**Core Technology Bootcamp – Learning Proposal**

**Audience Profile**

• **Participants**: Second-year generalist consultants with a business background and beginner-level knowledge on ‘core technology’ topics (e.g., cloud, SW engineering excellence and principles, tech strategy, architecture, enterprise platforms, cyber security etc.)

• **Objective**: Enable consultants to understand and communicate core technology concepts effectively (but not perform technical tasks themselves).

• **Key Goal**: Prepare participants to engage in meaningful discussions with technology experts and business stakeholders. Would merge this with objectives

**Program Rationale (Day-wise)**

**Day 1: Understanding Cloud Computing & Migration**

1. Cloud computing is the foundation of modern IT infrastructure.
2. Consultants must understand cloud service models, leading providers, security considerations, and migration challenges. This ensures they can evaluate cloud adoption strategies and assess business impact effectively.

**Day 2: Full Stack Engineering & DevSecOps**

1. APIs and DevSecOps are essential for software-driven businesses, ensuring rapid and secure deployment.
2. We cover API architecture, microservices, CI/CD, and security practices that drive digital agility. Consultants will learn how modern applications are built, secured, and deployed.

**Day 3: IT Architecture, Containers & Business Modernization**

1. Enterprises struggle with legacy IT infrastructure, and containerization (Kubernetes) is key to modernization.
2. This session explains monolithic vs microservices, enterprise architecture, and technical debt. Consultants will be able to advise on IT modernization strategies and cost-benefit trade-offs.

**Day 4: Data Governance & Cybersecurity Resilience**

1. Businesses depend on data-driven decisions and cybersecurity threats impact resilience.
2. Consultants will learn how organizations safeguard data and mitigate security risks. In these sessions we covers data management frameworks, privacy regulations, cybersecurity risks, and compliance.

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**Day 5: Future Tech & Capstone Project**

1. Consultants must understand the role of emerging technologies in shaping the next wave of enterprise IT.
2. In this session we additionally cover cloud security, automation, digital transformation risks, and culminates in a capstone project. Participants will synthesize insights, apply knowledge to real-world scenarios, and present strategic recommendations.

**Program Overview – 5 Days**

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| **Day** | **Session** | **Theme** | **Topics** | **Activities** |
| **1** | **1** | Introduction to Cloud Computing | - Cloud models: Public, Private, Hybrid - Cloud economics and business impact - Leading cloud platforms (AWS, Azure, GCP) | - Case study: Business benefits of cloud adoption - Discussion: Challenges in cloud migration |
| **1** | **2** | Cloud Service Models & Security | - Overview of IaaS, PaaS, SaaS - Shared responsibility model in  cloud security - Cloud migration strategies and risks | - Hands-on: Identifying cloud security risks - Discussion: Developing a cloud migration roadmap |
| **2** | **1** | Full Stack & API Communication | - What is Full Stack Engineering? - Front-end vs Back-end vs Middleware - API-based architecture and its business impact | - Case study: API-driven business transformation - Discussion: How APIs enable digital ecosystems |
| **2** | **2** | DevSecOps & CI/CD | - Importance of DevSecOps in modern development - Continuous integration and deployment pipelines - Security automation and compliance | - Interactive simulation: CI/CD workflow in action - Discussion: Security in Agile environments |
| **3** | **1** | Containerization & Kubernetes | - Difference between containerization and virtualization - Benefits of using Kubernetes for orchestration - How enterprises are modernizing with containers | - Case study: How businesses scale applications with Kubernetes - Hands-on discussion: Advantages of containerization |
| **3** | **2** | IT Architecture & Business Capability Mapping | - Enterprise systems and IT architecture - Legacy vs modern structures - Understanding transformation costs & technical debt | - Workshop: Mapping IT transformation for a business - Discussion: How business capability maps guide IT modernization |
| **4** | **1** | Data Management & Governance | - Data lifecycle and data-driven decision-making - Data Warehouses vs Data Lakes - Data privacy and compliance (GDPR, CCPA) | - Case study: Implementing data governance in a multinational company - Discussion: How organizations ensure data quality |
| **4** | **2** | Cybersecurity & Tech Resilience | - Common cybersecurity threats & attack vectors - Cyber resilience in digital transformation - Enterprise risk management frameworks | - Case study: Responding to a cybersecurity breach - Group discussion: Best practices for cybersecurity governance |
| **5** | **1** | Future of IT & Emerging Technologies | - Trends in cloud security and automation - The role of DevSecOps in enterprise transformation - Managing risks in digital-first enterprises | - Panel discussion: Experts on enterprise IT trends - Debate: Which technologies will shape the next decade? |
| **5** | **2** | Capstone Project & Final Presentation | - Applying bootcamp learnings to a real-world scenario - Developing a strategic technology roadmap | - Team-based consulting project - Executive-style presentations with structured feedback |

# Feedback from McKinsey

* In general, we should try to increase interactive elements; right now a lot of the activities are case studies and discussions; but we should find a way where people can do things hands-on, simulations exploring the actual tools / platforms and finding something out (e.g., on hyperscaler websites).
* Also, it looks a bit like it could be too deep in some technical parts, can you provide a more concrete picture of a few things, e.g*., interactive simulation: CI/CD workflow in action*, or *Hands-on discussion: Advantages of containerization* – what is a ‘hands-on discussion?
* Missing in the beginning
  + A strategy part, or a “why is this relevant at all”, a motivation why these are the things we will be looking at. “What is on the CIO agenda” would be a good name, and include things like: having business domain and tech expertise, tech talent attraction, technology disruption, enabling gen AI across the enterprise, tech transformation, cost pressure, legacy IT
  + Also at the beginning we need an intro about what is tech, what do we mean by it, relevance of technology for our clients, value drivers and problems to solve as well as how to modernize/transform and big decisions or trade-offs. How to translate tech-to-business and business-to-tech in order to discuss with clients credibly. Most important topics including Cloud, Cloud Providers, Architecture, and DevSecOps
  + Maybe also a small part of this could be: who are the main types of players: cloud hyperscalers, system integrators, IT consultancies, software vendors etc.
  + I would consider doing the business capability mapping and IT architecture and technical debt a bit earlier in the week
* Kubernetes and containerization is important, but technical, we should not spend more than 30-60min on it, and this has a risk of being “dry”
* The activities overall look good
* Future of IT & Emerging Technologies should not be more than 1-2h, what do you envision with the panel discussion? where would the experts come from?
* Something is missing on “gen AI and core tech”, doesn’t need to be that much, but we should include the core tech aspects of gen AI somewhere
* We would like to see the topics of “enterprise systems”, it is an important part of our work
* Ideally the cloud computing part can be hands on, e.g., people exploring the AWS menu of services to get a feel for it, of faculty demos something. Not just a “discussion” of the topic
* What do you have in mind with the Capstone project? Is that something participants are already working on throughout the week? So far this is a bit of a black box (same for AI)