



GREENPEAK PARTNERS

AI DEPLOYMENT AND OPERATIONS

CHAIR OF ARTIFICIAL INTELLIGENCE | PROF. DR. HEINER STUCKENSCHMIDT
GREENPEAK PARTNERS | LINDA HONG

PROJECT SEMINAR

HAPPY TO HAVE YOU ON BOARD!

Prof. Stuckenschmidt and I selected 12 students for this seminar.

Wochentag	Datum ▲	Von - Bis	Raum	
Mi	09.09.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	
Mi	23.09.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	
Mi	07.10.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	→ Today
Mi	21.10.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	
Mi	04.11.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	→ You can hand in your CV here
Mi	18.11.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	→ Q&A session
Mi	02.12.2026	17:15 - 18:45	ZOOM-Lehre-104 (Virtuelles Gebäude)	→ Final group presentation

Please build groups of 3 students to proceed with the group work.

Since we are a small group, feel free to ask questions!

PLEASE USE ILIAS FOR THE COMMUNICATION

Group in ILIAS

 UNIVERSITÄT MANNHEIM
ILIAS

 Dashboard

 Portal²

 Magazin

 Hilfe

 Dashboard

Meine Kurse und Gruppen

HWS 2026

 IE 679 AI Deployment and Operations [V] (HWS 2026)

Anmeldung: Keine Anmeldung möglich

Remarks

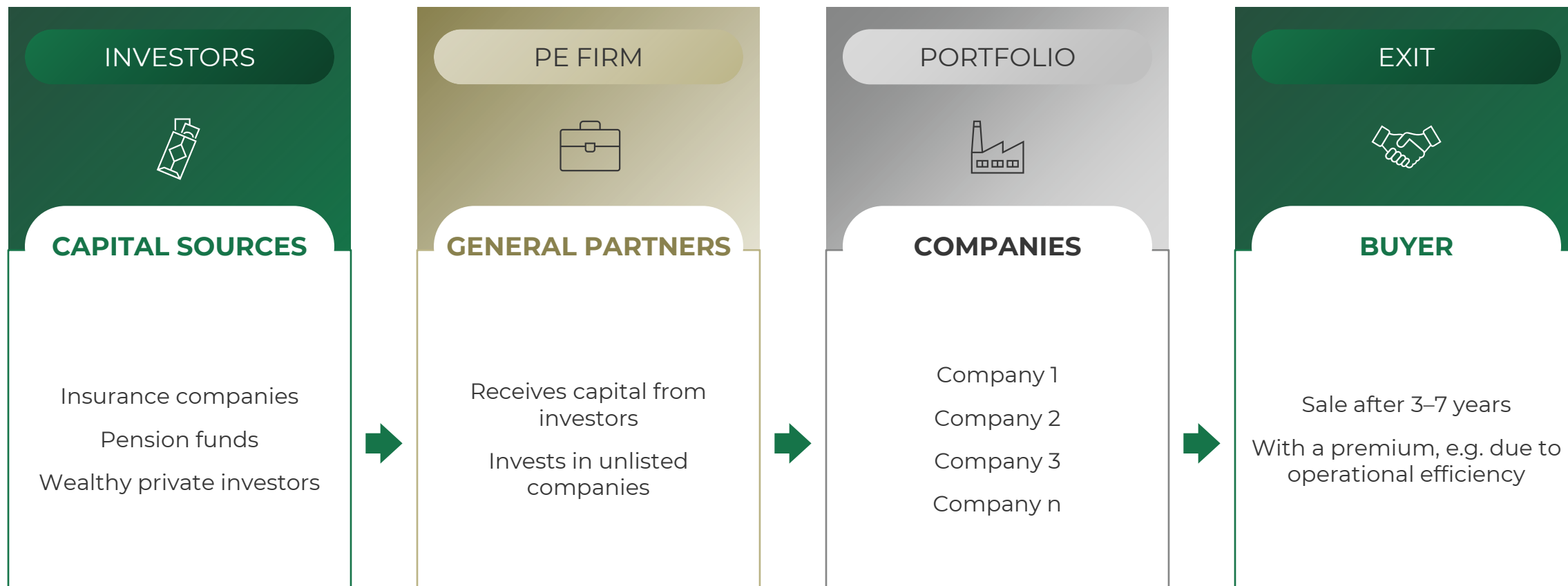
- For the data set and slides, please use the following link
 - <https://web.informatik.uni-mannheim.de/semweb/>
- Everyone should be in a group now, **please contact me if you are still missing a group member**

LEARNING GOALS

At the end of the seminar, you should be familiar with the following topics:

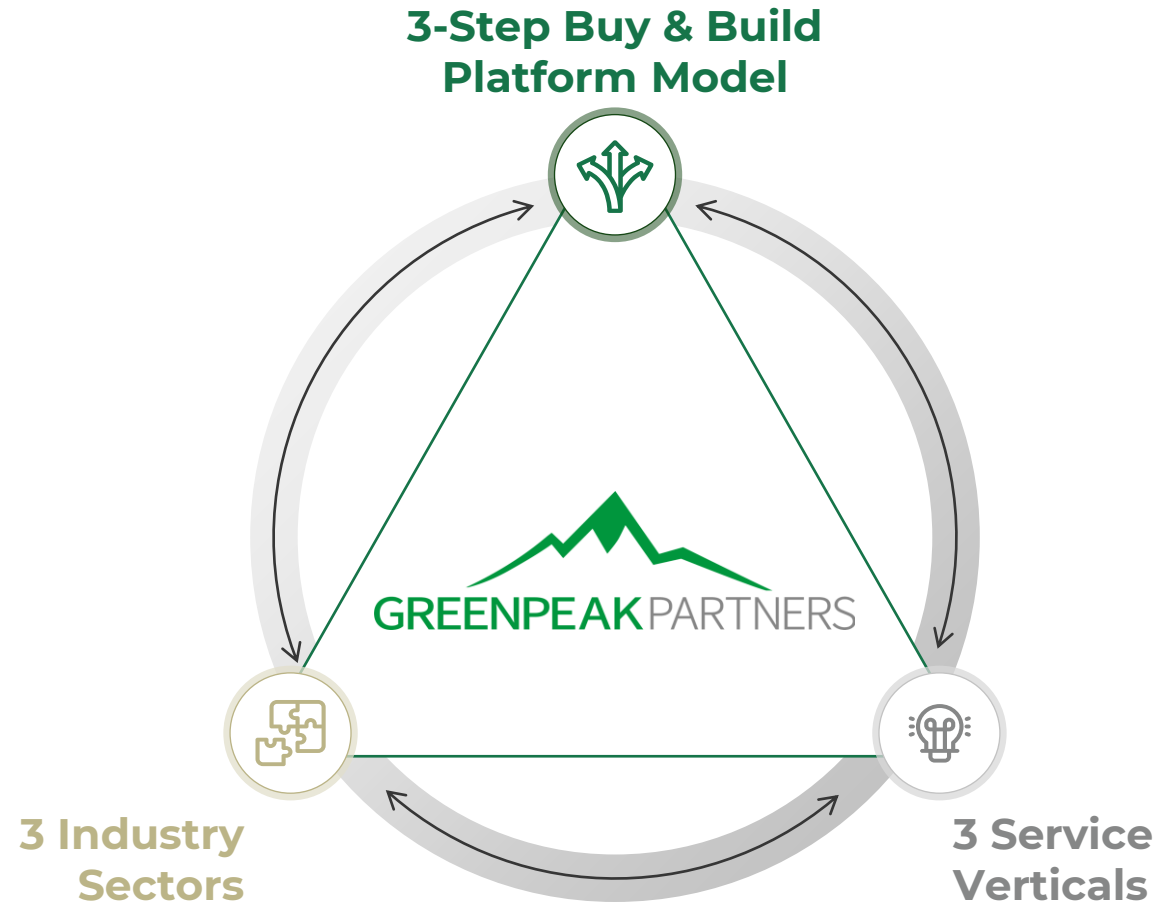
- Usage of an energy data set to predict the future electricity demand
- Basic understanding of the German electricity market and the current challenges and opportunities
- **Basic understanding about what a Private Equity Company is doing and how we leverage AI in our operations**
- **Understand the usage of cloud technologies**
- Usage of Azure to conduct a machine learning project
- Usage of Databricks to conduct cloud computation
- Usage of Terraform to configure infrastructure as code
- Usage of Github to track version control
- Conduct a group work to train working in teams

PRIVATE EQUITY FIRMS INVEST IN PRIVATELY HELD COMPANIES



Private equity describes an investment type into unlisted companies. It is a less liquid form than individual stocks or ETFs.

A DISCIPLINED AND PROVEN GROWTH FRAMEWORK



A 3-step building model, in 3 core Industries, built around 3 service verticals

WE BUILD SCALABLE PLATFORMS BY DEVELOPING, BUYING AND BUILDING THEM



Develop

Define the theme

Win true leaders

Build a common business plan



Buy

Source proprietary deals

Buy at a discount to platform value

Build financial alignment with the sellers



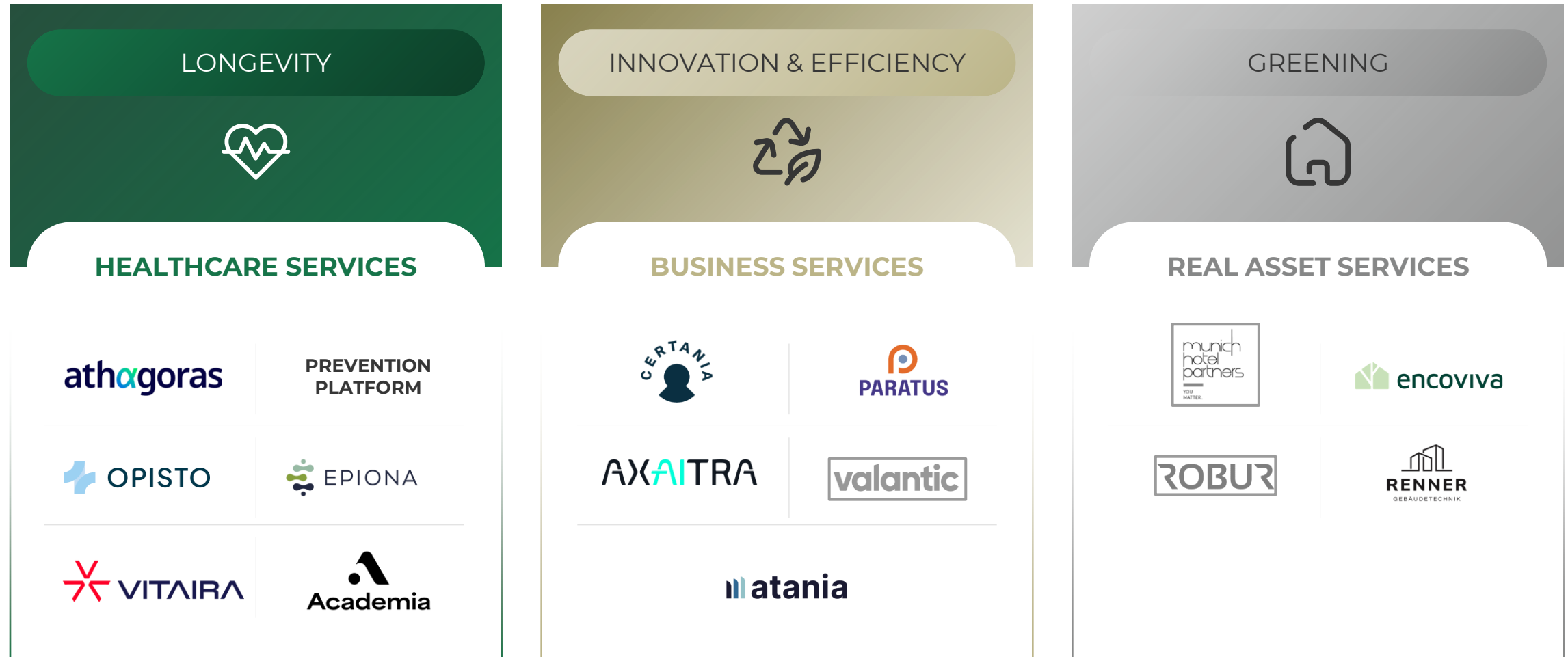
Build

Identify synergies

Build a common culture

Integrate the companies

WE BELIEVE IN THREE MAIN INDUSTRIES: LONGEVITY, INNOVATION & EFFICIENCY AND GREENING



WHAT MAKES GREENPEAK DIFFERENT

**Differentiated
Buy-and-Build
Strategy**

**€2bn+ revenue
created**

**Systematic &
repeatable
value creation
framework**

**“One-firm”
approach**

**Institutional
and Hands-on
Team**

**c.100+
Professionals**

**Proven ability
to generate
returns**

**>3x realized
gross MoM**

**Positioned for
future scale**

**Fund IV platform
concepts defined**

WE DEVELOP GREAT FIRMS THROUGH BUY & BUILD, AND MAKE SURE THEY ARE RECOGNIZED AS SUCH BY THE POTENTIAL BUYERS' UNIVERSE



GREENPEAK continuously improves each of this aspect for platforms throughout their lives and not only in preparation for exit

GREENPEAK CREATES SUSTAINABLE VALUE BY BUILDING STRONGER, SMARTER, AND MORE CONNECTED COMPANIES

1

Scale & Stability

Growing through acquisitions to build resilient platforms

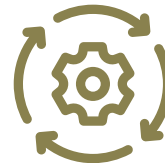


Expanding the group through targeted M&A diversifies revenue streams, balances risk, and strengthens market position

2

Synergy & Integration

Unlocking group potential through cooperation



Cross-selling, people talent, and joint initiatives create operational and commercial synergies and integrations that accelerate growth.

3

Innovation & Improvement

Driving growth within companies through strategic initiatives



Group-backed projects—like AI, digitalization, or pricing projects—boost individual company performance and uplift the entire group.

WE ARE A TEAM OF 100+ PROFESSIONALS IN MUNICH

Value Creation Team

Fund Team

Investment Team

Debt Financing Team

Supporting Functions and Project Support for the Platforms

Supporting Functions für Greenpeak & EK-Financing

Supports the platform manager with acquisitions

Supports the platform Manager and Greenpeak with debt financing

- Virtual holding functions for the platforms
- Partly holding tasks for platforms, partly consulting for platforms
-

- Handles the Ops topics for all Greenpeak companies at fund level
- Contact person for Greenpeak employees of services and management
- Responsible for the process of raising equity for platforms and Greenpeak

- Drives the process of deal sourcing from Greenpeak's point of view
- Supports platform managers with DDs and preparation for IC
- Keeps an eye on equity story

- Contact with debt financing
- Leads and supports in all topics related to debt financing

TWO ENERGY COMPANIES IN OUR PORTFOLIO, WHERE WE SEE DATA AND AI CREATE ADDITIONAL VALUE

Engenios



Building a scalable, integrated platform of infrastructure engineering firms focused on energy, digital, transport, and water infrastructure. The group offers expertise in planning, project management, and construction supervision to deliver complex infrastructure projects efficiently and reliably.

Investment Criteria

Engineering and consulting firms in the field of infrastructure with a focus on:

- Energy grid
- Digital network
- Transport
- Water & wastewater

Kaia Energy



Building an independent power producer that operates renewable and flexibility assets for Germany's energy transition.

Investment Criteria

- Wind, solar and battery storage projects in Germany
- Scalable assets with flexibility or hybrid potential
- Projects located close to demand to enable efficient, customer-aligned energy delivery

Our conviction: data and AI turn energy assets and engineering know-how into additional value across our portfolio

AI MAKES RENEWABLE POWER PREDICTABLE AND GETS MORE OUT OF THE EXISTING GRID

AI value potential (IEA)

\$110bn



annual savings potential in power plant operations and maintenance by 2035

175 GW



extra transmission capacity that AI can unlock in existing lines

8%



energy savings in light industry by 2035

23%



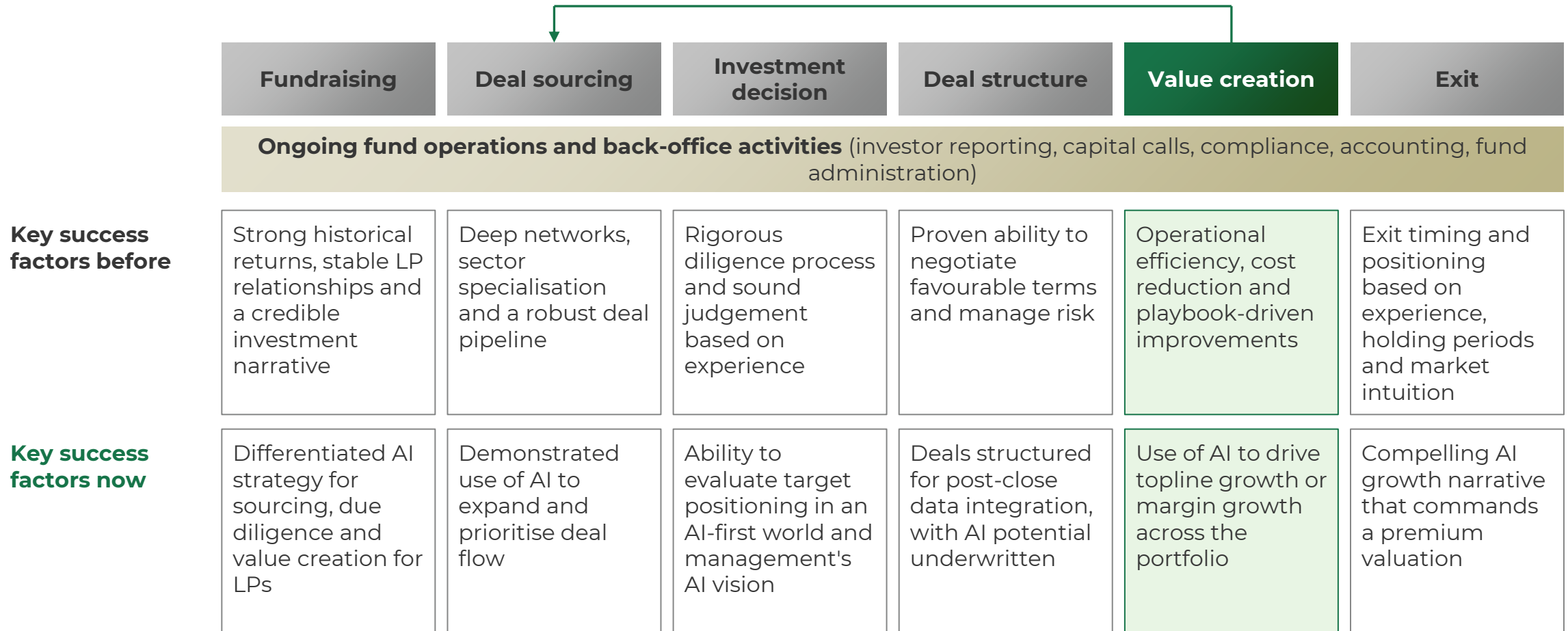
of grid operators use AI in daily operations today

Why AI matters

- **Weather-driven supply:** AI forecasts wind and solar output more accurately
- **Lower balancing costs:** better forecasts need less reserve power
- **North-to-South transport:** AI line monitoring moves more power through existing lines
- **Fewer outages:** predictive maintenance flags faults before they happen
- **First-mover edge:** few operators use AI in daily operations yet

WHY IS AI IMPORTANT FOR GREENPEAK

Learnings from AI value creation in the portfolio inform new deal sourcing and investment decisions

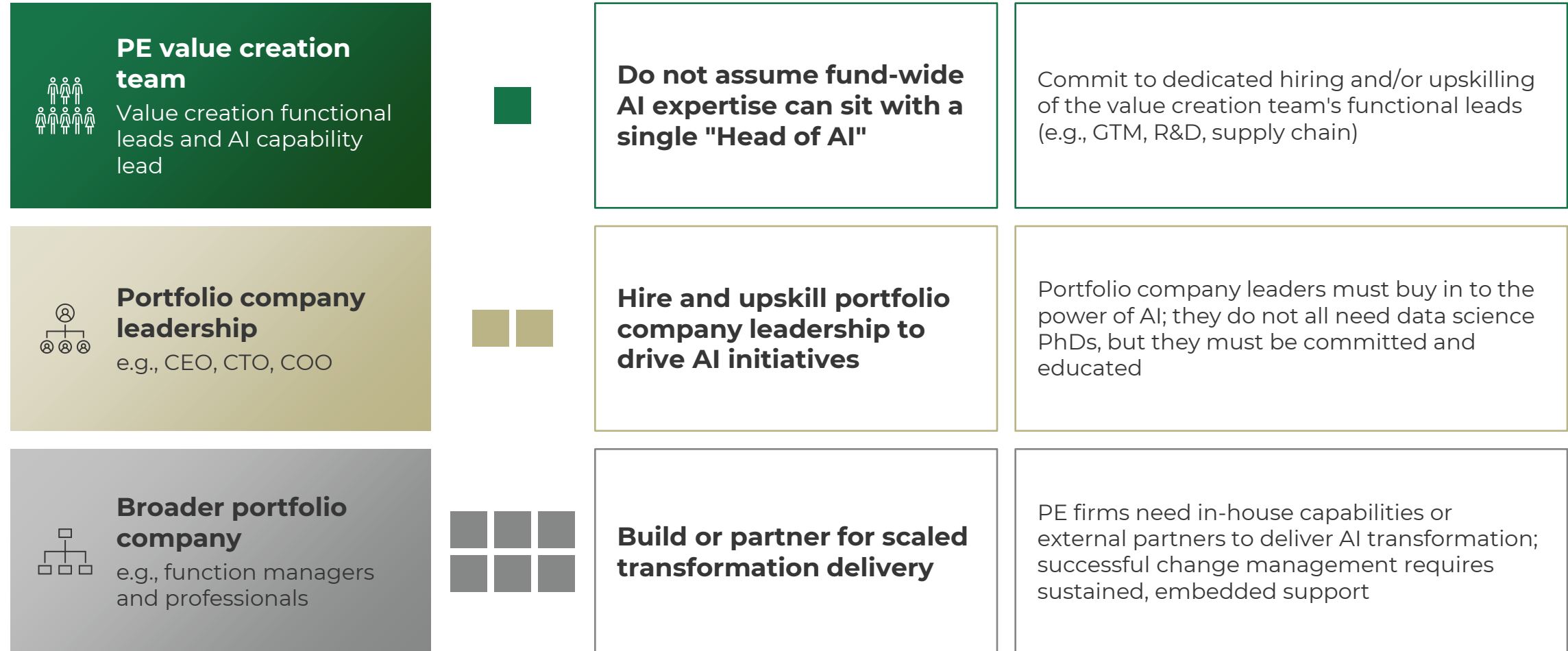


Role of AI Transformation

WHY IS AI IMPORTANT FOR GREENPEAK

AI roles

Implications for AI value capture



We are always looking for highly motivated students. Check out our [career web page](#).

CLOUD TECHNOLOGY ALLOWS ENTERPRISES TO BUILD SCALABLE SOLUTIONS

How the cloud works

- **Delivery:** computing services are delivered over the internet
- **Infrastructure:** the hyperscaler provides the hardware and maintains power, cooling and networking
- **Pricing:** usage is billed on a pay-per-use basis

Advantages

- **Flexible scaling:** computing capacity ramps up and down with demand
- **Low Capital Expenditure (CAPEX):** little physical hardware needed; an internet connection and a computer are enough
- **Always up to date:** the cloud provider keeps resources current

Disadvantages

- **Cost:** can be expensive, depending on the cloud configuration
- **Dependency:** the market is concentrated on a few American hyperscalers
- **Security:** additional measures are needed, as traffic is routed via the internet

Main hyperscalers



Microsoft

Focus
here



Google



Amazon

IN THIS LECTURE, WE FOCUS ON THE AZURE CLOUD

Get certified

- **Azure Fundamentals:** Certifications help you to showcase your skills; You can get certified here <https://learn.microsoft.com/en-us/credentials/certifications/azure-fundamentals/?practice-assessment-type=certification>

Microsoft Azure

Your cloud platform: an ever-expanding set of services to meet your technical goals

Compute

- VMs
- Containers
- Functions

Storage

- Blob
- Files
- Queues, Tables

Networking

- VNet
- Load Balancer
- DNS, CDN

Databases

- SQL, Cosmos DB
- MySQL
- PostgreSQL

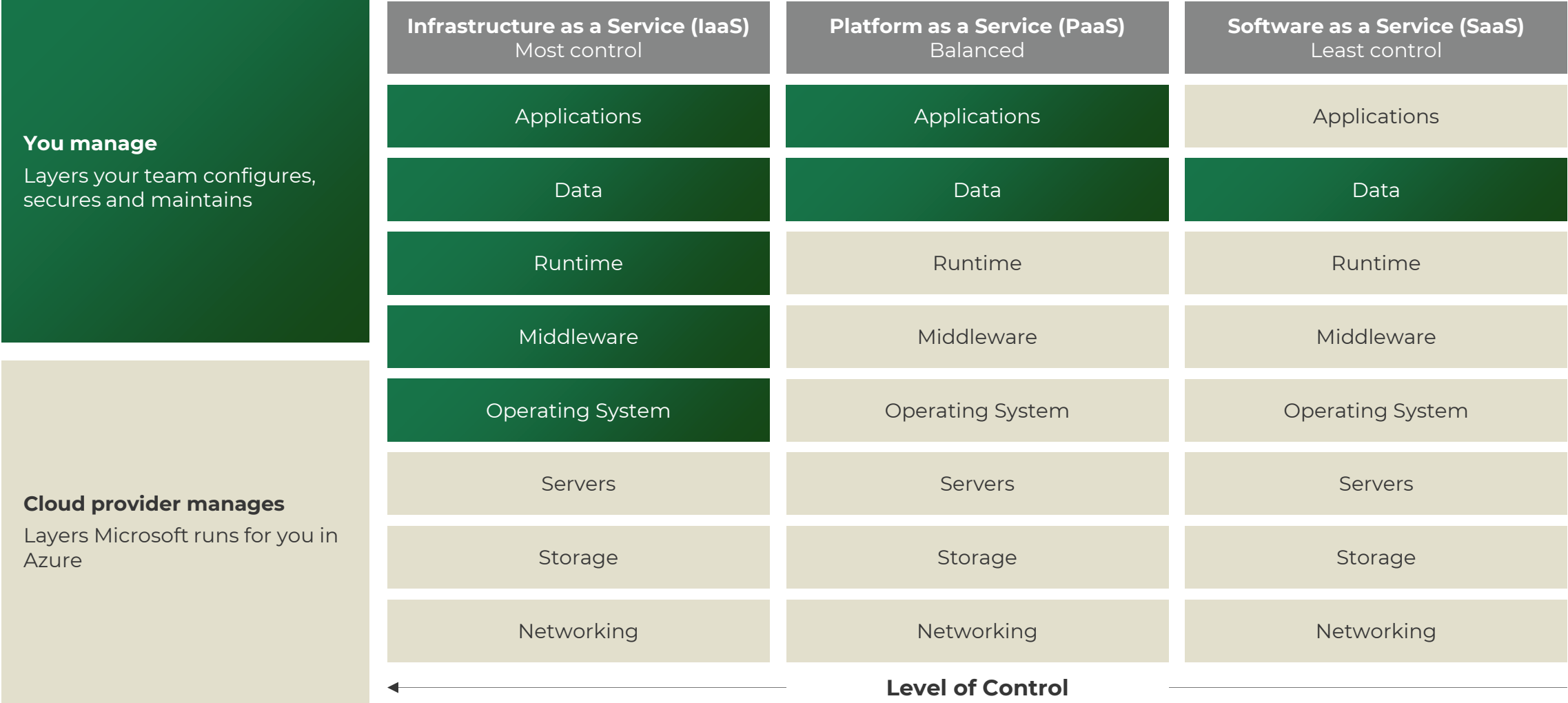
AI & ML

- Azure OpenAI
- AI Services
- Machine Learning

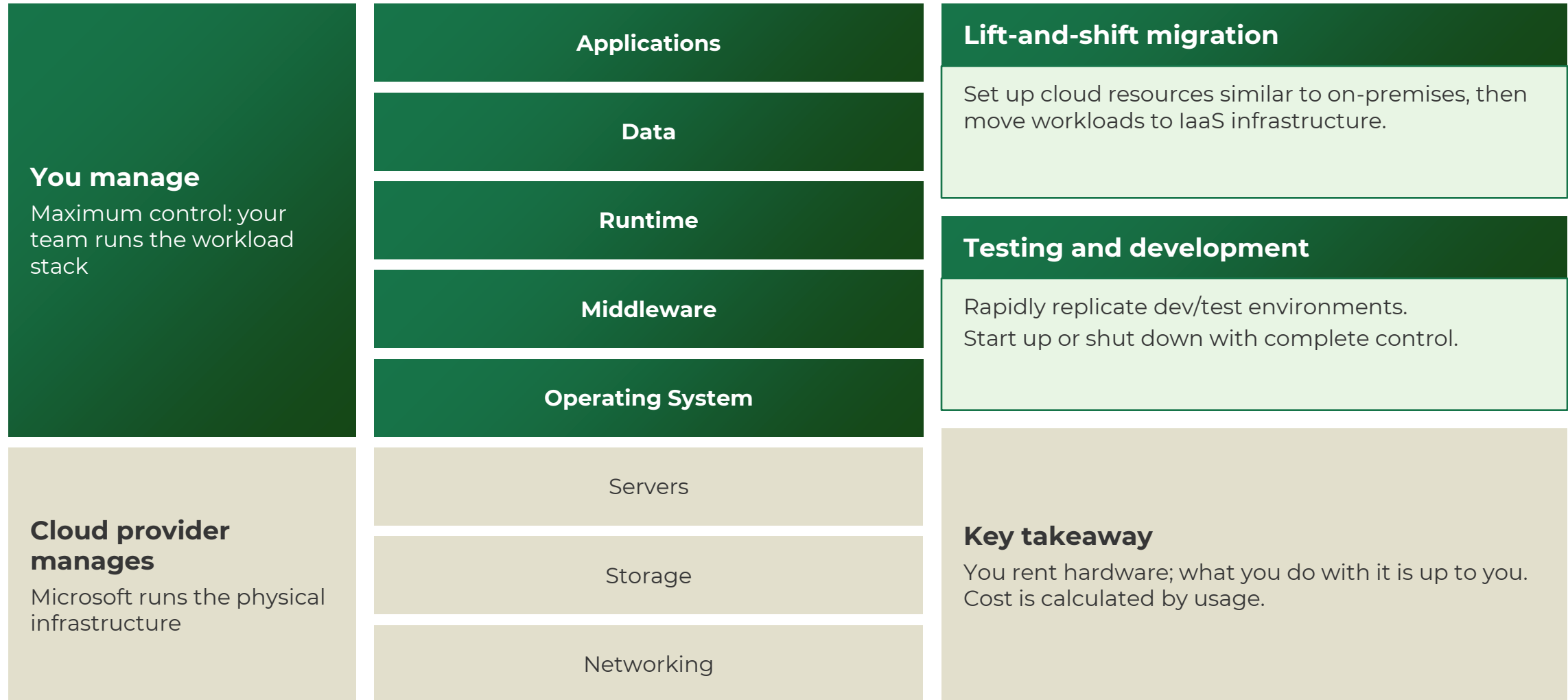
IoT

- IoT Hub
- IoT Central
- Edge Services

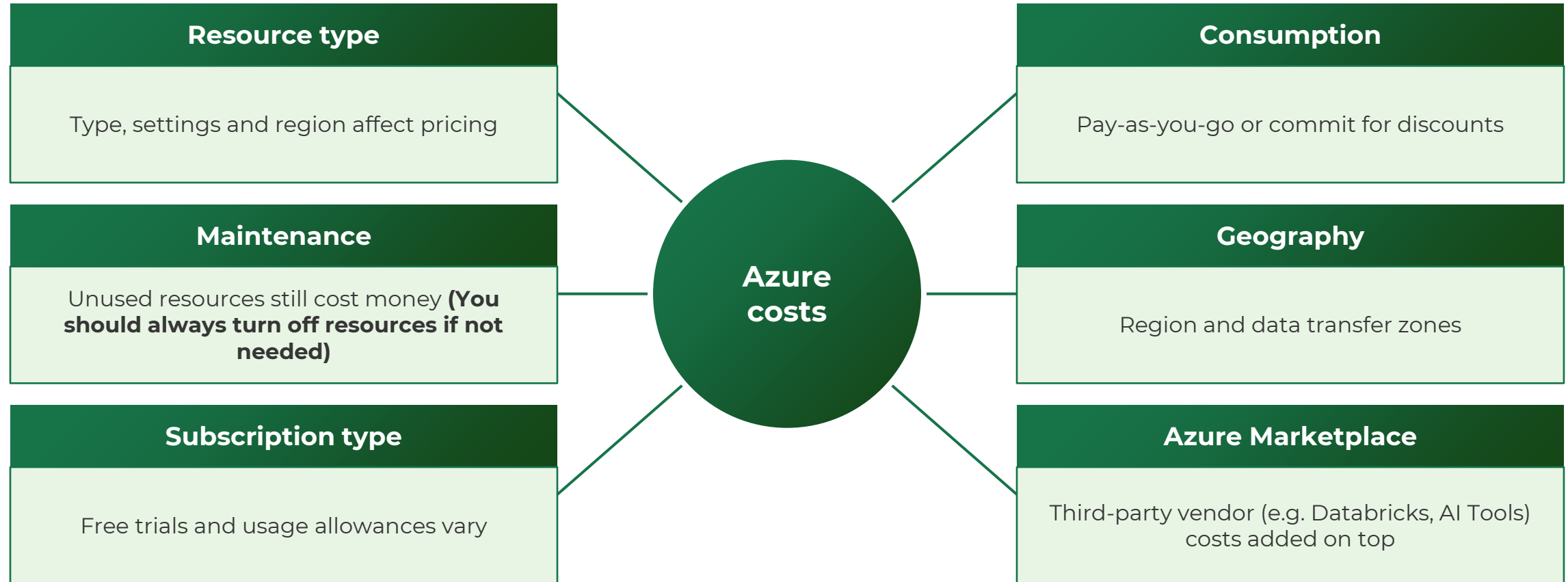
THE AZURE CLOUD ALLOWS THREE DIFFERENT RESPONSIBILITY TYPES



IN THIS LECTURE, WE FOCUS IN INFRASTRUCTURE AS A SERVICE (IAAS)



AZURE COSTS ARE INFLUENCED BY A NUMBER OF FACTORS



Each factor can increase or decrease your monthly Azure bill.

AZURE OFFERS FOUR CORE PRICING MODELS

PRICING MODEL	DESCRIPTION	BEST FOR	DISCOUNT
Pay-as-you-go	The standard consumption model. You are billed per second or minute of active execution with no upfront commitment.	Short-term, unpredictable or highly fluctuating workloads.	Baseline Full price
Azure Savings Plans	You commit to a fixed hourly spend (e.g. \$10/hour) for 1 or 3 years across eligible compute services.	Dynamic workloads requiring flexibility across different VM series or regions.	Up to 65% off
Azure Reservations	You commit to specific resource types (e.g. specific VMs, SQL databases) in a single region for 1 or 3 years.	Highly predictable, steady-state workloads.	Up to 72–85% off
Spot Pricing	Allows you to purchase unused Azure capacity at extremely low rates, but Microsoft can evict your workload at short notice when capacity is needed.	Non-critical, batch or interruptible tasks (e.g. rendering, dev environments).	Up to 90% off

Choosing the right pricing model is especially important for enterprises

GET READY TO USE AZURE FOR THE GROUP PROJECTS

1

Open Azure for Students

Free resources at Microsoft Azure for Students: [here](#)

2

Sign up

Create an account with your student mail ([@uni-mannheim.de](#))

3

Get your credit

You get **100 USD** free credit as a student



The screenshot shows the 'AZURE FOR STUDENTS' landing page. At the top, there's a navigation bar with the Microsoft logo, 'Azure', and links for 'Mehr erfahren', 'Produkte', 'Lösungen', and 'Mehr'. There are also search, learn, support, and contact links, along with buttons for 'Erste Schritte mit Azure' and 'Anmelden'. The main content area features the headline 'Kostenlos Lösungen in der Cloud entwickeln mit Azure for Students'. Below this, a sub-headline states: 'Verwenden Sie die E-Mail-Adresse Ihrer Schule, um sich zu registrieren und Ihr Konto jährlich zu verlängern, solange Sie Schüler/Studierender sind.' There are two buttons: 'Kostenlos starten' and 'Kein Student? Jetzt loslegen mit Azure'. To the right of the text is an image of three students in a classroom setting. At the bottom of the page, a red banner contains the text 'Please create an account until next time'.

LEARNING GOALS

After today's lesson, you got familiar with the following topics:

- What Private Equity Firms do
- How Greenpeak Partners is operating
- Why AI is important at Greenpeak Partners
- What Cloud Technologies are
- How the Azure Landscape looks like



**THANK YOU FOR
YOUR ATTENTION!**

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