



**UNIVERSITY OF
CAMBRIDGE**
Judge Business School

ExecutiveEducation



CHIEF TECHNOLOGY OFFICER PROGRAMME

A month in the life of a participant

Thank you for expressing interest in the **Chief Technology Officer (CTO) Programme** from Cambridge Judge Business School (CJBS) Executive Education. This programme's flexible learning journey is designed for senior and mid-career technology leaders. You will learn through online and interactive sessions with world-renowned CJBS faculty and guest lectures by industry experts. The programme's live online and in-person sessions will help you delve deeper into the curriculum and derive the most value. The expertly developed curriculum spans five overarching topics that will equip you with the tools and frameworks to drive technology transformation in your organisation.

We understand that you will be balancing the CTO Programme with your professional duties. This document will give you an idea of the learning sessions and activities you will engage in each week, along with the estimated time you will need to invest to make the most of the programme.



You can expect to spend approximately **three to five hours per week** on this programme, including lectures by CJBS faculty, reviewing faculty-recommended articles and submitting assignments designed to apply your learning and develop your expertise.

Additionally, you will participate in discussion boards and tailored activities that will connect you with your learner cohort in order to foster critical thinking and put into practice the skills you are developing.

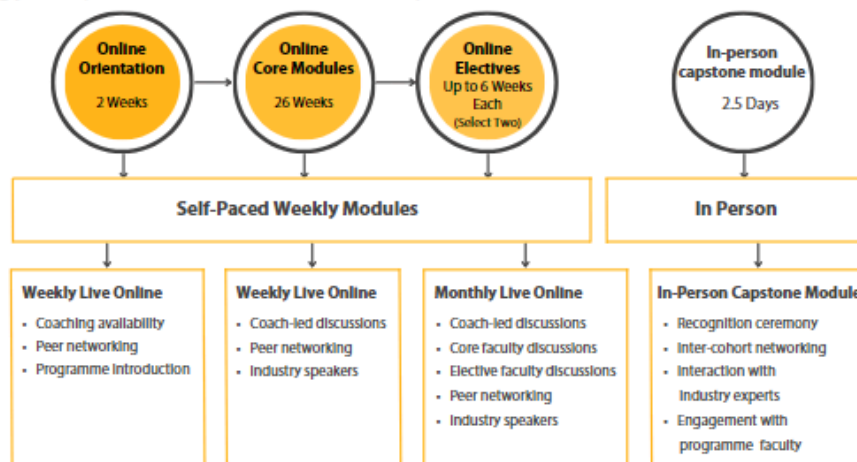
A critical element of this programme is a series of interactive, experiential sessions that will add value to your learning journey. Further, you can deepen your knowledge with live peer learning and career advisory sessions.

By the end of this programme, you will:

- Increase your fluency in the language and application of strategy to your organisation
- Determine and plan the shifts that will strategically align your culture with the needs of your organisation
- Define goals and execution strategies for the active management of business processes
- Structure your approach to organisational processes and execution
- Articulate the innovation architecture that underpins your planned approach
- Elaborate the internal and external approaches to technology and policy that support your strategic goals

Indicative monthly programme flow:

The learning journey includes a combination of self-paced modules and live interaction.



Although the schedule of activities may vary, you will attend live and in-person sessions and webinars interspersed with asynchronous video lectures.

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CURRICULUM OVERVIEW

Phase	Module	Module Title
Phase I — Strategy	1	Corporate and business strategy
	2	The contribution of the CTO function to strategy
	3	Strategic innovation types
	4	Success measurement
	5	The innovation portfolio
	6	Innovation and sustainability
Phase II — Culture and leadership	7	What is culture?
	8	Organisational culture change
	9	Leadership is emotional
	10	Reciprocity and emotions
	11	Leadership is cultural
Phase III — Processes and execution	12	Cascading strategy execution process and governance
	13	Process types, their strengths and limitations
	14	Organisational structures
	15	The strategic role of projects
	16	Process measures and incentives
Phase IV — Global organisation and partners	17	The distributed nature of innovation
	18	The architecture of global innovation processes
	19	Gaining the ecosystem edge
	20	Contracting with partners
	21	Global project management

Phase V — Enacting innovation: culture and new products	22	Culture of innovation
	23	Challenge identification and definition
	24	Ideation and solution design
	25	Proposition and user experience
	26	Agile experimentation and implementation



First month module overviews

Week 1: Corporate and business strategy

The first module will examine how to anticipate and respond to disruption with focused development. You will learn to put strategy in its corporate and business context, delineating which strategies do not serve organisational goals and whether strategies from the past or current frameworks can move the needle on successful output.

Live session

- Faculty kick-off (optional): Planned advantage in corporate and business domains

Lectures (1 hour)

- Programme opening–Innovation: the challenge of translation with Professor Christoph Loch
- Guest interview with Kamal Munir, Professor of Strategy and Policy
- Strategy in context
- What is strategy?
- Bad strategy
- Corporate- and business-level strategy
- Historic strategy frameworks
- Core business strategy framework
- Top-down and bottom-up strategy
- Module one takeaways

Activities and assignments (3–4 hours)

- Reading (optional): Robust adaptive strategies
- Reading (optional): A dynamic view of strategy
- Case analysis (optional): Google and the self-driving car
- Infographic (optional): Value curves
- Assignment (required): Describe your organisation's business strategy
- Discussion (optional): Discuss the CTO role
- Weekly discussion (required): One-minute takeaways
- Module one capstone check-in (required): Strategic organisational analysis

Week 2: The contribution of innovation to strategy

Innovation must have a place in successful corporate strategy. Building technology synergies across businesses and developing cross-business platforms can create foundational support for innovation. Innovation-backed initiatives create important benchmarks for the success of corporate strategies. Businesses are all but required to make strategic changes by improving their position, which will then foster and drive new positions.

Live session

- Weekly forum (optional): What is innovation?

Lectures (1 hour)

- Stelios Kavadias: Self introduction
- Guest interview with Hijian Si
- What is innovation?
- Corporate versus business innovation
- Innovation in support of competitive strategy
- What do CTOs do?
- Module two takeaways

Activities and assignments (3–4 hours)

- Reading (optional): The transformative business model: how to tell if you have one
- Reading (optional): Innovation strategy
- Reading (optional): Making strategy execution work with cascading trees
- Assignment (optional): Describe your organisation's business strategy
- Module 2 capstone check-in no. 1 (required): Strategy blueprint
- Poll and discussion (optional): Organisational priorities
- Module two capstone check-in no. 2 (required): Personal growth strategy
- Weekly discussion (required): One-minute takeaways

Week 3: Strategic innovation types

Existing corporate and business strategies will be re-evaluated and upgraded as organisations drive towards the goal of strategic innovation. This may spur the adoption of new marketing positions, new products and designs, new business models, new processes and new technologies. This has been dubbed as 'fundamental innovation'. Some of these improvement measures will involve the support of other areas that are not primarily within the CTO's oversight.

Live session

- Weekly forum (optional): Strategic frameworks that fit the vision

Lectures (1 hour)

- Beyond product innovation
- Types of innovation
- Where innovation is applied
- The CTO's responsibility at 3i Infotech
- What is within your responsibility?
- What do innovation types contribute to strategy?
- Module three takeaways

Activities and assignments (3–4 hours)

- Reading (optional): The four types of innovation and the problems they solve
- Assignment (optional): Organisational diagnosis
- Case analysis (optional): Sumitomo's innovation drive
- Module three capstone check-in (required): Adding dimension to innovation
- Discussion (required): What can go wrong?
- Weekly discussion (required): One-minute takeaways



Week 4: Success Measurement

What are measures of success? This module will compare and contrast generic and custom measures and their strategic contribution to continuous improvement. Measures need to have a strategic character, be contingent on the task and type and have to be of a different nature where the output process is not only measuring 'what' but also 'how'.

Live session

- Weekly forum (optional): Strategic frameworks that fit the vision

Lectures (1 hour)

- Why standard output measures are insufficient
- Function-level innovation metrics
- Gemstone measures
- Gemstone case debrief
- Principles for innovation measurement
- Module four takeaways

Activities and assignments (3–4 hours)

- Reading (optional): Mobilising an R&D organisation through strategy cascading
 - Case analysis (optional): Gemstone
 - Discussion (optional): Gemstone, metrics beyond output
 - Infographic (optional): Radical, upward and shared processes
 - Assignment (optional): Strategic reflection on measurement
 - Module four capstone check-in (required): The five Rs of measurement
 - Weekly discussion (required): One-minute takeaways
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Sample case studies

The programme will include cases from Google, Sinyi Realty, Sumitomo, 3i Infotech, Nike, 3M, Microsoft, Singapore Bank, Amazon and many others.

Action plan overview

Over the 26-week core module period, you will develop an action plan for your organisation based on identified opportunities for improvement and growth. Your plan will leverage the topics presented in this programme and will aid in analysing challenges in your organisation. It will provide you with the opportunity to apply proven methodologies in the development of potential solutions. If you are not currently employed or your current organisation is unsuitable for this task, you may select another organisation to base your proposal on.

There are major checkpoints at the end of each phase of the programme. These checkpoints are required for completion of the programme and are designed to help you apply what you have learned. Weekly check-ins are also built in at the end of each module in order to assist you in maintaining momentum on the project. This structure will make it easy not only to capture your learning but also assist you in building a comprehensive plan without stress.

You are encouraged to take advantage of programme discussions, faculty live sessions, webinar deep dives and the Slack channel to ask questions and talk through ideas. Applying the feedback you receive will support you in implementing meaningful improvements to your plan. We have carefully designed these opportunities in order to promote your success.

The final deliverable will be an action plan and an executive summary presentation that describes the high-level features of your plan. While the action plan is comprehensive, the actual presentation on your plan will be brief. We know that to explain something succinctly implies deep understanding. You should target your plan for the decision makers in your organisation—whether that is the CEO, a board of directors, a direct supervisor or someone else.

All checkpoint submissions and the executive summary presentation of the action plan are **required** for you to complete this programme.

Below is the action plan checkpoint submissions and their related topics:

Week 1	Orientation to the action plan structure.
Week 6	Discuss the strategic approach, proposed portfolio and measurement strategies.
Week 11	Discuss your plan for building a culture that is fit for purpose.
Week 16	Determine the operational measures, structure and incentives that will support your plan.
Week 21	Plan your innovation architecture and ecosystem strategy.
Week 26	Define your approach to internal and external policy, review and finalise your complete action plan and deliver your presentation.

About Emeritus

Cambridge Judge Business School Executive Education is collaborating with online education provider Emeritus to offer a portfolio of high-impact programmes. These programmes leverage our thought leadership in management practice developed over years of research, teaching and application. Prospective participants with questions about the programme are encouraged to contact Emeritus for further information.

Cambridge Judge Business School Executive Education

University of Cambridge
Trumpington Street Cambridge
CB21AG
United Kingdom

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