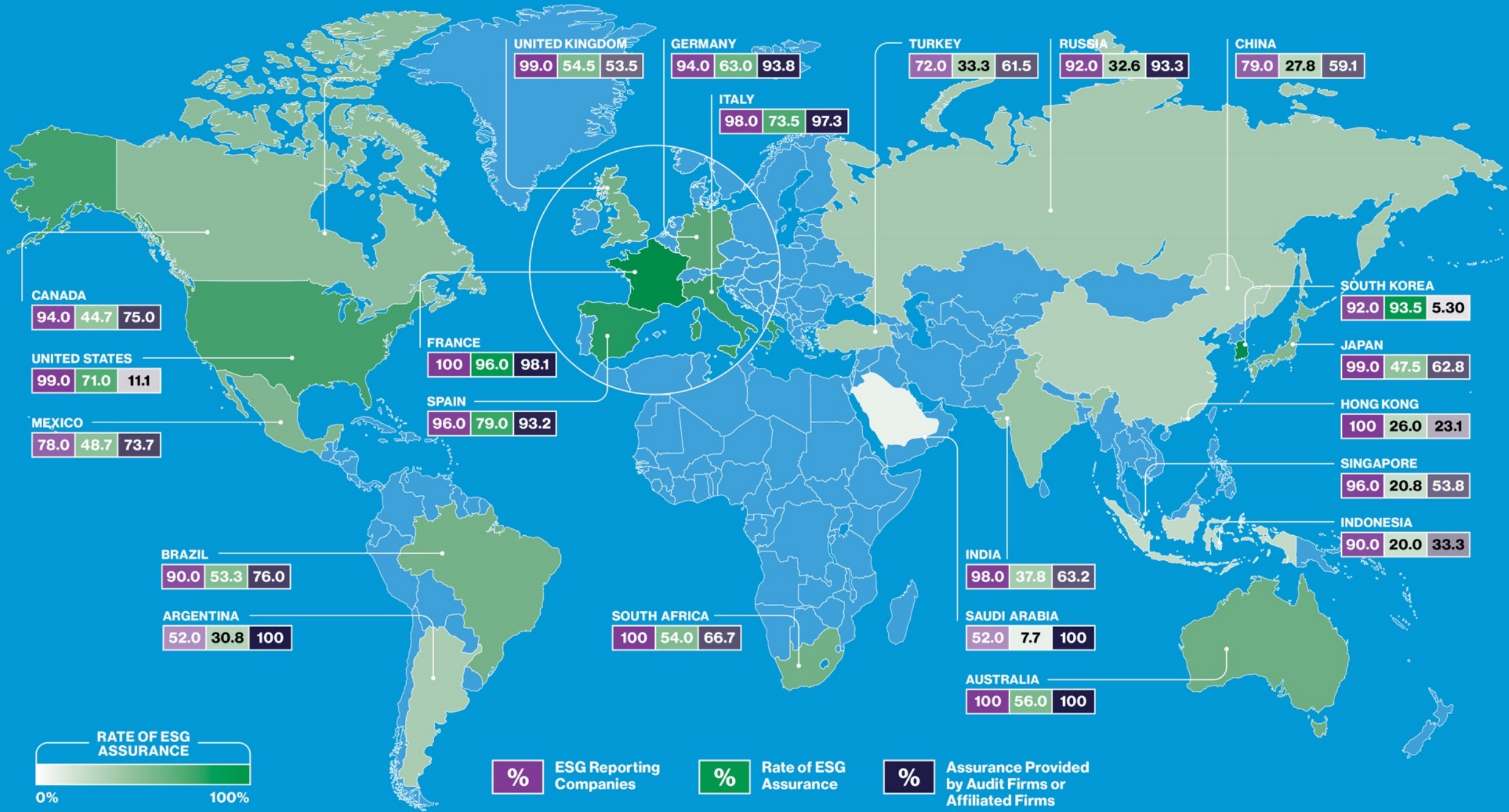
of assurance engagements employing an Audit Firm made use of the International Standard on Assurance Engagements 3000 (Revised), while other service providers often rely on alternative assurance standards

83%

of all assurance engagements result in limited assurance reports



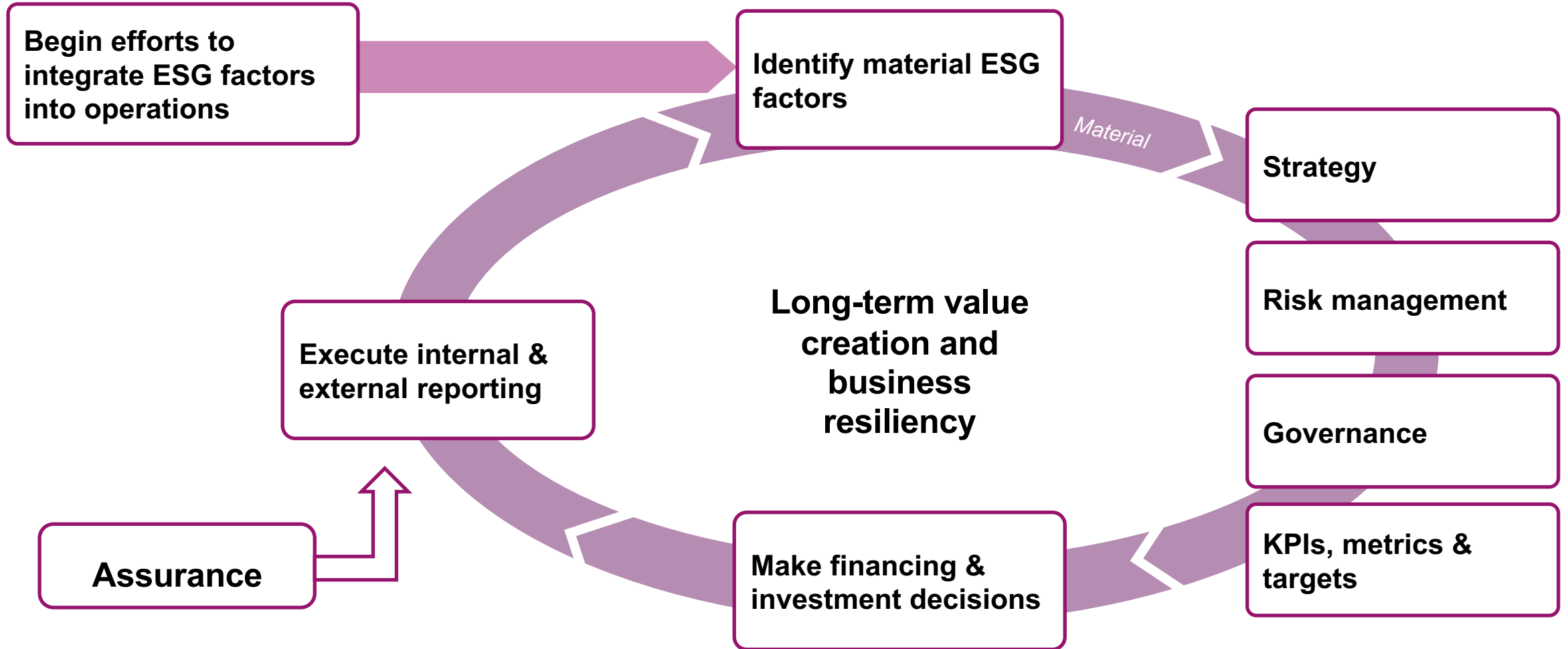
There are significant differences across jurisdictions



Are ESG reporting, assurance, and related issues evolving too quickly to be taught?

No.

ESG as a part of the work finance professionals already own and support



Note: the specific role of the CFO / accounting & finance teams will vary by organization. In all cases, finance will partner with internal and external stakeholders.

Sources: adapted from [KPMG's Integrating ESG into your business](#) and the [Task Force on Climate-related Financial Disclosures \(TCFD\) framework](#).

In the US

Foundational Competencies Framework

Environment, social and governance management

- Evaluate the impact of organizational activities on the environment, society and governance.
- Explain the effect legal and regulatory global environments have on organizations.
- Describe how operating units prioritize environmental, societal and governance initiatives into operational plans.
- Explain the relevant reporting frameworks for environmental, societal and governance initiatives.
- Identify information system requirements to evaluate strategies to enhance environmental, societal and governance practices.
- Leverage relevant technologies to facilitate data analyses that support diversity, equity and inclusion.

BAR Section of CPA Exam

Use of COSO ERM framework to identify, respond to, and report environmental, social and governance (ESG) related risks.

How can it be added into syllabi or test blueprints?

In Australia/New Zealand

Sustainability for Accountants Elective

...to contribute to and influence an organisation's values, culture, strategy and practices to ensure they align to sustainability principles, practices, frameworks and standards.

Covering topics such as:

Defining sustainability, governance, strategy, risk, sustainable finance.

ESG and performance, data, reporting, assurance.

Towards common sustainability principles, metrics, reporting

Case studies in sustainability.

How can it be added into syllabi or test blueprints?

Other resources

[AICPA “Faculty Hour” Educator Webinars:](#)

Upcoming: Demystifying ESG Friday, November 11, 2022; 2:00pm-3:30pm EST

Previous:

- Revolutionizing Accounting Curricula by Infusing Data Analytics in the Classroom
- Developing a Data Analytics Mindset

[Fordham University ESG Literacy Training](#)

Other AICPA initiatives:

- [Sustainability Disclosure Priorities for 2023](#), November 15, 2022; 11:00am EST
- AICPA ESG Certificate Program launching November 7



Together as the Association of International
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Thank you

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