“We attract, inspire and engage the next generation of CIMA members and CGMAs by increasing awareness among academics and university students through identification of best practices, training, resources and communications, working in partnership with the regions.”

Global CGMA University and Academic Center of Excellence (COE)
The Association of International Certified Professional Accountants
The COE’s role

- Establish consistent global strategy & performance for academic relations that compliments country efforts
- Provide partnership & support
- Develop best practices & tools
- Align priorities & interests
- Develop operational efficiency
What is this document about?

• This document is part of a series that was developed to provide reading materials, case studies, videos, podcasts and other resources that are relevant to a specific exam in the 2019 CIMA Professional Qualification (PQ).

• These resources will help you to understand more about new topics within a specific exam.

• All resources found in this document can be shared with faculty members and students.

• Each resource has a link to its webpage and for ease of access, just click on these icons when you see them in the following slides:
Quick links to each section

The Enterprise Pillar

Exam blueprint

Topic A – Role of the finance function
1. Managing finance in a digital world

Topic B – Technology in a digital world (new topic)
2. Managing finance in a digital world

Topic C – Data & information in a digital world (new topic)
3. Managing finance in a digital world

Topic D – Shape & structure of the finance function (new topic)
4. Managing finance in a digital world

Topic E – Finance interacting with the organisation
5. Managing finance in a digital world

Additional resources

Contact:
AcademicPartners@acca.org.com
Kvin.Frang@acca.org.com
The Enterprise Pillar
2019 CIMA Professional Qualification Framework
Summary of the Enterprise Pillar

Articulate a vision in a digital world.

How do we articulate the role of the finance function in a digital world?

How do we manage performance through people and projects?

How do we develop and manage strategy?
What changed in E1?

2015 syllabus
E1: Organisational Management

A. Introduction to organisations
B. Managing the finance function
C. Managing technology and information
D. Operations management
E. Marketing
F. Managing human resources

2019 syllabus
E1: Managing Finance in a Digital World

A. Role of the finance function
B. Technology in a digital world
C. Data and information in a digital world
D. Shape and structure of the finance function
E. Finance interacting with the organisation

New
New
New
E1: Structure and outline

Equal exam weighting for all sections: 20%

- E1A: Role of finance in the organisation and the activities it performs to fulfil its role
- E1B: The technology landscape and its impact on organisations and the finance function
- E1C: Data usage by the finance function
- E1D: Structure and shape of the finance function linked to the roles
- E1E: How the finance function interacts with the organisation to create and preserve value
The competency framework reflects our findings on how finance professionals are expected to apply accounting and finance skills within the context of the business/organisations in which they operate.

It also reflects for the first time how technology and a digital mindset will be required to affect and influence their own decisions, actions and behaviours and those of their colleagues within the wider organisation.
Exam blueprint
What are exam blueprints?

- They are based on the CIMA syllabus and set out in detail what is examinable in each CIMA examination.
- They are published annually, and provide information about the format, structure and weightings of the assessments.
Key features of the blueprints

• Updated annually
• 3 documents, one per level
• 4 sections
  – Overview
  – Case study exam business simulation
  – Objective test representative tasks
  – Appendices (formulas etc.)
Exam overview

Skill level
Remembering
Understanding

Exam content weighting
5 major topics
20% weighting each

Exam format
Objective test
On-demand / home based
Computerised
60 questions / 90 minutes

Starting on 4 May 2020, students will be allowed to take exams from the comfort of their own home. Do check our website to see if it’s available in your country.
CIMA pass rates

Due to the launch of the 2019 Professional Qualification the pass rates for the objective tests, including E1, are unavailable. We expect to update the pass rate table by July 2020 and will then continue to update it every quarter.
Examination purpose

• The Objective Tests assess learners on acquired fundamental knowledge, skills and techniques for the role that will be simulated in the culminating Case Study Examination.

• The Objective Tests will cover all areas of the syllabus and will ensure that learning has taken place across the breadth of the syllabus.

• The Objective Tests at operational level are weighted towards remembering and understanding.
“I can” statements

- In the exam blueprint, you will find **representative task statements**.
- Each statement is a plain English description of what a CIMA finance professional should know and be able to do i.e. “I can….”
“I can” statements (cont’d)

• The content and skill level determine the language and verbs used in the representative task.

• CIMA will test up to the level of the task statement in the objective test (an objective test question on a particular topic could be set at a lower level than the task statement in the blueprint).

• The task statements in the blueprint are representative and are not intended to be (nor should they be viewed as) an all-inclusive list of tasks that may be tested on the Examination.

• The number of tasks associated with a particular content group or topic is not indicative of the extent such content group, topic or related skill level will be assessed on the test.
Beyond the blueprint

• The blueprint may indicate models and frameworks which may lead to the learning outcomes stated in the syllabus.

• However, learning providers may use other models and aides to develop these learning outcomes.
A snapshot of the E1 exam blueprint

<table>
<thead>
<tr>
<th>E1A: Role of the Finance Function</th>
<th>Skill level</th>
<th>Representative task statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead outcome</td>
<td>Component outcome</td>
<td>Remembering and understanding</td>
</tr>
<tr>
<td>1. The roles of the finance function in organisations</td>
<td>a. Enables organisations to create and preserve value</td>
<td></td>
</tr>
</tbody>
</table>

The slides below will list all these representative task statements.
Topic A – Role of the finance function

E1 Managing finance in a digital world
Overview

• This section examines the roles that finance plays in organisations and why.
• It describes in detail the activities that finance professionals perform to fulfil these roles.
• Consequently it is the foundation of the whole qualification and answers the question: *what do finance professionals do and why?*
• It provides links with other topics within the subject and what is covered in other areas of the Operational Level.
E1A – Role of the finance function

There are 2 lead learning outcomes for topic A.
• The roles of the finance function in organisations.
• The activities that finance professionals perform to fulfill the roles.

Skill level required
• Remembering
• Understanding

Structure & outline
• Review where E1A sits in the overall structure and outline of E1.

2015 syllabus
• Review how E1A was covered in the 2015 syllabus
E1A – Role of the finance function: Explanatory notes

- The roles of the finance function in organisations.
- The activities that finance professionals perform to fulfill the roles.

Describe the increasingly disruptive contexts in which organisations and their finance teams operate and how these contexts shape the role of finance.

Take each role and show how finance performs it in a typical organisational setting. The coverage should be introductory and brief.

It is meant to set the scene for subsequent sections and draw a link between the roles and the topics that will be covered in other areas of the Operational Level.

See more details
Use “information to impact” framework to describe the primary activities finance professionals perform.

Relate it to how data is generated, transformed and used.

Link it to how technology could be used to improve the productivity of finance professionals in these areas and the threat of automation.

See more details
# E1A – Role of the finance function

<table>
<thead>
<tr>
<th>Lead outcome</th>
<th>Component outcome</th>
<th>Representative task statement</th>
<th>Topics to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain the roles of the finance function in organisations</td>
<td>a. enables organisations to create and preserve value</td>
<td>➢ Understand how technology and competition drive the fast changing and unpredictable contexts in which organisations operate.</td>
<td>• The fast changing and unpredictable contexts in which organisations operate</td>
</tr>
<tr>
<td>(See explanatory notes again)</td>
<td>b. shapes how organisations create and preserve value</td>
<td>➢ Understand how the finance function enables, shapes and narrates value creation thorough planning, forecasting, resource allocation, performance management and financial reporting.</td>
<td>• Enabling value creation through planning, forecasting and resource allocation</td>
</tr>
<tr>
<td></td>
<td>c. narrates how organisations create and preserve value</td>
<td>➢ Understand the purpose and principles of corporate governance, the ethical responsibilities of the organisation and individuals and ways of achieving corporate social responsibility.</td>
<td>• Shaping value creation through performance management and control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Narrating the value creation story through corporate reporting</td>
<td>• The role of ethics in the role of the finance function</td>
</tr>
</tbody>
</table>
### Lead outcome

2. **Describe the activities that finance professionals perform to fulfil the roles**

(See explanatory notes again)

---

### Component outcome

**Describe how the finance function:**

- **a.** Collates data to prepare information about organisations
- **b.** Provides insight to users by analysing information
- **c.** Communicates insight to influence users
- **d.** Supports the implementation of decisions to achieve the desired impact
- **e.** Connects the different activities connect to each other

### Representative task statement

- **From exam blueprint**

### Topics to be covered

- How data is collected, cleaned and connected by finance.
- Types of analysis to produce insights.
- How finance communicates to influence key stakeholders (audiences, frequency, format etc)
- How finance uses resource allocation and performance management to enable organisations achieve their objectives
- Potential impact of technology
Resource list

Topic A – Role of the finance function
The Future of Finance – an introduction

Digital is transforming the #FutureOfFinance and shifting from cost to value, creating:

🌟 A change in responsibilities
👩‍🔬 New technologies
💡 New skills, competencies and mindset

Value
Technology
Skills
In a digital world, the finance function will be judged on the added value it brings to the organisation and the wider community.

- Business is a small part of societies ecosystem; as a profession, we have a responsibility to develop our students’ awareness of this and to consider the broader public interest when considering the narrow goals of the corporation.
Webinar

Future of Finance part 1: Changing role and mandate of finance

The future of finance
The strategic context and emerging themes
A new mandate for finance?

Dr. Martin Farrar
Associate Director, Research - Management Accounting Unit
Association of International Certified Professional Accountants

Peter Simons, FCMA
Associate Director, Research - Management Accounting Unit
Association of International Certified Professional Accountants
How do finance leaders respond in real time to a crisis like the worldwide spread of the new coronavirus?

• In times of crises, the profession has an opportunity to show how it can put the public interest before corporate profit, and through this enhance its reputation.
The roles of the finance function in organisations
Finance transformation: the human perspective

Successful finance transformation: the missing ingredient
Finance transformation: the human perspective (presenting three case studies)

BP

Siemens

UK Government Finance Function
Fun quiz

- Artificial intelligence and machine-learning technologies promise to free management accountants and finance professionals from routine tasks. The time gained can be used to focus on business growth opportunities.
- Take this quiz to find out whether you’ve got what it it takes. There are 7 questions in total.
How leaders are leveraging new technologies and skills to advance business and drive digital strategy
Global Management Accounting Principles

A Framework for Decision-Making: Four Principles from CIMA and AICPA

by Jefferson Mendoza | Jan 25, 2015 11:25pm
Topic B – Technology in a digital world
(new topic)

E1 Managing finance in a digital world
Overview

• This section focuses on the technologies that define and drive the digital world in which finance operates.

• It provides awareness of the technologies used in organisations and deepens understanding of the impact of the technologies on what finance does.

• It draws on the issues raised in the previous section about the role of finance and the activities finance performs to fulfil these roles.

• Given that the digital world is underpinned by technology and the use of data, this section provides a foundation to the next section on data.
There are 2 lead learning outcomes for topic B.

- Outline and explain the technologies that affect business and finance.
- Examine how the finance function uses digital technologies to fulfil its roles.

Skill level required are:

- Remembering
- Understanding

Structure & outline

- Review where E1B sits in the overall structure and outline of E1.

2015 syllabus

- Review how E1B was covered in the 2015 syllabus
There are 2 lead learning outcomes for topic B.

- Outline and explain the technologies that affect business and finance.
- Examine how the finance function uses digital technologies to fulfil its roles.

The aim is to create awareness of the technologies that drive the digital world and how they interact with each other.

The technologies outlined by the major advisory firms and the World Economic Forum digital transformation initiative provides the material on which learning and related activities can be based.

See more details
E1B – Technology in a digital world: Explanatory notes

There are 2 lead learning outcomes for topic B.

- Outline and explain the technologies that affect business and finance.
- Examine how the finance function uses digital technologies to fulfil its roles.

Examine how finance professionals use the relevant technologies to fulfil their roles.

Explain how the technologies impact various activities performed by finance professionals in the “information to impact” framework.

The intention is to move from creating awareness to generating understanding of how finance can use these technologies to increase its value and relevance to organisations.

See more details
## E1B: Technology in a digital world

<table>
<thead>
<tr>
<th>Lead outcome</th>
<th>Component outcome</th>
<th>Representative task statement</th>
<th>Topics to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Outline and explain the technologies that affect business and finance</td>
<td>a. Outline the key features of the fourth industrial revolution</td>
<td>➢ Understand the key features and dynamics of the fourth industrial revolution.</td>
<td>• Characteristics and dynamics of the fourth industrial revolution</td>
</tr>
<tr>
<td></td>
<td>(See explanatory notes again)</td>
<td>➢ Understand key technologies and their impact on an organisation including,</td>
<td>• Cloud computing</td>
</tr>
<tr>
<td></td>
<td>b. Outline and explain the key technologies that define and drive the digital world</td>
<td>cloud computing, big data, data analytics, process automation, artificial intelligence,</td>
<td>• Big data analytics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>data visualisation, blockchain, Internet of Things, mobile technologies and 3-D printing.</td>
<td>• Process automation</td>
</tr>
</tbody>
</table>

From exam blueprint

What is this?

1. Understand the key features and dynamics of the fourth industrial revolution.
2. Understand key technologies and their impact on an organisation including, cloud computing, big data, data analytics, process automation, artificial intelligence, data visualisation, blockchain, Internet of Things, mobile technologies and 3-D printing.
E1B: Technology in a digital world

<table>
<thead>
<tr>
<th>Lead outcome</th>
<th>Component outcome</th>
<th>Representative task statement</th>
<th>Topics to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Examine how the finance function uses digital technologies to fulfil its roles</td>
<td>a. Digital technology</td>
<td>Understand key technologies and how the finance function use cloud computing, big data, data analytics, process automation, artificial intelligence, data visualisation, blockchain, internet of things, mobile technologies and 3-D printing.</td>
<td>• How finance uses technologies listed above</td>
</tr>
<tr>
<td></td>
<td>b. Digital mindsets</td>
<td>Understand how a digital mindset can transform finance functions, processes and measurement of performance.</td>
<td>• Areas of finance susceptible to automation &amp; why</td>
</tr>
<tr>
<td></td>
<td>c. Automation and the future of work</td>
<td>Understand the components of the finance function (financial reporting, management accounting, treasury and internal audit) and how they can be affected by the increased use of automation.</td>
<td>• New areas for finance to focus</td>
</tr>
<tr>
<td></td>
<td>d. Ethics of technology usage</td>
<td></td>
<td>• Digital mindsets for finance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Understand how the increased use of technology impacts ethical considerations including data protection, privacy and overall corporate digital responsibility.</td>
<td>• Ethics of the use of technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Understand how the increased use of technology impacts legal and social considerations including data protection, privacy and overall corporate digital responsibility.</td>
<td></td>
</tr>
</tbody>
</table>
Resource list

Topic B – Technology in a digital world (new topic)
Key technologies that are changing the skills required by finance professionals

- Our researchers discuss:
  - the current technological tools you need to be aware of that are disrupting the finance function
  - the impact that these tools are having on the finance function
  - how technological automation is shifting the skills requirement of the finance professional
  - the types of organisations that, typically, are early adopters of technology.
The Fourth Industrial Revolution

- The World Economic Forum and business consultants McKinsey studied more than 1,000 factories worldwide and identified nine with the best track record of implementing 4IR technologies.

- These factories of the future (three are in China, five in Europe, and one in the US) performed 20% to 50% better than the rest.
Technology in 2020

A photo tour of CES 2020's latest innovations
Take a tour of the technology supershow in Las Vegas with this photo gallery.
31 January 2020
Strategy and innovation, Technology and analytics

It wasn’t just gadgets on display in Las Vegas last week at CES, the event formerly known as the Consumer Electronics Show. Grand plans for entire cities were part of the innovative ideas unveiled at the annual tech event. Bigger, faster, thinner — all seem within reach in the not-too-distant future. Here’s a recap through photos.

Watch Video

Video: Hyundai partners with Uber Air for flying cars
Joining with Uber, South Korean auto-manufacturer Hyundai has revealed the design of an aircraft to carry four passengers and travel at speeds of up to 180 miles (290 km) per hour.
8 January 2020
Technology and analytics

Watch Video
Introducing RPA in various industries – 3 short videos
Introducing RPA in organisations

Robotic process automation (RPA) could save an estimated 25,000 hours per year for an organisation with 40 full-time accounting staff, according to a 2019 Gartner study that involved more than 150 controllers, CFOs, and other senior accounting executives.

But RPA needs to be carefully planned and measured, say finance professionals knowledgeable about implementing automated processes.
Big data analytics in 2020

Using XBRL and big data to improve decision-making
A subsidiary of the China National Petroleum Corporation has tagged its way to better forecasting and business results.

By Yanchao Rao, Bing Leng, Xiuping Mu, Chao Li, Xiaofeng Hu, and John Turner
1 April 2020

Technology and analytics, Performance management, Forecasting

60 – 80% discount available for university academics and students.
AI (artificial intelligence) in financial services

How technology is transforming financial services

Fintech is at the centre of how financial services, and also technology, media, and telecommunications companies, are changing.

By Oliver Rowe
6 December 2019

Future of finance, Technology and analytics
3D printing – what is it and why is it important in 2020?

Additive layer manufacturing (ALM), also known as 3D printing, creates three-dimensional solid objects from digital blueprint files. Objects are created by laying down successive layers of material, each of which is a thinly sliced horizontal cross section of the final object.
Data visualisation in 2020

Want to use drag-and-drop digital tech like Iron Man? Now you can

Watch Video

What is data visualization?

What is Data Visualization in 3 minutes?

63,328 views - Oct 25, 2018
Data visualisation tools

Ideas for data analysis in Excel
The AI-powered tool lives up to its name by generating visualisation options from data.

By Liam Bastick, FCMA, CGMA
24 March 2020

Technology and analytics, Excel
Thivanka Rangala, FCMA, CGMA, is the CFO at edotco Group, a telecommunications tower company that is building network infrastructure for 5G technology in Asia.

He shares insights on preparing for 5G roll-out and advises finance professionals to stay ahead of the curve.
Understanding blockchain
Blockchain in 2020

The pros and cons of blockchain adoption

The technology has streamlined transaction and product tracking in multiple industries, but it’s not without its challenges.

By Oliver Rowe
1 December 2019

Technology and analytics, Future of finance
2020 will be a pivotal year for blockchain | Case studies

Regulation represents by far the most significant hurdle for blockchain innovators.
Internet of Things (IoT) – an introduction
Internet of Things (IoT) – case studies
Digital Transformation Initiative (DTI) – by World Economic Forum

- Launched in 2015, the initiative offers unique insights into the impact of digital technologies on business and wider society over the next decade.

- DTI research supports collaboration between the public and private sectors focused on ensuring that digitalization unlocks new levels of prosperity for both industry and society.
Arhin: Technology is having a significant impact on my job. It has taken away most of the routine and repetitive aspects of my job. I am managing all these challenges by constantly updating myself on the use of emerging technologies and hiring the right people to help where required.
Ethics of technology usage

Data privacy risks to consider when using AI
New technology carries unexpected perils that corporate leaders should guard against to keep consumer, employee, and client data safe.

By Sarah Ovaska
1 February 2020
Governance and risk, Risk management, Technology and analytics

Top 9 ethical issues in artificial intelligence

Faced with an automated future, what moral framework should guide us?

Image: Matthew Webe
Topic C – Data & information in a digital world (new topic)

E1 Managing finance in a digital world
Overview

• This section draws out one of the major implications of using technology in organisations and the finance function – namely the collection and processing of information can be done more effectively by machines rather than by people.

• It asserts that the role of finance professionals should be to use data to create and preserve value for organisations.

• Five ways of using data are examined.

• The key competencies required to use data in these ways are also highlighted.

• The primary objective is to help finance professionals understand what they can do with data and how to build the skills needed to use data
E1C: Data and information in a digital world

There are 2 lead learning outcomes for topic C.

- Describe the ways in which data is used by the finance function.
- Explain the competencies required to use data to create and preserve value for organisations

Skill level required are:

- Remembering
- Understanding

Structure & outline

- Review where E1C sits in the overall structure and outline of E1.

2015 syllabus

- Review how E1C was covered in the 2015 syllabus
There are 2 lead learning outcomes for topic C.

- Describe the ways in which data is used by the finance function.
- Explain the competencies required to use data to create and preserve value for organisations.

Build on the previous section on technology to explain why in the digital world finance professionals have to place more focus on using information than on collecting and/or processing information.

Outline and describe the various uses of information.

Link them to the primary activities that the finance function performs and to the topics to be covered in other modules of the operational level.

See more details
E1C: Data and information in a digital world: Explanatory notes

There are 2 lead learning outcomes for topic C.

- Describe the ways in which data is used by the finance function.
- Explain the competencies required to use data to create and preserve value for organisations.

Highlight and explain the data competencies required in the digital world.

Locate where finance has a competitive advantage and where finance will need to work with data scientists.

See more details
# E1C: Data and information in a digital world

<table>
<thead>
<tr>
<th>Lead outcome</th>
<th>Component outcome</th>
<th>Representative task statement</th>
<th>Topics to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe the ways in which data is used by the finance function</td>
<td>Identify the ways in which the finance function uses data:</td>
<td>➢ Understand how the finance function can leverage novel technologies and the associated data to improve information used by decision makers</td>
<td>Using data for:</td>
</tr>
<tr>
<td>(See explanatory notes again)</td>
<td>a. In a general sense</td>
<td>➢ Understand how the finance function can use data and information to assist sales and marketing to better understand customers and developing customer value propositions.</td>
<td>• Decision making</td>
</tr>
<tr>
<td></td>
<td>b. Specifically in each of the primary activities of finance</td>
<td>➢ Understand how the finance function can use data and information to assist operations in enhancing operational efficiency.</td>
<td>• Understanding customer value proposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Understand how the finance function can partner with other areas of the organisation to create value from digital assets.</td>
<td>• Enhancing operational efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Understand how the increased use of data impacts ethical considerations including data protection, privacy and overall corporate digital responsibility.</td>
<td>• Monetising data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ethics of data usage</td>
</tr>
</tbody>
</table>
# E1C: Data and information in a digital world

<table>
<thead>
<tr>
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<th>Component outcome</th>
<th>Representative task statement</th>
<th>Topics to be covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Explain the competencies required to use data to create and preserve value for organisations</td>
<td>Explain the competencies that finance professionals need in:</td>
<td>➢ Understand how the feedback that the finance function receives from stakeholders would facilitate future data needs and associated strategy.</td>
<td>• Assessment of data needs</td>
</tr>
<tr>
<td></td>
<td>a. Data strategy and planning</td>
<td>➢ Understand how the process of data extraction, transformation and loading (ETL) systems impacts the use of data in business intelligence (BI) systems, big data analytics and data visualisation.</td>
<td>• Extraction, transformation and loading (ETL) systems</td>
</tr>
<tr>
<td></td>
<td>b. Data engineering, extraction and mining</td>
<td>➢ Understand the finance function’s role in data modelling, data manipulation and analysis.</td>
<td>• Business Intelligence (BI) systems</td>
</tr>
<tr>
<td></td>
<td>c. Data modelling, manipulation and analysis</td>
<td>➢ Understand the finance function’s role in the management of the components of big data including variety, volume, veracity and velocity.</td>
<td>• Big data analytics</td>
</tr>
<tr>
<td></td>
<td>d. Data and insight communication</td>
<td>➢ Understand the finance function’s role in creating and maintaining data visualisations for improved communication.</td>
<td>• Data visualisation</td>
</tr>
</tbody>
</table>

From exam blueprint
Resource list

Topic C – Data & information in a digital world (new topic)
Data analytics is essential for finance professionals

• One way finance leaders can improve their impact on data analytics is expanding their knowledge in the area.

• In a poll of 500 senior finance and technology managers, 55% said data analytics will be essential in the next ten years, but 40% said skills gaps are a barrier to advanced analytics.
A case study of a state-owned enterprise in China

- In recent years, the Chinese domestic petroleum market has been dealing with oversupply, resulting in decreasing industry profits. Oil companies have been facing fierce competition and unprecedented operational pressures. Increasingly, oil companies have turned to management accounting to increase operating profits and add enterprise value.

- The idea behind the HSC's project is to implement use of XBRL for internal management reporting to structure and standardise heterogeneous data within enterprises — utilising big data to ensure businesses are equipped for the digital age.
Discounted certification courses for academics

Online course
10 hours

Data Analysis Fundamentals Certificate

Data analytics
In a recent episode of the *Go beyond disruption* podcast, we interviewed data and decision scientist Elaine McVey to learn more about data and decision science, how data impacts business decision making and how to drive value from your data.

She also provided insights into how finance and business leaders can partner with data scientists.
What is ETL? What is BI?
What is big data & analytics?
What is data modeling? What is data ethics?
Topic D – Shape & structure of the finance function
(new topic)

E1 Managing finance in a digital world
Overview

• This section brings together the implications of the previous sections.

• It reveals **how the finance function is structured and shaped**.

• This structure and shape enables finance to perform its role in the organisation and with other **internal and external stakeholders**.

• In this sense it prepares candidates for the next section which looks at how finance interacts with key internal stakeholders in operations, marketing and human resources.
E1D: Shape and structure of the finance function

There are 2 lead learning outcomes for topic D.
• Describe the structure and shape of the finance function.
• Explain what each level of the finance function does.

Skill level required are:
• Remembering
• Understanding

Structure & outline
• Review where E1D sits in the overall structure and outline of E1.

2015 syllabus
• Review how E1D was covered in the 2015 syllabus
E1D: Shape and structure of the finance function: Explanatory notes

There are 2 lead learning outcomes for topic D.

- Describe the structure and shape of the finance function.
- Explain what each level of the finance function does.

Introduce candidates to the structure of the finance function and outline the broad areas of finance such as finance operations, external reporting, financial planning and analysis (FP&A), decision support etc.

Describe the evolving shape of the finance function from the triangle to the diamond shape.

Link the description to the impact of digital technology and automation on the finance function.

See more details
E1D: Shape and structure of the finance function: Explanatory notes

There are 2 lead learning outcomes for topic D.

- Describe the structure and shape of the finance function.
- Explain what each level of the finance function does.

The focus is the diamond shape and the four levels within this shape.

Explain what each level does, the relationship between the levels, and the link between the levels and the basic finance activities covered under the role of finance.

See more details
## E1D: Shape and structure of the finance function

<table>
<thead>
<tr>
<th>Lead outcome</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Describe the structure and shape of the finance function</td>
<td>Describe the:</td>
<td>➢ Understand the contemporary transformation of the finance function in the digital era from roles that generate information to roles that turn information into insight and how finance communicates that insight to decision makers.</td>
<td>➢ Structure of the finance function from the roles that generate information to the roles that turn information into insight and communicate insight to decision makers.</td>
<td></td>
</tr>
<tr>
<td>(See explanatory notes again)</td>
<td>a. Evolution of the shape of the finance function</td>
<td>➢ Understand the different historical organisational configurations and structural dimensions that organisations may adopt.</td>
<td>➢ Hierarchical shape of finance function</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Shape of the finance function in the digital era</td>
<td>➢ Understand the hierarchical shape of the finance function and how automation could shift the traditional structure to a diamond shape.</td>
<td>➢ Shared services and outsourcing of finance operations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Understand how reconfiguration, shared services, outsourcing, business process re-engineering, relocation, segregation of the finance function and supporting involvement of business partners impacts the finance function.</td>
<td>➢ Retained finance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>➢ Automation and diamond shape of finance function</td>
<td></td>
</tr>
</tbody>
</table>
E1D: Shape and structure of the finance function

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<tr>
<td>2. Explain what each level of the finance function does</td>
<td>a. Finance operations</td>
<td>➢ Understand the components of the finance function (financial reporting, management accounting, treasury and internal audit) and how they provide insight to decision makers</td>
<td>➢ Finance operations to generate information and preliminary insight</td>
<td></td>
</tr>
<tr>
<td>(See explanatory notes again)</td>
<td>b. Specialist areas including financial reporting and financial planning and analysis (FP&amp;A)</td>
<td>➢ Understand how the finance function works with FP&amp;A, taxation, project management and project appraisal to provide insight to decision makers.</td>
<td>➢ FP&amp;A, Taxation, Corporate reporting, decision support to produce insight</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Strategic partnering for value</td>
<td>➢ Understand strategic partnering for value and how business partnering can influence an organisation to make appropriate decisions</td>
<td>➢ Business partnering to influence organisation to make appropriate decisions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Strategic leadership of the finance team</td>
<td>➢ Understand the importance of strategic leadership of the finance functions and the link to having a team with the appropriate knowledge, skills and experience.</td>
<td>➢ Leading the finance team to create the required impact for the organisation</td>
<td></td>
</tr>
</tbody>
</table>
Syllabus in the context of the structure and shape of the finance function

Beyond the scope of the syllabus
To be covered by CPD

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Strategic Level

Strategic Partnership through interaction with internal and external stakeholders to influence and shape how the organisation creates and preserves value

Management Level

Technical specialists generate insights about value creation and preservation in their respective areas

Operational Level

Managing processes and applying accounting rules to assemble and extract data to provide information and insight

---

Strategic Leadership of the finance team to achieve desired impact
Resource list

Topic D – Shape & structure of the finance function (new topic)
The shape of finance

Future of Finance part 3: Changing shape of the finance

Future of Finance research – Emerging Themes

The changing shape of finance

Peter Simons FCMA, CGMA
Associate Technical Director - Research and Development (Management Accounting)

Dr Martin Farrar
Associate Technical Director – Research and Development (Management Accounting)

Beyond balance sheets: Top three trends transforming the CFO role in 2020

Photo by Sarah Anne Wish
Leadership skills

Motivation expert, author, and speaker Sophie Bennett describes the ways leadership skills need to change in today’s technology-enabled workplace.
Business partnering

Key competencies for finance business partnering
These essential competencies can help prevent poor operational decisions.

By Raju Venkataraman, FCMA, CGMA
1 February 2020
Strategy and Innovation, Future of Finance

Building a better business, together
Welcome to finance business partnering

Take the next step in business partnering
Become a strategic partner by building relationships and learning to speak a language other than Finance.

By Anders Liu-Lindsberg
3 February 2020
Strategy and Innovation, Future of Finance
Topic E: Finance interacting with the organisation

E1 Managing finance in a digital world
What changed in E1E?

2015 syllabus
E1: Organisational Management

A. Introduction to organisations
B. Managing the finance function
C. Managing technology and information
D. Operations management
E. Marketing
F. Managing human resources

2019 syllabus
E1: Managing Finance in a Digital World

A. Role of the finance function
B. Technology in a digital world
C. Data and information in a digital world
D. Shape and structure of the finance function
E. Finance interacting with the organisation

Structure & outline within E1
Overview

• The finance function is not the only area of activity in organisations.
• **Finance joins with others** to create and preserve value for their organisations.

• This section brings together what has been learned in the previous section to describe how **finance can interact with other parts of the organisation** to achieve the objectives of finance, those other areas and crucially the objectives of the whole organisation.

• The aim is to show how finance can **work collaboratively** in a connected (and joined-up) organisation and not in isolation.
E1E: Finance interacting with the organisation

There are 4 lead learning outcomes for topic E.

- Describe how the finance function interacts with operations.
- Describe how the finance function interacts with sales & marketing.
- Describe how the finance function interacts with human resources.
- Describe how the finance function interacts with IT.

Skill level required are:

- Remembering
- Understanding

In the 2015 syllabus, these comprises of 4 major topics.
There are 4 lead learning outcomes for topic E.

• Describe how the finance function interacts with operations.
• Describe how the finance function interacts with sales & marketing.
• Describe how the finance function interacts with human resources.
• Describe how the finance function interacts with IT.

Describe how finance plays its role by interacting with the rest of the organisation.

Bring together the issues raised in the previous sections and link them to what the other areas of the organisations do.

For example address how finance and marketing interact using data and collaborative technology to achieve organisational goals and the individual functional goals of both finance and marketing.

Describe how the use of KPIs influence these interactions and how the KPIs of finance and these areas can be aligned to ensure they work together effectively.
E1E: Finance interacting with the organisation

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<tbody>
<tr>
<td>1. Describe how the finance function interacts with operations.</td>
<td>Describe:</td>
<td>➢ Understand the main role of operations in the design of products/services and processes and how this relates to operations, supply and the finance function.</td>
<td>• Process management</td>
<td></td>
</tr>
<tr>
<td>(See explanatory notes again)</td>
<td>a. Main role of operations</td>
<td>➢ Understand the contribution of operations management to the efficient production and delivery of customer specific goods and services.</td>
<td>• Product and service management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Areas of interface with finance</td>
<td>➢ Understand how the relationships within the supply chain can be managed including lean synchronisation, contractual/relational approaches, material requirement planning, quality planning and control, statistical process control, operational improvement, total quality management (TQM), Kaizen, Six Sigma, lean thinking and reverse logistics.</td>
<td>• Supply chain management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Key performance indicators</td>
<td>➢ Understand how the finance function helps manage operations through the use of key performance indicators</td>
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</tr>
</tbody>
</table>
## E1E: Finance interacting with the organisation

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<tr>
<td>2. Describe how the finance function interacts with sales &amp; marketing.</td>
<td>Describe:</td>
<td>➢ Understand the marketing mix (The 7 Ps) and marketing environment including societal, economic, technological, political and legal factors affecting marketing (PESTEL).</td>
<td>• Market segmentation</td>
</tr>
<tr>
<td></td>
<td>a. Main role of sales &amp; marketing</td>
<td>➢ Understand the main techniques of sales and marketing including market research, market segmentation, market targeting and positioning of products, market data gathering techniques and methods of analysis.</td>
<td>• Big data analytics in marketing</td>
</tr>
<tr>
<td></td>
<td>b. Areas of interface with finance</td>
<td>➢ Understand how the finance function interacts with sales and marketing including product development, product/service life cycles and costing.</td>
<td>• Channel management</td>
</tr>
<tr>
<td></td>
<td>c. Key performance indicators</td>
<td>➢ Understand the role of Big Data analytics and its use in the marketing process including predicting customer demand, improving the customer experience, monitoring multi-channel transactions and identifying customer preferences.</td>
<td>• Sales forecasting and management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➢ Understand how the finance function helps manage the supply chain through the use of key performance indicators.</td>
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### E1E: Finance interacting with the organisation

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</table>
| 3. Describe how the finance function interacts with human resources. | Describe: a. Main role of human resources | ➢ Understand the HR activities associated with developing employees including recruitment, selection of staff, staff development and training, performance management, the role of incentives and practices related to motivation and reward systems. | • Staff acquisition  
• Staff development  
• Performance management  
• Motivation and reward systems |
| | a. Areas of interface with finance | ➢ Understand how the finance function interacts with human resources through the use of key performance indicators. | |
| | b. Key performance indicators | From exam blueprint | |
# E1E: Finance interacting with the organisation

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<tr>
<td>4. Describe how the finance function interacts with IT.</td>
<td>Describe:</td>
<td>➢ Understand the role of information systems in organisations and how IT enables knowledge management between finance, operations, sales and marketing and human resources.</td>
<td>• IT infrastructure</td>
</tr>
<tr>
<td></td>
<td>a. Main role of IT</td>
<td>➢ Understand the ways of organising and managing information systems in the context of the wider organisation including enabling transformation, the emergence of new technology, geographically dispersed teams, enhancing internal and external relationships and ethical and social issues with information systems and data.</td>
<td>• IT systems support</td>
</tr>
<tr>
<td></td>
<td>b. Areas of interface with finance</td>
<td>➢ Understand the costs and benefits of information systems including privacy and security, systems architecture, data flows and big data information management.</td>
<td>• Costs and benefits of IT systems</td>
</tr>
<tr>
<td></td>
<td>c. Key performance indicators</td>
<td>➢ Understand how the finance function interacts with IT and the use of key performance indicators.</td>
<td></td>
</tr>
</tbody>
</table>
Resource list

Topic E: Finance interacting with the organisation
The future of supply chain

Rooting out forced labour from supply chains

CFOs and finance departments have a significant role to play in preventing and detecting slavery in the supply chain.

By Malia Politzer
1 April 2020

Performance management, Supply chain, Global economy and markets
Supply chain disruption due to the COVID-19 pandemic

Finance’s crisis role in managing supply chain risk

By Oliver Rowe
18 March 2020

Global economy and markets, Performance management, Supply chain, COVID-19, Risk Mitigation, Finance and treasury
Global effect on supply chain during a pandemic

How world’s largest glove maker meets coronavirus demand

The finance head of Malaysia’s Top Glove shares efforts behind the scenes in the company’s production ramp-up.

By Alexis See Tho
17 March 2020

Global economy and markets, Governance and risk, COVID-19

Supply chain tips amid the coronavirus outbreak

Companies should assess and diversify their sourcing for materials and products.

By Sarah Ovaska
11 March 2020

Global economy and markets, Performance management, Supply chain, COVID-19
Importance of supply chain during a pandemic
Case study: Jaguar Land Rover (JLR)

Arthur Yu, FCMA, CGMA, the China CFO of carmaker Jaguar Land Rover (JLR) had to face the following:

- “We started looking into contingency planning — how can we work remotely to keep the critical processes going?”
- “How can we keep the factory going?
- How can we keep the supply chain under control so that our suppliers can still supply parts to our China and UK factory?”
Scenario planning and the COVID-19 crisis

In this time of incredible uncertainty, here are tips on how scenario planning can provide key insights.

By John “Jack” Alexander, CPA
7 April 2020

COVID-19, Risk Mitigation, Performance management

• Scenario analysis provides a structured way to identify a range of potential outcomes and estimated impacts and then identify and evaluate potential actions.
How finance works with other departments in an organisation

What I learned being the CFO of a tech startup
A first-time finance leader shares on-the-job lessons from getting a fledgling company off the ground.
By Kunwar Chadha, FCMA, CGMA
1 December 2019
People and leadership skills, Finance and treasury, Technology and analytics

Kunwar Chadha, FCMA, CGMA, had to learn some critical lessons on the job as a first-time CFO with a fast-growing technology startup.

Boosting the strategic value of your data
Finance departments need to think through their use of data for maximum impact.
By Andrea Chipman
14 May 2019
Strategy and innovation, Technology and analytics
IT roles and IT infrastructure for finance

15 Must-Have Skills For Any Successful CIO Candidate

POST WRITTEN BY
Expert Panel, Forbes Technology Council
Successful CIOs, CTOs & executives from Forbes Technology Council offer firsthand insights on tech & business.

What Is a Financial Management System?

Designed for creating, connecting, storing, and reporting many different types of finance transactions, a financial management system ultimately has one core purpose: counting money.

Quite simply, without some kind of accounting software, an organization would not survive. At the most basic level, every organization needs systems to manage the flow of money in and out of the business. But a truly effective financial management system can do more: optimize profitability, measure cash flow, determine tax obligations, ensure compliance, and maintain long-term enterprise sustainability.
Quiz: What core competencies does automation require?

By Kate O’Flaherty
24 January 2019

Future of finance, Technology and analytics

Automation is increasingly augmenting finance professionals' capabilities. Take this quiz to find out how much you know about the mindsets and competencies technological automation requires from finance professionals. Answers are based on information in the CGMA report Changing Competencies and Mindsets.
Additional resources
Find a job!

Global Career Hub

Over 19,000 jobs for finance professionals worldwide

More than 3% of those jobs are for fresh graduates
Business games for the classroom

Your students can play our online game and get a Certificate of Participation when they pass the game.

- **UK students**
- **Ukraine students**
- **France students**
- **Central & Eastern Europe students**

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(submission deadline: August 31st, 2020)

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Are you eligible for an award? To find out, take the 5 minutes self-assessment.

To apply for an award, fill out the online application. You do not need to submit any evidence.

To recommend a university academic for an award, fill out this form.
CGMA case study author opportunity

• We are offering a unique opportunity for faculty to review and update former CGMA exam case studies.

• Once updated, the case may be submitted for publication under the new authors’ name.

• Requirement:
  • You must revise and update a significant portion of the case study
  • You must also create teaching notes both for this program and to be eligible for publication submission to a journal of your choice
Summary of resources in each section
Resources for E1A - Role of the finance function (just click on the picture to go to that slide)
Resources for E1B – Technology in a digital world
(just click on the picture to go to that slide)
Resources for E1B – Technology in a digital world (continue) (just click on the picture to go to that slide)
Resources for E1C – Data & information in a digital world (just click on the picture to go to that slide)

Data analytics is essential for finance professionals

- One way finance leaders can improve their impact on data analytics is expanding their knowledge in the area
- In a poll of 103 senior finance and technology managers, 56% said data analytics will be essential in the next ten years, but 49% said skills gaps are a barrier to advanced analytics

A case study of a state-owned enterprise in China

- In recent years, the Chinese domestic petroleum market has been challenging with oversupply, resulting in decreasing industry profits. Oil companies have been facing fierce competition and unprecedented operational pressures. As a result, companies are striving to increase operating profits and add enterprise value.
- The idea behind the HECU project is to implement use of BI, for internal management reporting in structure and standardize heterogeneous data within integration, and also big data to research business data trends for the digital age

Discounted certification courses for academics

- Online course
  - 10 hours

A podcast about the value of data science

- In a recent episode of the "Big Data" podcast, we discussed the impact of data science on business. The podcast features conversations with experts in various fields, highlighting how data science can drive innovation and improve decision-making.
- The episode also provides insights on how to blend finance and business analytics, and partner with data scientists.
Resources for E1D – Shape & structure of the finance function (just click on the picture to go to that slide)
Resources for E1E – Finance interacting with the organization (just click on the picture to go to that slide)
Contact:

Academic.Partners@aicpa-cima.com
Karen.Phang@aicpa-cima.com
Thank you