



Accelerating Qatar's AI Readiness form Data Centre Efficiency to Infrastructure and Skillset



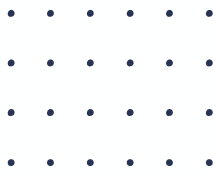
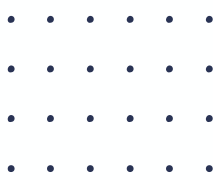


Table of contents

- 01 Data Centres**
- 02 Infrastructure**
- 03 MEEZA Academy**
- 04 MEEZA.AI**



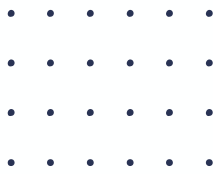
01

Data Centres

AI is Transforming the Digital Landscape



Data Centres – Driving Qatar’s Digital Economy

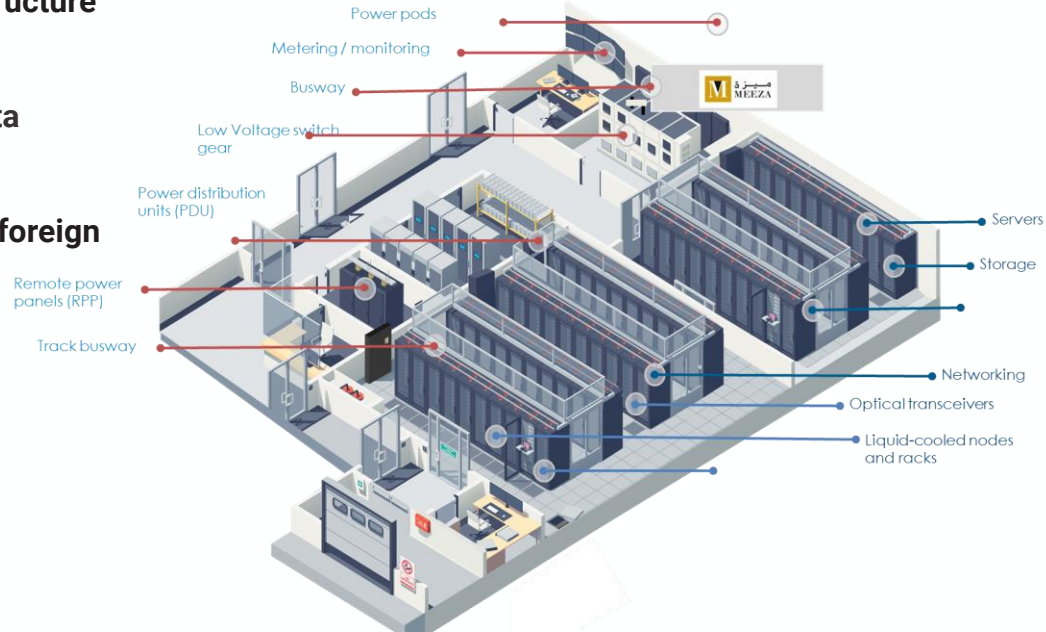


Foundation of Digital Economy:
DCs as the backbone of robust & secure digital infrastructure

Scalable and Reliable:
Hosting advanced applications like AI, IoT, and Big Data

Economic Impact:
Accelerating business agility and innovation & driving foreign investments

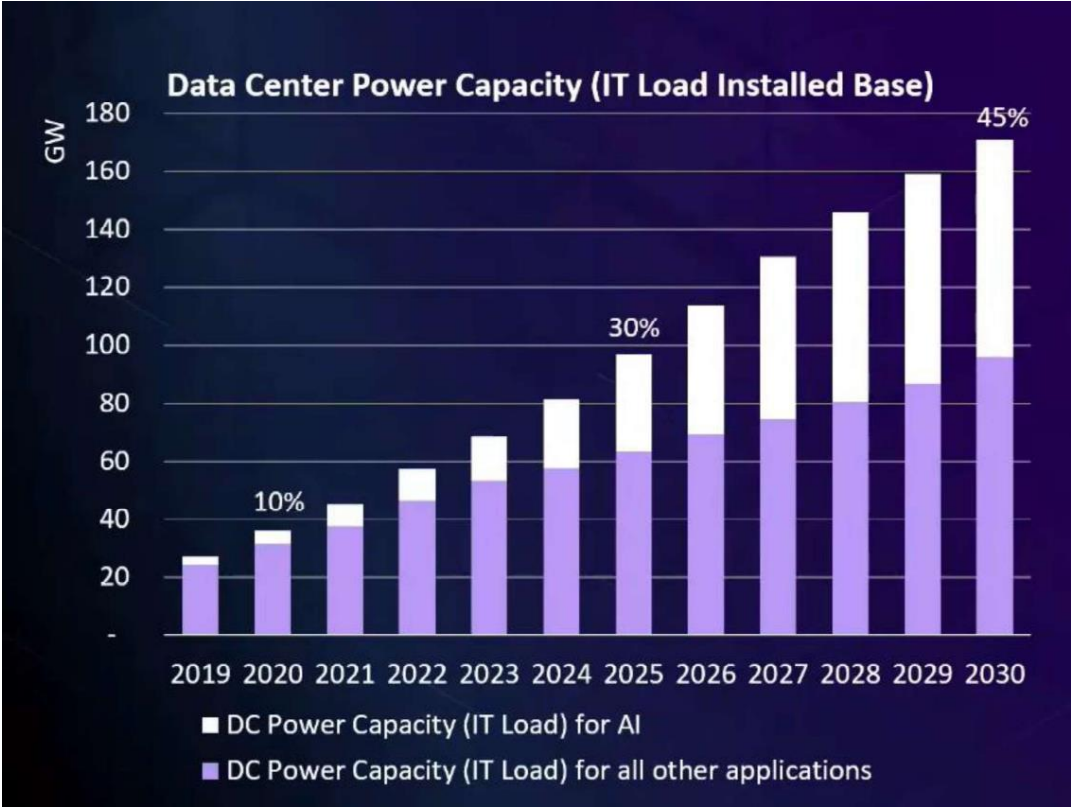
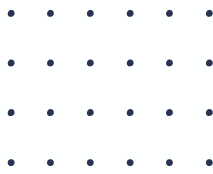
MEEZA’s Role in the Digital Economy: Supporting Qatar National Vision 2030



Data Centres – Land and Power



AI Capacity of All DC Power



New AI Challenges



Unprecedented
Densities



Improve
Performance

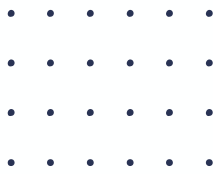


Save on
Electricity

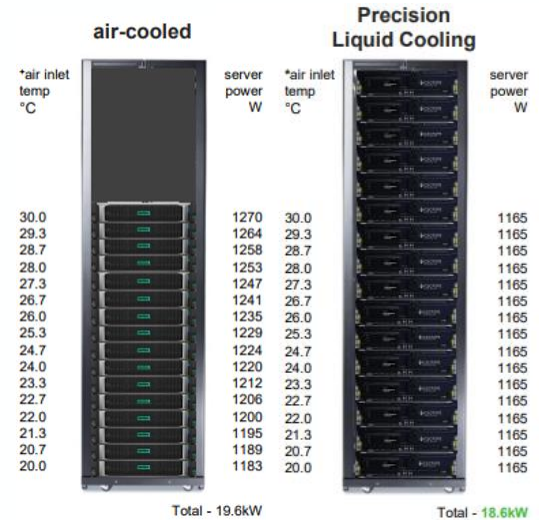
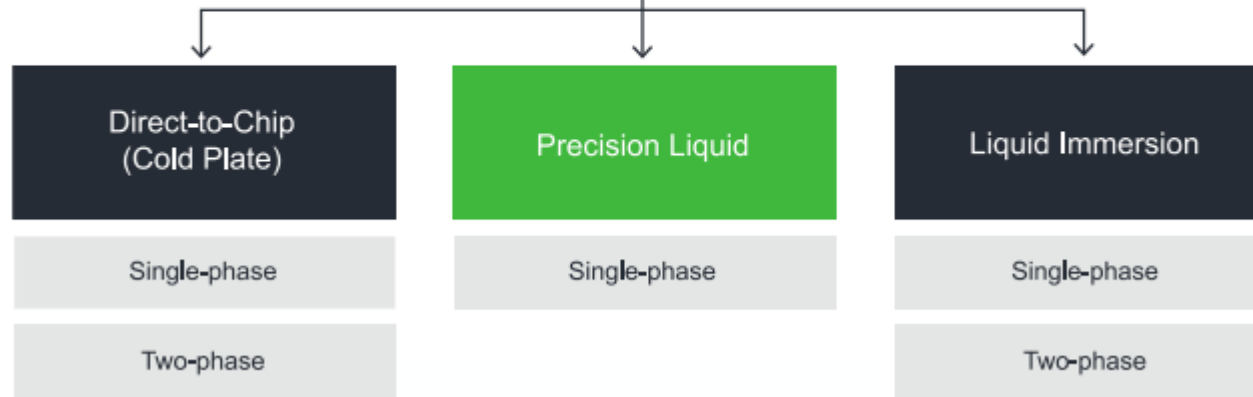


Save on
Physical Space

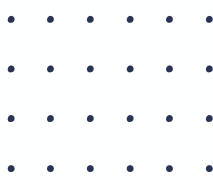
Not All Solutions are created Equal

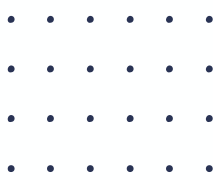


Liquid Cooling



Workload and Use-Case Dependency





02

Infrastructure

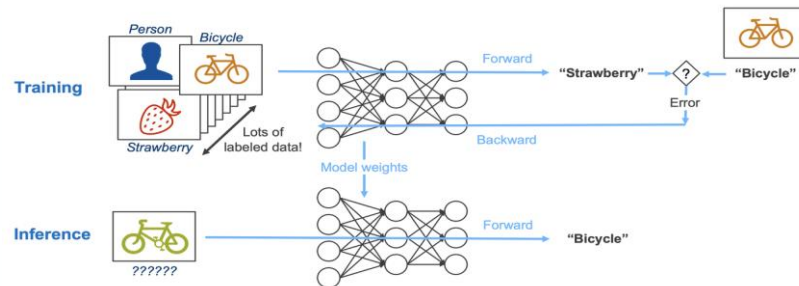
World's 1st Generative LLM

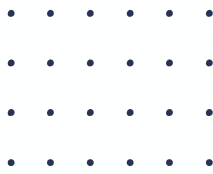
Pre-trained
on CPUs

	ThirdAI BOLT2.5B	GPT-2
Model Parameters	2.5B	1.5B
Hardware	10 servers, each configured with 2 Sapphire Rapids CPUs	128 V100 GPUs
Training Time	20 days	10 days
Tokens Consumed	40B tokens	170B tokens
FLOPs	2E+19 160x more efficient	3.36E+21

Training vs. Inference

AI is split into Training and Inference workloads, each with different implications on data center requirements.





GPUs & Advanced Infrastructure

Training Workload

Heavy GPUs

Training TIME is important

Low Latency and high resiliency not required

E.g. Chat GPT-4

Extreme kW/Rack (70 to 120 kW/rack)

Inference Workload

Mix of CPU and GPU

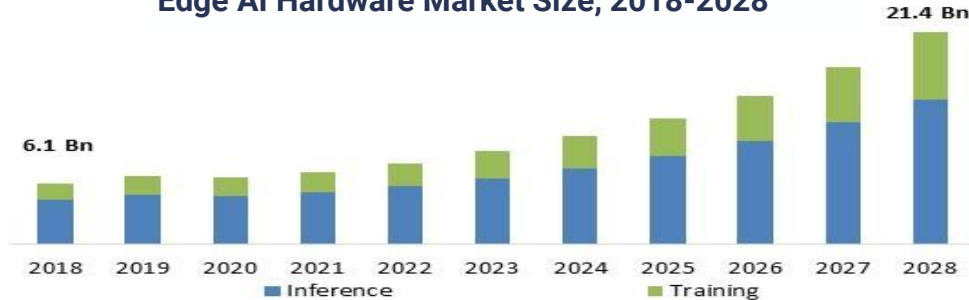
Predication TIME is important

Demand for low Latency & high resiliency

E.g. Predictive analytics, Fraud detection..

Moderate kW/Rack (40 to 70 kW/rack)

Edge AI Hardware Market Size, 2018-2028



Increasing Demand for GPUs: Training

Large Clusters for Large Models

10,000 GPUs: Train LLMs

1,000 GPUs: Inferencing, ML apps, multiple users

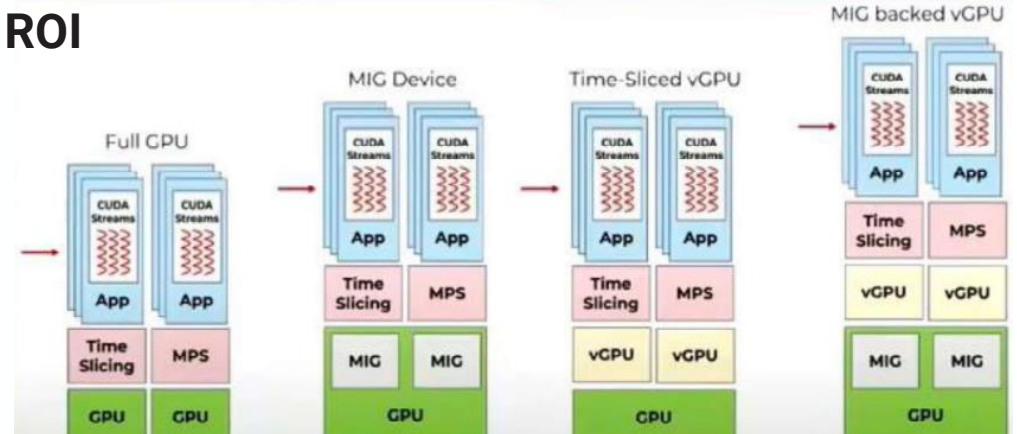
100 GPUs: Fast workloads

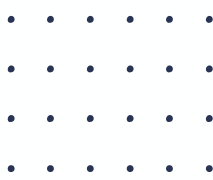
Slice Usage of GPUs to optimize ROI

Time slide

Multi-instance GPU

Virtual GPU



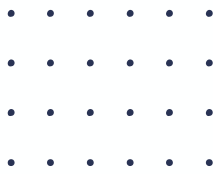


03

MEEZA Academy

MEEZA Academy

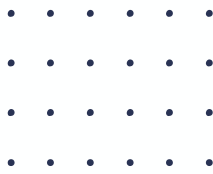
*A Catalyst for Qatar's
AI Skillset Readiness*



Prepare a new generation of experts supporting the growing demands in the IT sector and contribute to MEEZA's mission to become the preferred managed IT services and solutions provider in the MENA.

The Academy selects and train college students and fresh graduates to develop their skills with strategic partners in ICT in line with the Qatar Vision 2030 of building a knowledge-based economy.





04

MEEZA.AI



[ABOUT MEEZA AI](#)

[USE CASES](#) ▾

[ENGAGE](#)

Unlocking Business Possibilities

Welcome to MEEZA.AI, unlocking limitless potential with transformative Artificial Intelligence Solutions. As catalysts, we drive innovation and growth, empowering businesses to revolutionize operations and seize success.



In collaboration with





Thank You

Presented by:



Dr Eng Fadi Nasser
Chief Commercial Officer