paradigm shift.

Strategic Business Management 2025 – New Content Added for 2025 Workbook

Please note that some chapters do not have any new content for 2025 so the omission of certain chapters in our review below is not an error.

This document is not intended to cover all points in the relevant sections: instead, we just want to give you an overview of the main points.

If you have also purchased access to our Advanced Level subscription package, don't forget to make use of the online quick-fire questions on these 2025 syllabus updates which are provided as part of our Strategic Business Management course: the quick-fire questions will get you working with the following content in an active way, which is always the best way to learn!

Chapter 1 Strategic analysis

7.1 ABCD+ technologies

- Organisations are currently in a technology revolution and must adapt to changes to fulfil customer needs and maintain competitiveness
- ABCD+ technologies consist of Artificial Intelligence (AI) and Automation, Blockchain, Cloud computing and Cybersecurity, and Data and Digital transformation
- Artificial Intelligence (AI) involves using advanced computer systems to perform tasks requiring human intelligence such as learning from data, reasoning, problem-solving, sensory understanding, language processing, and pattern recognition
- Blockchain is a decentralised and immutable distributed ledger technology that enhances security and transparency, supporting applications like cryptocurrencies, supply chain oversight, and digital identity
- Cloud computing enables on-demand internet access to remote computing resources managed by cloud service providers, which involves risks explored in other chapters
- Cybersecurity includes tools, policies, and practices to protect organisations from cyber-attacks
- Data and digital transformation technologies analyse data with software and machine learning to support decisions and improve performance

7.2 Big data

• Big data refers to datasets that exceed the capacity of typical database software to capture, store, manage, and analyse

7.4 Digital assets

• Digital assets are electronic content that provides value to organisations, such as digital media, documents, websites, blockchain, cryptocurrencies, and big data

7.5 Distributed ledger technology

- Distributed ledger technology (DLT) is a decentralised database system where transactions are recorded across multiple locations without a central authority, supporting transparency and reducing the need for audits
- Blockchain is a type of DLT, categorised as public (accessible to anyone) or private (restricted to authorised parties)

7.5.1 Blockchain

- Public blockchains are accessible to anyone with an internet connection
- They allow anyone to join, read or write information on the platform
- Cryptocurrencies such as Bitcoin and Ethereum operate on public blockchains
- Private blockchains, also known as permissioned blockchains, are distributed ledgers only
 accessible to authorised parties whose identities are verified by the controlling organisation or
 company

7.5.2 Cryptocurrency

- Cryptocurrencies are digital assets that function as mediums of exchange and stores of value, and operate on decentralised networks using blockchain
- They are not considered cash or financial instruments under IFRS but may be accounted for as intangible assets or inventory
- Cryptocurrencies are created using methods like proof of stake, which is energy-efficient, or pre-mining, where coins are generated before launch
- They can be purchased from brokers or crypto exchanges

7.7 Sustainability

- Sustainability involves an environmental and social focus, aiming to improve lives and the planet in the long term
- Environmental, Social, and Governance (ESG) factors assess sustainability issues' impact on business value, increasingly important to investors

8.3.2 Sustainability solutions based on market forces

- Chartered Accountants play a role in compliance with sustainability regulations and reporting
- Sustainability challenges are addressed through risk management, strategy, financing, supply chain management, governance, and other activities

Chapter 2 Strategic choice

6.3.1 Robotic process automation

- Robotic process automation (RPA) replicates business processes and runs alongside existing applications, using "if this, then that" instructions
- It is best suited to repetitive and frequent tasks, while manual handling may be more efficient for infrequent or less standardised processes
- Automation requires a cost-benefit analysis due to potential high costs and lengthy implementation periods
- Tools like Microsoft's Power Automate enable finance staff to automate tasks independently of IT, improving efficiency and productivity

6.3.2 Artificial intelligence and machine learning

- Artificial intelligence (AI) involves using advanced systems to perform tasks traditionally requiring human intelligence, such as problem-solving, pattern recognition, and decisionmaking
- Al helps organisations identify patterns and make decisions, and developing an Al strategy is essential to remain competitive
- Machine learning, a subset of AI, allows systems to learn from data independently of explicit programming, using supervised (labelled data) or unsupervised (pattern identification) methods
- Generative AI creates new content, such as text, images, or audio, based on training data patterns, with uses for accountants including report drafting and coding
- Risks of generative AI include bias, inconsistency, inaccuracy, outdated data, fraudulent applications (e.g. deepfakes), data privacy breaches, and intellectual property issues
- A chatbot is an AI-based application designed to simulate conversation with users using natural language processing

6.6 Cloud computing

• Cloud computing provides on-demand internet access to resources like applications, servers, data storage, and tools, hosted remotely and managed by a cloud services provider

Chapter 3 Strategic implementation

3.6.3 Transition Plan Taskforce Implementation Guidance

- The Transition Plan Taskforce (TPT) was established in April 2022 to support organisations in creating credible transition plans for achieving net-zero as part of their strategy
- Transition plans help secure financing required to meet net-zero goals
- In November 2022, the TPT published its draft Implementation Guidance for consultation, with its mandate expected to run until the second half of 2024

Chapter 1 – Preparing a credible transition plan

- Starts with baselining the entity's current position, including assessment of climaterelated risks and opportunities using the TCFD approach, evaluating decarbonisation levers, analysing interdependencies, and emissions footprinting
- Key planning stages include:
 - Setting ambition through clear objectives, supplemented by targets and milestones, and defining GHG reduction targets
 - Developing an action plan with roadmaps, change management programmes, financial planning, and stakeholder engagement
 - Ensuring accountability through monitoring, reporting, assurance processes, defining roles and responsibilities, and capacity-building

Chapter 2 – How to disclose your transition plan

- Disclosure should align with TPT's three guiding principles of ambition, action, and accountability, structured around five key elements (objectives, strategy, engagement, metrics, and governance)
- Transition plans should be disclosed alongside existing reports like annual reports and updated at least every three years
- Assurance options include ISAE 3000 (Revised), ISAE 3410, and proposed ISSA 5000 for sustainability assurance

Chapter 3 – How transition plans are used

- Effective transition plans should address the needs of various stakeholders, including:
 - Management and boards for internal communication and transition objectives
 - Investors for aligning interests and making investment decisions
 - Governments and regulators for evaluating net-zero progress
 - Consumers for assessing climate ambition progress

4.18.1 The importance of cybersecurity

• Cybersecurity refers to tools, policies, training, and technologies aimed at protecting an organisation's and user's assets from cyber-attacks

4.18.2 Cybersecurity and supplier selection

- Cybersecurity assurance across supply chains is vital, starting from supplier onboarding to the end of the contract
- Key questions for assessing a supplier's cybersecurity include:
 - Existence of a formal vulnerability management policy
 - Performance of periodic external and internal security tests
 - Secure transmission of sensitive information
 - Approach to applying operating system and security updates

Chapter 4 Strategic performance management

2.7 Data analytics

• Data analytics is the process of collecting, organising, and analysing large datasets to identify patterns and insights for future business decisions

5.1 Measures of ESG performance

• Examples of performance indicators used to measure ESG factors:

Environmental – taking actions to protect the environment (Planet)

- Greenhouse Gas emissions (Scope 1, 2, and 3 measured in metric tonnes of CO2 equivalent)
- Land use and ecological sensitivity (number and area of sites in or adjacent to protected or biodiversity areas in hectares)
- Water consumption and withdrawal in water-stressed areas (mega litres withdrawn and consumed)
- Single-use plastic (metric tonnes consumed across the full value chain)

Social – building and maintaining relationships with stakeholders (People and Prosperity)

- Absolute number and rate of employment (total hires, rate of new hires, and employee turnover)
- Innovation in better products and services (% of revenue from socially or sustainably beneficial products and services)
- Diversity and inclusion (percentage of employees by age group, gender, ethnicity, and other diversity indicators)
- Freedom of association and collective bargaining (% of workforce covered by collective bargaining agreements)
- Pay equality (remuneration ratios for women:men, minority:majority groups, and other equality areas)
- Health and safety (number and rate of work-related fatalities and injuries)

Governance – ensuring leadership is transparent and accountable (Stewardship of the organisation)

- Governing body composition (percentage of directors by gender, age, and minority group)
- Number of different disciplines (e.g., finance, engineering) represented on the board of directors
- Anti-corruption (number of corruption incidences)
- Directors' remuneration (performance criteria and remuneration policies)

Chapter 5 Strategic marketing and brand management

5.2.2 Artificial Intelligence and marketing

- Al technology analyses large datasets to identify patterns, predict consumer behaviour, and personalise content to improve marketing strategies and campaigns
- Machine learning algorithms are used to process customer data, identify behavioural patterns, and make predictions
- Companies leverage this information for personalised interactions through targeted advertisements, product recommendations, and personalised messaging
- Personalisation strengthens customer loyalty and helps businesses gain market share
- According to McKinsey (2024), 65% of organisations report using generative AI in at least one business function, a significant increase from one-third in 2023
- The greatest increase in generative AI adoption is observed in marketing and sales, where usage has more than doubled since 2023

Chapter 6 Corporate governance

1.7 Governance and sustainability

• Directors are responsible for ensuring compliance with mandatory climate-related reporting requirements, including the Task Force on Climate-related Financial Disclosures (TCFD) and the UK Transition Plan Taskforce (TPT) Implementation Guidance for net zero

3.1 Role of board

- The UK Corporate Governance Code identifies the role of the board to:
 - Provide leadership, generate value, allocate resources, and achieve objectives (Principle A)
 - Align strategy, integrity, and culture (Principle B)
 - Report achievements transparently regarding governance (Principle C)
 - Promote engagement with stakeholders, shareholders, and employees (Principles D and E)

3.6.2 Audit committee

- The 2024 update to the UK Corporate Governance Code introduced a separate document published by the FRC in May 2023 titled *Audit Committees and the External Audit: Minimum Standard*
- Key parts of the minimum standard include:
 - Audit committees must secure external audit resources through fair and competitive tendering to ensure an effective and skilled service
 - Committees should be open to challenges from auditors regarding financial reporting to maintain objectivity and independence
 - Non-audit services provided by the external auditor must be monitored, and recommendations should be escalated to the board
 - Committees should assess the effectiveness of external audits by considering audit quality risks, audit plan execution, amendments, and feedback from stakeholders such as the finance director and head of internal audit
 - Annual reports must include the audit committee's work on:
 - Addressing significant financial reporting issues
 - Requests from shareholders for matters to be included in the audit plan and reasons for denials
 - Auditor independence and effectiveness, tenure, and plans for retendering
 - Disagreements over the external auditor's tenure between the board and audit committee

- The January 2024 revision to the UK Corporate Governance Code updated Provision 29, requiring disclosures on the effectiveness of risk management and internal control frameworks, including:
 - Assessment processes, declarations on material controls, and plans to address ineffective controls

5.1.7 Money laundering

- The Economic Crime Plan 2 (2023-26) outlines six key initiatives to combat money laundering and economic crime:
 - Deployment of 475 new financial crime investigators focused on money laundering and asset recovery
 - Introduction of a new public-private prioritisation approach to optimise resources in preventing, detecting, and disrupting economic crime
 - Application of advanced technology, including data analysis, to support law enforcement intelligence
 - Establishment of a Crypto Cell that pools expertise and tools across law enforcement and regulators to combat cryptoasset misuse
 - Reform of the UK's supervisory regime, alongside increased information-sharing to target criminal activities
 - Expansion of the Combatting Kleptocracy Cell within the NCA to target corrupt elites, their finances, and their enablers

Chapter 8 Data analysis

6.3.1 Challenges associated with ESG information

- The International Federation of Accountants (IFAC) highlights the critical role of accountancy professionals in delivering high-quality sustainability-related reporting and assurance services
- According to the IFAC report Equipping Professional Accountants for Sustainability (2024), professional accountants need to be systems-thinkers, recognising the interconnectivity of finance and sustainability
- Sustainability should not be considered in isolation, and accountants must evaluate its impacts on business models, value chains, strategies, governance, risks, and opportunities at all stages of their development

7.1 Data analytics

• Data analytics involves collecting, organising, and analysing large datasets to identify patterns and insights for future business decisions

7.3 Big data and analytics

- Big Data refers to datasets that are too large for typical database software to effectively capture, store, manage, and analyse
- McKinsey defines Big Data as the next frontier for innovation, competition, and productivity

Chapter 9 Information strategy

1.8.2 M-commerce

- M-commerce refers to commercial transactions conducted on mobile devices like smartphones
 or tablets
- Three main areas of m-commerce include:
 - Browser/web-based platforms such as online stores (Tesco, Marks and Spencer) and marketplaces (Amazon, eBay)
 - Mobile apps that serve marketplaces (Vinted), shopping (ASOS), banking (Barclays), payments (PayPal), and customer loyalty (Starbucks), allowing personal data storage for quick transactions
 - In-person payments using mobile phones, for example, mobile wallets (Google Pay, Apple Pay) and QR code payments
- Some businesses, like digital banks, rely on m-commerce as their sole channel for customer interaction

1.10 IT and competitive advantage

- IT innovations can create temporary competitive advantages, as seen with self-service airport check-in kiosks
- Rapid technological change erodes competitive advantages, with self-service check-ins replaced by online and mobile app check-ins

1.10.1 Artificial intelligence

• To stay competitive, businesses must develop effective AI strategies, particularly generative AI, which offers significant efficiency gains

6.1 Cybersecurity controls

- The National Cyber Security Centre (NCSC) re-issued its "Ten Steps to Cybersecurity" guidance in 2022 to address evolving risks like increased cloud service use, home working, and ransomware threats
- ICAEW's Cyber Security Resource Centre promotes adopting the Cyber Essentials certification to manage cyber risks
- Key cybersecurity control measures include:
 - Secure use of removable disks and drives by limiting their use to business-owned devices and implementing anti-malware scanning software
 - Address security risks for cloud-based files by educating employees on setting appropriate file access permissions and protecting sensitive information from hackers

Chapter 10 Human resource management

2.5 HR and the knowledge economy

- Technological changes are driving the need for organisations to update workforce skills
- The OECD predicted in 2019 that automation technologies could eliminate 14% of global jobs and transform another 32% within 20 years
- Generative AI is accelerating job displacement, particularly in knowledge-based work such as research, coding, and writing, as AI increasingly surpasses human performance in these areas
- Millions of workers will require upskilling or complete re-training to adapt to job losses caused by technological advancements
- Organisations must support employees through this transition by offering learning and development opportunities, as well as aligning upskilling efforts with specific, suitable job roles

Chapter 11 Finance awareness

- 5.9.5 Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS)
 - The EU has introduced the CSRD to provide a reporting methodology for climate and sustainability information, effective since December 2023
 - Reporting under the CSRD requires use of ESRS, with the largest EU companies reporting from 2025 and phased adoption for other entities from 2026
 - Non-EU companies meeting specific trading thresholds in the EU will also need to comply
 - External assurance will be required, transitioning from limited assurance in October 2025 to reasonable assurance by 1 October 2028
 - Suitable assurance standards, such as IAASB's ISSA 5000, are expected to support these requirements
 - ESRS categories include:
 - 2 cross-cutting general disclosure standards (ESRS 1 and 2) covering general requirements and disclosures
 - 5 environment standards (ESRS E1-E5) covering climate, pollution, water and marine resources, biodiversity and ecosystems, and resource use and circular economy
 - 4 social standards (ESRS S1-S4) covering workforce, value chain workers, affected communities, and consumers/end users
 - 1 governance standard (ESRS G1) addressing business conduct
 - The CSRD differs from the IFRS Sustainability Disclosure Standards (IFRS S1 and S2) by incorporating double materiality, requiring consideration of both the entity's impacts on and dependencies on people and the environment
 - The CSRD targets a broader audience beyond traditional financial statement users, while aiming to align and make disclosures broadly complementary to IFRS standards
 - ESRS disclosures will follow this general format:
 - Governance
 - Strategy
 - Impact, risk, and opportunity management
 - Metrics and targets

5.10.4 International Standard on Sustainability Assurance 5000 General Requirements for Sustainability Assurance Engagements

- The IAASB issued an exposure draft of ISSA 5000 in August 2023 to provide dedicated guidance for assurance engagements on sustainability disclosures
- Prior to ISSA 5000, assurance was conducted under standards like ISAE (UK) 3000 and ISAE 3410, which were not tailored for sustainability reporting

- ISSA 5000 is designed to support various frameworks (e.g., TCFD, ISSB, CSRD) and allow both accountants and other practitioners to provide limited and reasonable assurance on sustainability disclosures
- The standard reflects double materiality by addressing both the impacts and dependencies of an entity's sustainability practices
- ISSA 5000 will provide explicit guidance on quality management, ethics, evidence gathering, expert use, and reporting, enhancing the credibility of sustainability disclosures through tailored assurance standards

Chapter 14 Financial structure and financial reconstruction

1.8 Developing technologies and the financing decision

- Emerging technologies are reshaping the business landscape, creating access to new financing platforms
- Key areas covered include:
 - Fintech
 - Crowdfunding
 - Initial coin offerings (ICO)
 - Peer-to-peer lending (P2P)
 - Revenue-based finance (RBF)
 - Use of Artificial Intelligence (AI) in financing decisions

1.8.1 Financial Technology (FinTech)

- FinTech is revolutionising global financial services and altering commerce and user expectations
- Examples of FinTech include:
 - Crowdfunding and peer-to-peer lending
 - Crypto apps for cryptocurrency transactions
 - Digital wallets such as Apple Pay
 - Algorithm-driven financial advice at lower costs than traditional advisors
 - Digital-only banks without legacy systems

1.8.2 Crowdfunding

- Online crowdfunding platforms provide access to equity finance by pitching to many investors
- A successful pitch includes an engaging business plan, evidence of skills/experience of the management team and often a video summary
- Linked to the growth of internet technologies allowing access to millions of potential investors

Advantages:

- Provides finance to startups typically underserved by traditional sources due to lack of history
- Engages large numbers of investors, building brand awareness
- Quick process, e.g., 30 days to raise funds

Costs:

- Requires fees to crowdfunding platforms, legal and advisory costs and time spent addressing investor queries
- Example: Kickstarter supports creative projects, allowing creators to set funding goals and attract pledges
- Some platforms offer equity and debt options (peer-to-peer lending)

1.8.3 Initial Coin Offering (ICO)

- Similar to IPOs but uses cryptocurrency, typically to raise finance for early-stage projects
- Investors receive tokens granting rights or utility access; payment is made in cryptocurrencies like bitcoin
- Regulators increasingly view ICOs as securities subject to regulations such as full prospectuses, limiting their simplicity and use

Risks:

- Unregulated, making fraud easier (e.g., 78% of 1,500 ICOs in a 2018 study were scams)
- Highly volatile prices influenced by market conditions and hype
- Projects often at early experimental stages, posing significant risks of total investment loss

1.8.4 Peer-to-peer lending

- Debt finance connecting businesses with investors via online platforms
- Usually requires an established trading history with financial accounts and credit checks submitted
- Allows customers and investors to share returns by lending small portions or large loans directly

Advantages:

- Lower interest rates and origination fees due to competition
- Faster processing as procedures are streamlined and can occur outside bank hours
- Accessible financing for borrowers with low credit ratings

1.8.5 Revenue-based finance

- Used for businesses with recurring income streams, offering capital in exchange for a share of future revenues usually repaid over 1-5 years
- Payments based directly on performance, avoiding fixed repayments or personal guarantees
- Repayment caps ensure agreed returns for lenders without ownership dilution

Advantages:

- Aligns lender and borrower success, adjusts with revenue fluctuations
- Less burdensome for variable revenue businesses compared to traditional finance
- Often quick to arrange and suited for startups and subscription-based businesses

Considerations:

- Revenue volatility risk remains
- Can be more expensive than traditional loans due to variable repayments

1.8.6 The use of Artificial Intelligence (AI) in the financing decision

- Risk assessment and credit scoring
 - Al analyses data (e.g., credit scores, financial history) accurately and impartially to assess risk
- Loan approval and automation
 - Processes like verifying documentation and credit histories are streamlined to cut costs and timescales
- Matching lenders and borrowers
 - Al matches borrowers quickly with suitable lenders by analysing data such as credit history
- Fraud protection
 - Detects suspicious activities and flags inconsistencies for further investigation
- Real-time financial analysis
 - Enables fast financing approvals, risk management and cost reduction using immediate data
- Predictions and forecasting
 - Identifies future trends to inform strategic financial decisions and maintain competitiveness

Chapter 19 Ethics

4.3 Ethics, data and artificial intelligence (Al)

- Generative AI extends AI by using data and machine learning to create human-like content (e.g., text, audio, video)
- Tools such as ChatGPT, Copilot, and Bard are widely used across industries
- Ethical concerns arise, e.g., deepfakes, which misuse Generative AI for malicious purposes
- ICAEW guidance applies five ethical principles to Generative AI:
 - Integrity honesty about usage and scrutiny of information sources for accuracy
 - Objectivity recognising potential biases in Al-generated content and avoiding automation bias
 - Professional competence and due care content may lack current knowledge and creativity, requiring professional scepticism
 - Confidentiality protecting sensitive or personal data used by Generative AI
 - Professional behaviour compliance with legislation, including intellectual property and data protection, and avoiding reliance on potentially flawed AI outputs
- Definition: Hallucination refers to incorrect/misleading content created by AI due to inaccurate knowledge or biases
- ICAEW guidance will evolve alongside AI developments, with updates such as IESBA Code amendments addressing technology use in non-audit work
- Accountants must be cautious about assuming management responsibility when recommending AI solutions

Context example: UNESCO Recommendations on the Ethics of Artificial Intelligence

- UNESCO aims to foster peace, eradicate poverty, promote sustainable development and intercultural dialogue
- In 2021, UNESCO published recommendations for ethical AI usage signed by all 193 UN Member States

Core values of UNESCO recommendations:

- Human rights and human dignity
- Living in peaceful, just and interconnected societies
- Diversity and inclusiveness
- Environmental and ecosystem flourishing

Ten core principles for ethical AI:

- Proportionality and do no harm limit AI use to necessary areas
- Safety and security address risks and vulnerabilities from AI

- Privacy and data protection implement strong frameworks
- Multi-stakeholder governance ensure diverse and legal data sources
- Responsibility and accountability ensure accountability for AI actions
- Transparency and explainability balance understanding and necessary safeguards
- Human oversight maintain human control over AI systems
- Sustainability assess AI's impact on sustainability and UN goals
- Awareness and literacy educate and engage the public about AI
- Fairness and non-discrimination ensure AI benefits all without discrimination
- UNESCO addresses challenges from Al's rapid evolution and promotes policies for responsible Al development
- Recommendations include readiness assessments and consideration of ethical impacts

Examples of ethical dilemmas with AI:

- Gender bias perpetuating stereotypes when using biased or incomplete data (e.g., male-dominated shortlists for leadership roles)
- Al in the legal system risk of bias or lack of transparency in Al-augmented court judgements
- Al-created art raises questions about ownership and potential threats to the creative industry
- Autonomous vehicles ethical dilemmas in unavoidable accident scenarios, such as decisions about whom to harm
- UNESCO emphasises awareness and fostering solutions to address ethical dilemmas as Al continues to evolve

Glossary

Acute physical risks: arise from weather-related events like storms, floods, droughts or heatwaves, increasing in severity and frequency

Artificial Intelligence (AI): advanced computer systems performing tasks requiring human intelligence, including learning, reasoning, sensory understanding, language processing and pattern recognition, often involving machine learning

Big data: datasets too large for traditional database software to capture, store, manage and analyse

Blockchain: a type of distributed ledger technology recording data in a decentralised and tamper-proof manner, supporting applications like cryptocurrencies, supply chains, digital identity and secure voting

Chatbot: a software application simulating conversation with users using natural language processing

Chronic physical risks: arise from long-term climatic shifts, such as sea-level rise, reduced water availability, biodiversity loss and changes in soil productivity

Cloud computing: on-demand access to computing resources via the internet, such as servers, data storage and applications, hosted by cloud service providers

Cognitive bias: the influence of individual background, experiences and beliefs on how information is interpreted and understood

Cryptocurrency: decentralised digital assets functioning as mediums of exchange and stores of value, using blockchain technology, and often accounted for as intangible assets or inventory under IFRS

Cybersecurity: tools, policies and frameworks that protect organisational and user assets against cyberattacks

Data analytics: collection, organisation and analysis of data to discover patterns and insights for business decision making

Digital assets: electronically stored content providing organisational value, including videos, documents, websites, blockchains and cryptocurrencies

Distributed ledger technology: decentralised database systems recording and validating transactions across multiple sites without a central authority, enhancing transparency

Generative AI: AI designed to create new content like text, images, audio or video by mimicking patterns in training datasets

Hallucination: incorrect or misleading Al-generated content due to inaccurate knowledge, biases or flawed assumptions

Machine learning: computer systems learning from data to make predictions or decisions without being explicitly programmed, using supervised or unsupervised methods

Observer bias: influence of a researcher's assumptions or unconscious beliefs on their observations

Omitted variable bias: occurs when excluding a variable from a data model leads to incorrect attribution of causal relationships

Robotic process automation: software replicating business processes, programmed following "if this, then that" instructions and running with existing applications

Selection bias: arises when sample selection methods lead to certain data characteristics being underrepresented or excluded, making the sample unrepresentative

Self-selection bias: occurs when individuals opt to participate themselves, often resulting in incomplete or skewed results

Survivorship bias: occurs when only subjects who survived a prior event are included in a sample, ignoring those who did not

Transition risks: include policy, legal, technological, market and reputational risks with financial implications, such as increased operating costs, asset impairments or shifts in consumer demand due to climate-related regulations and developments