



AI Data Centre of the Future

Speakers



Thomas Rowley

Chief Technologist
for Networking &
Connectivity,
Softcat



Chris Redding

Head of Hybrid
Platforms,
Softcat

AI Platform Framework

Buy

Packaged services

Integrate

AI reference architectures
Managed services

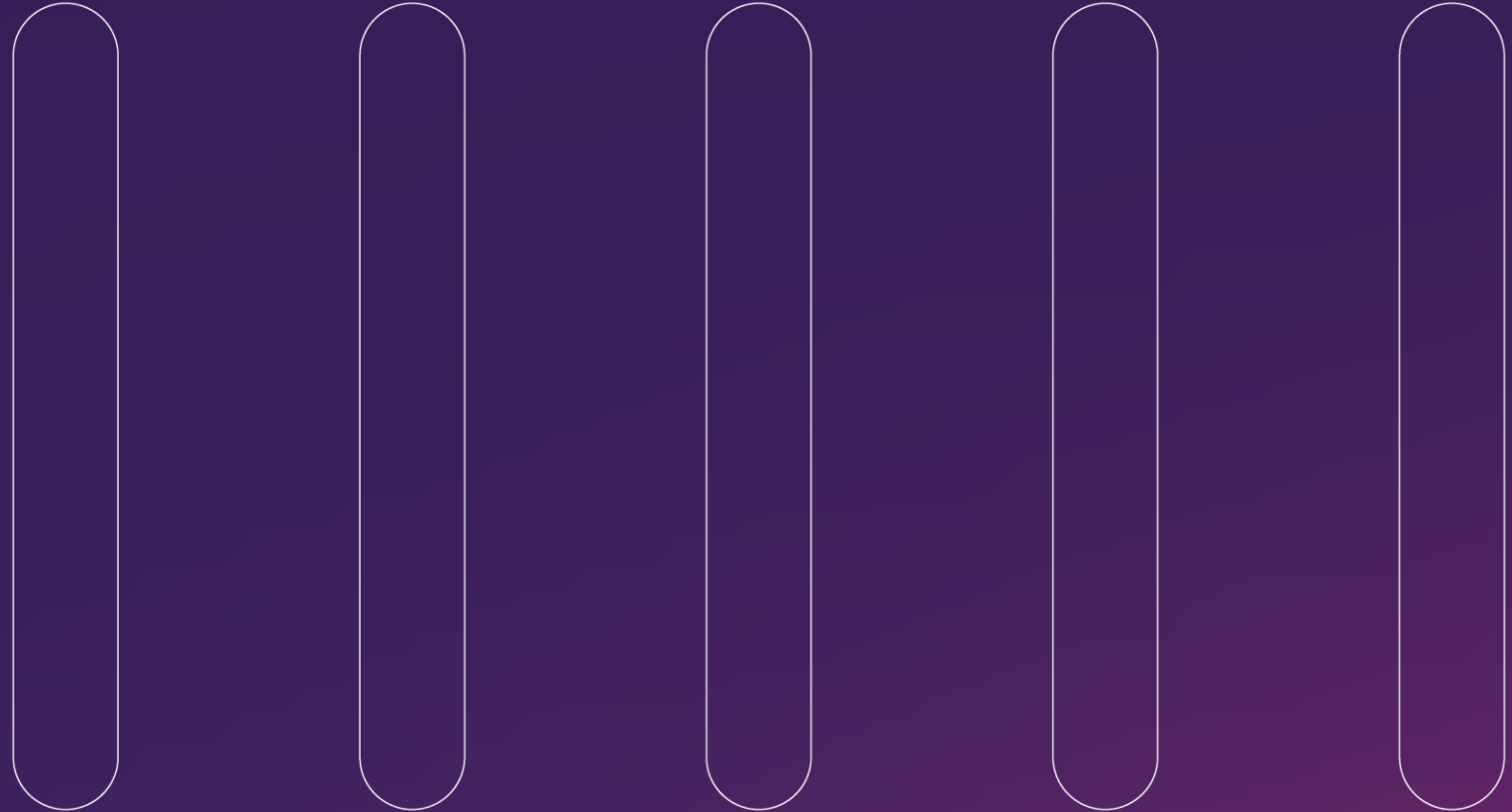
Build

Compute platform
AI frameworks

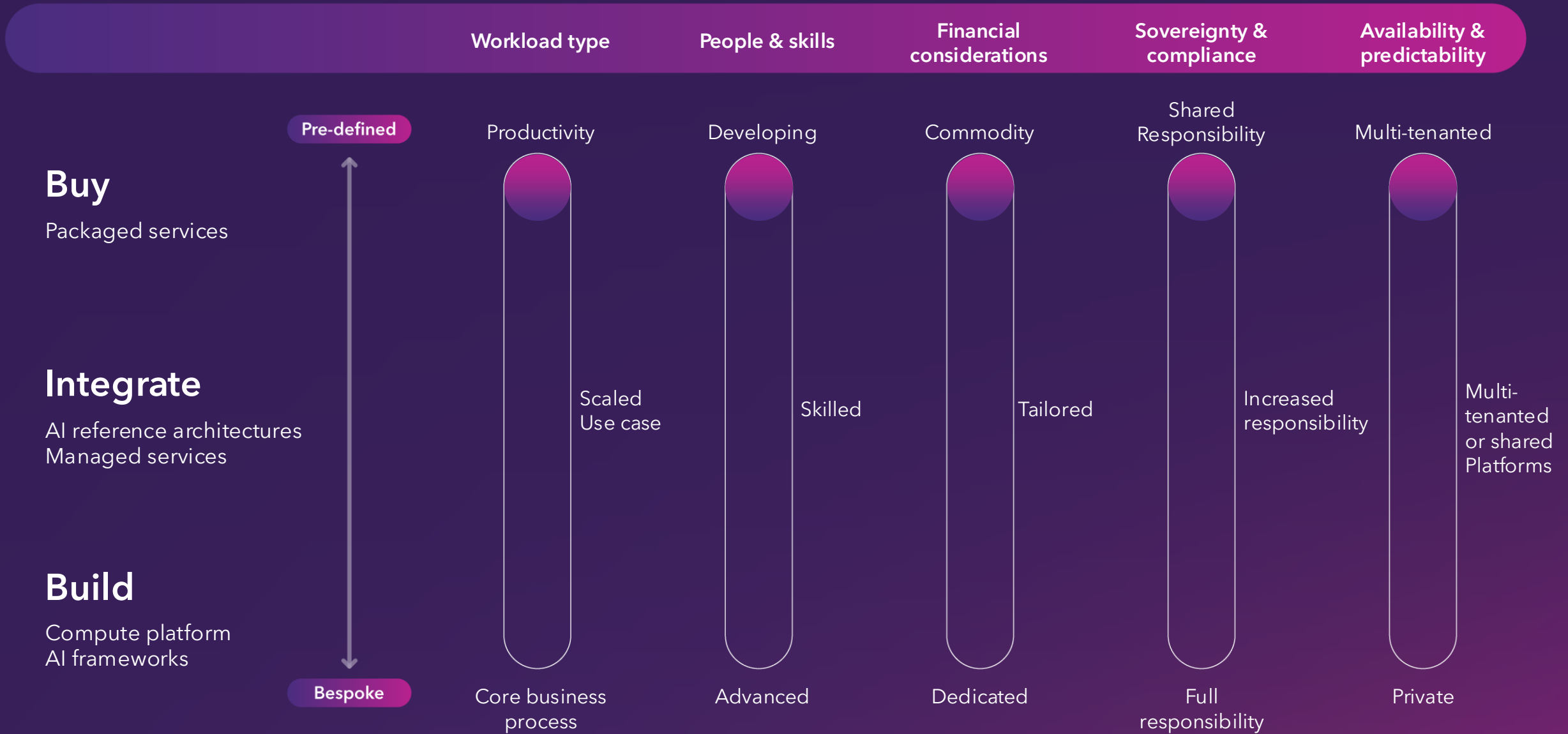
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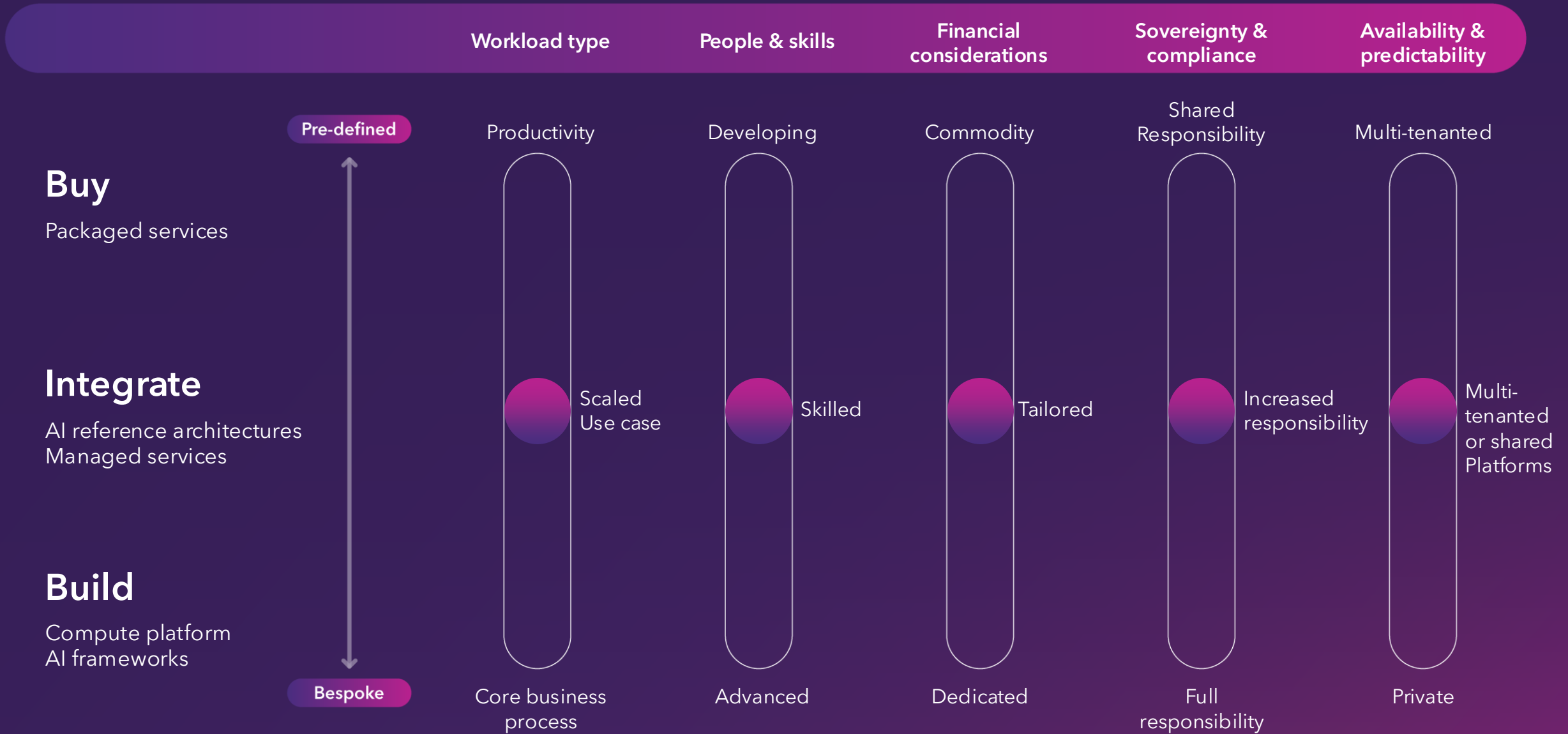
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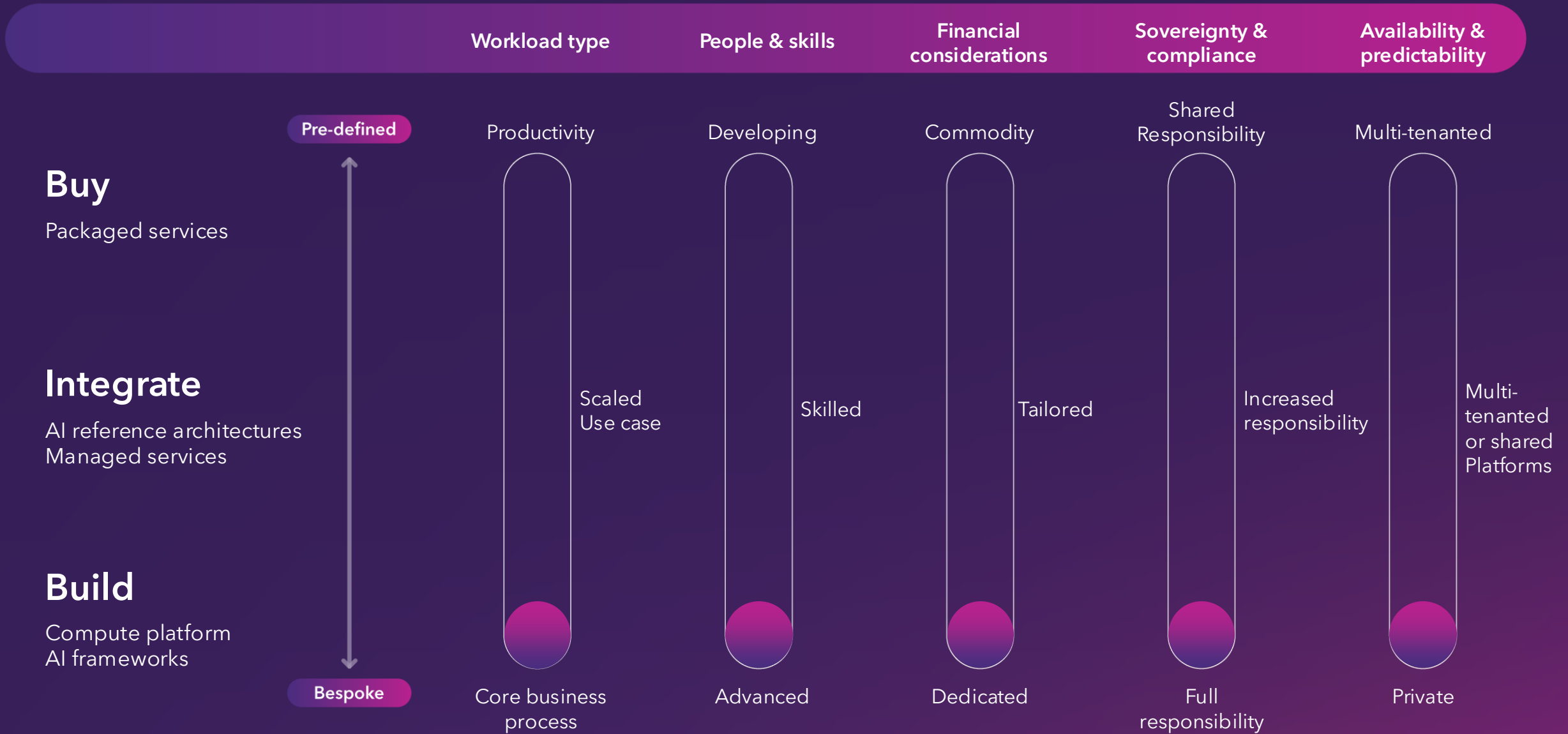
AI Platform Framework



AI Platform Framework



AI Platform Framework



Transport Example



Buy

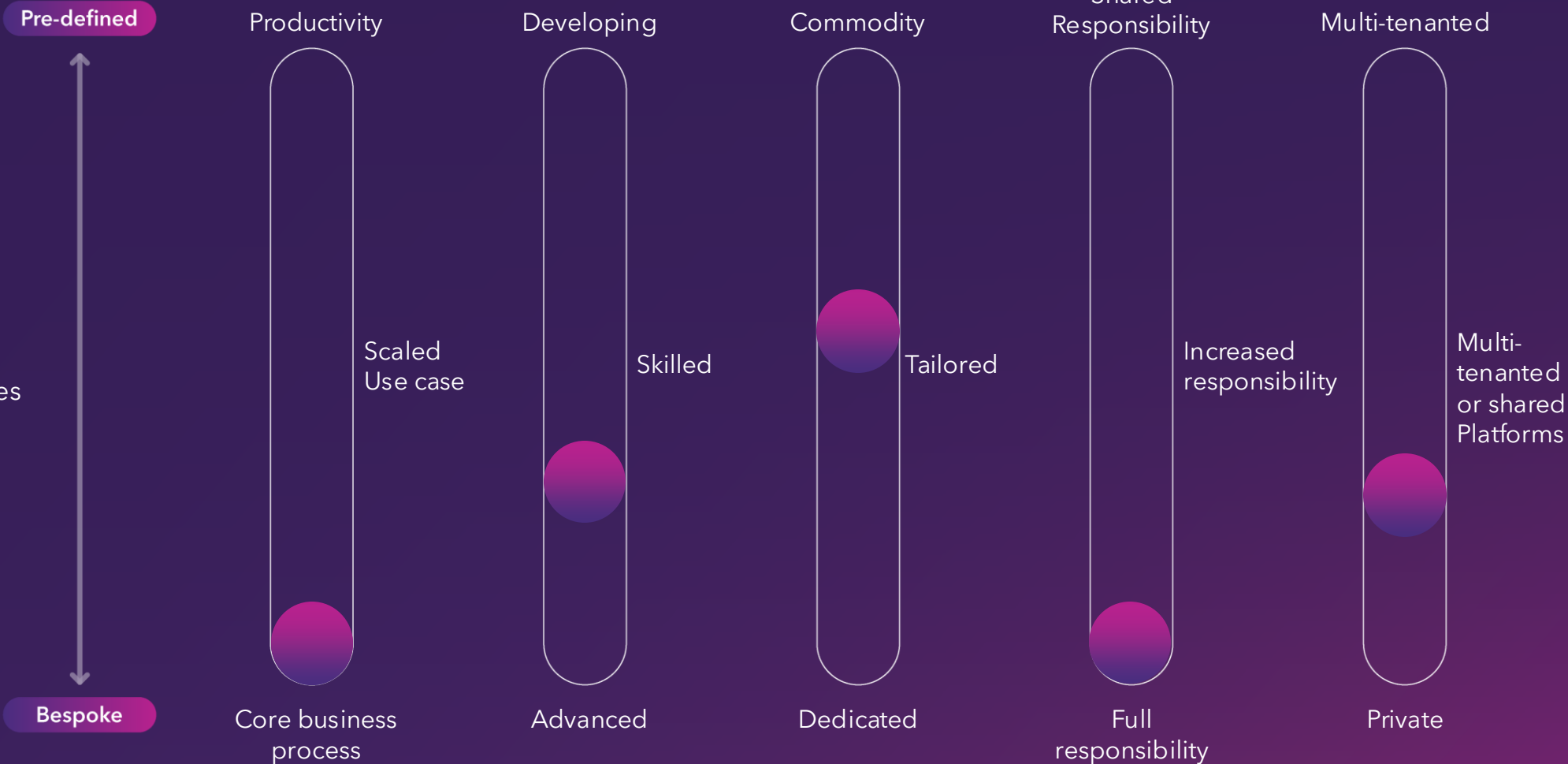
Packaged services

Integrate

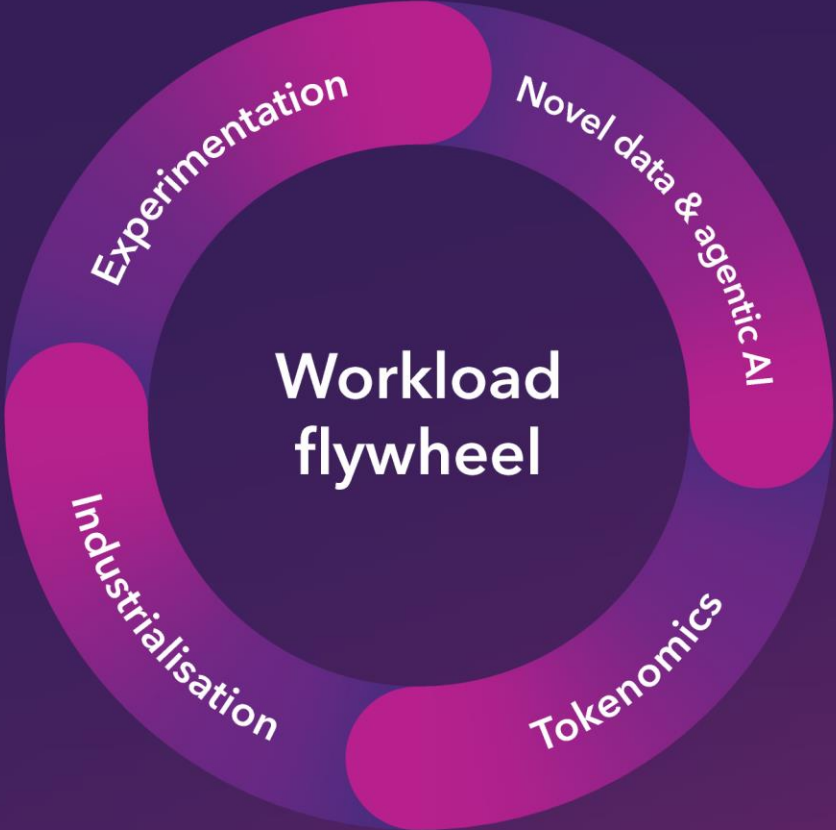
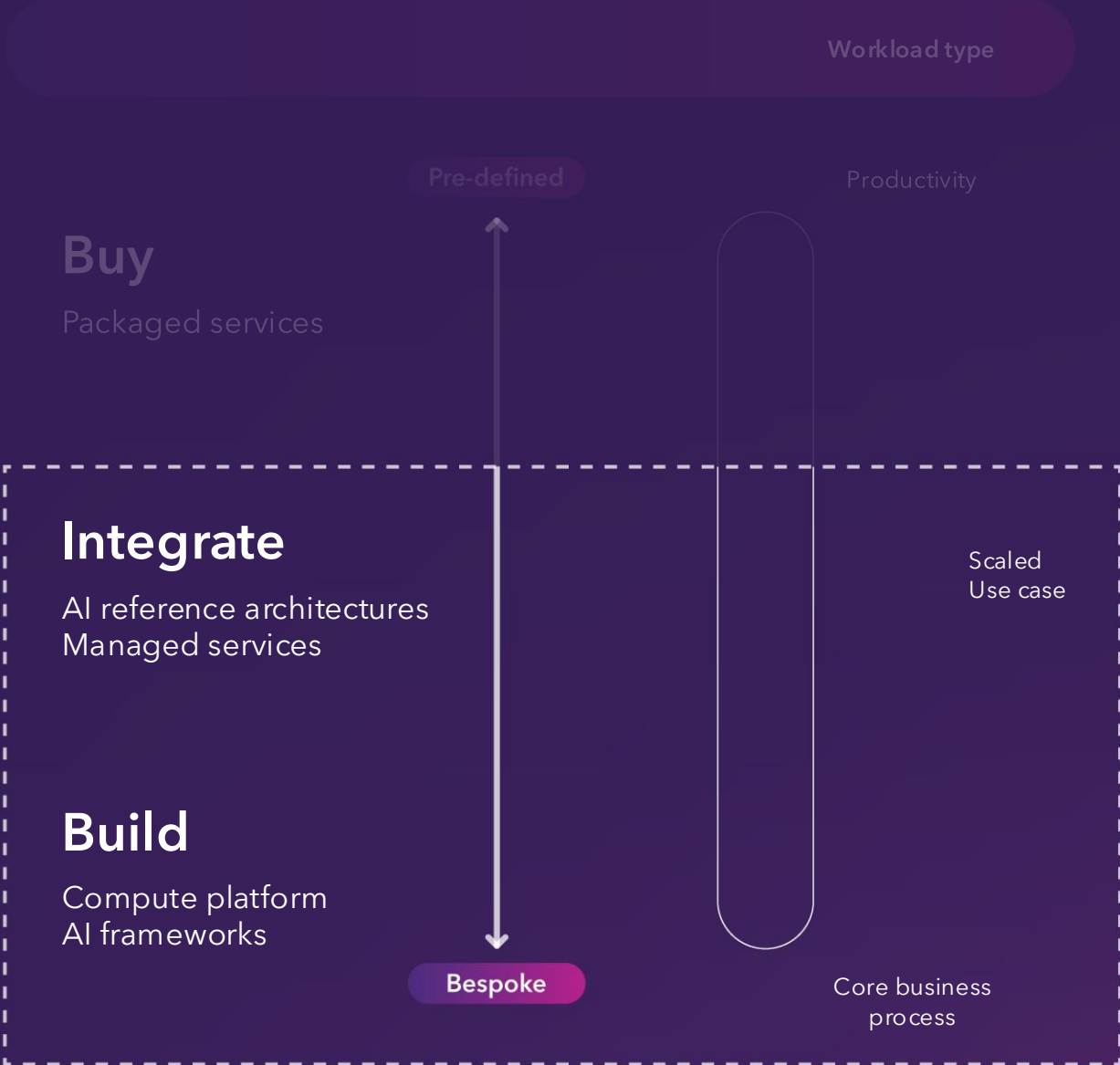
AI reference architectures
Managed services

Build

Compute platform
AI frameworks



Workload Focus



Why AI compute is different

Variable	Traditional DC	AI DC
Compute	CPUs for efficient performance	GPUs for massive parallel processing
Power	5-10 kW / rack	30-50 kW / rack or higher
Cooling	Standard air-cooled	Specialised air or liquid
Storage	Cost effective & secure	High throughput & low latency
Management	VM or container-centric	Specialised to optimise GPU usage

Why AI networks are different

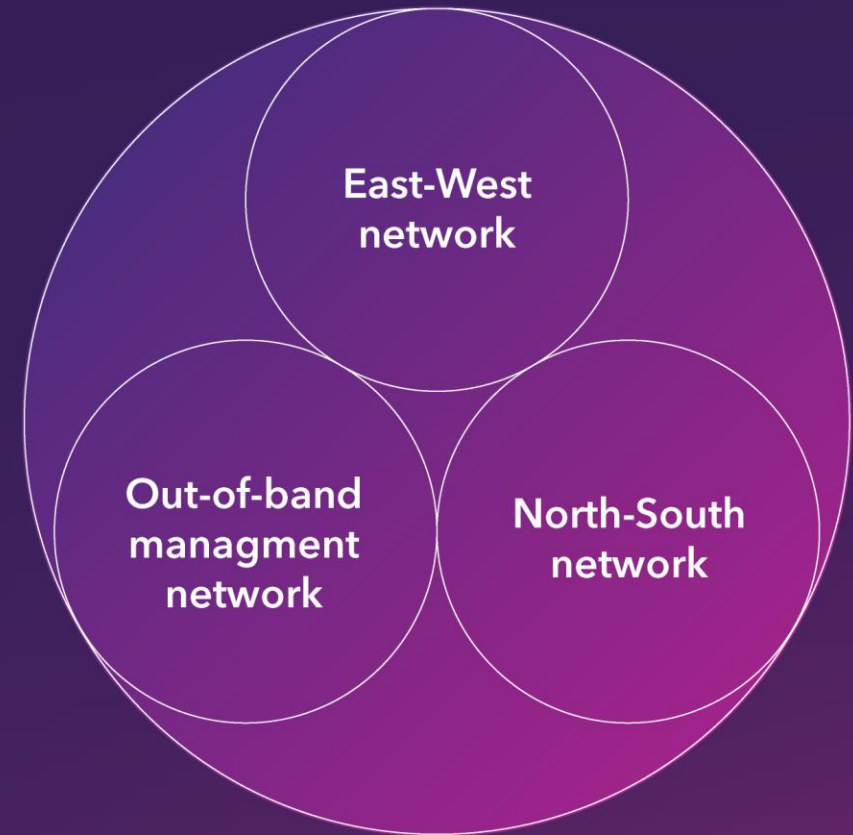


Traditional DC
Networking



Networking for
AI Workloads

3 networks



Networking for AI decision factors: Protocols vs Congestion Management

RoCEv2

- Explicit Congestion Notification (ECN)
- Data Centre Quantized Congestion Notification (DCQCN)
- Packet Flow Control (PFC)

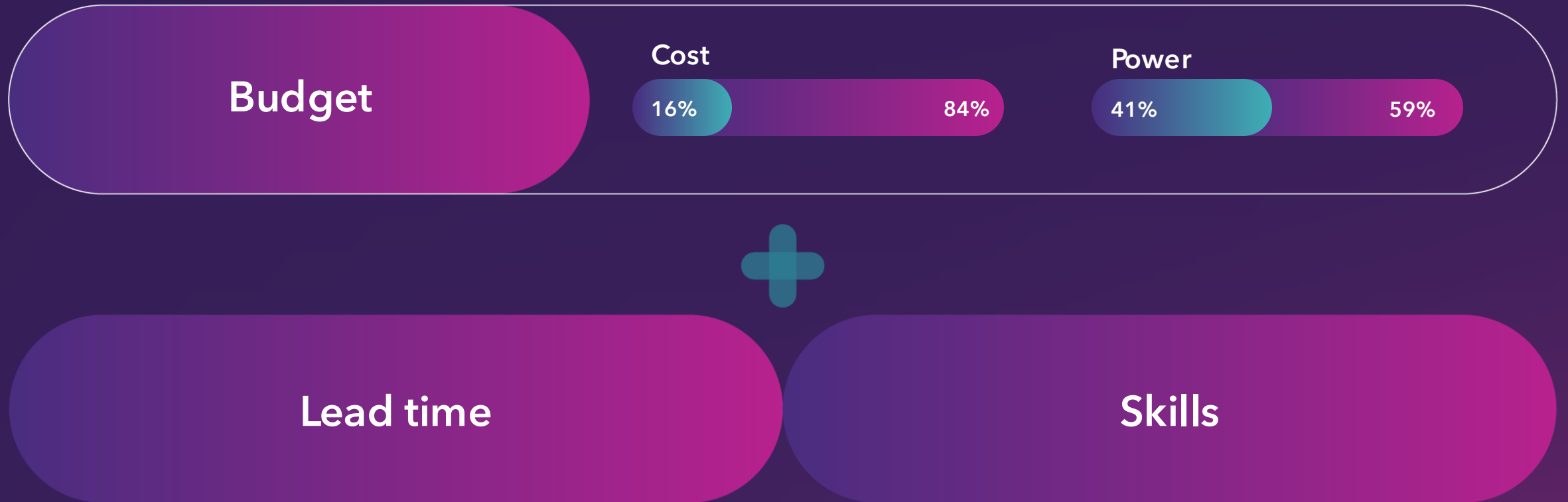
InfiniBand

- Forward Explicit Congestion Notification (FECN)
- Backward Explicit Congestion Notification (BECN)
- Credit-Based Flow Control (CBFC)
- Link-Level Retransmission (LLR)

Ultra Ethernet Transport

- Credit-Based Flow Control (CBFC)
- Link-Level Retransmission (LLR)

AI Data Centre business decision factors



Speakers



Roger Dickinson

Cloud & AI
Infrastructure
Marketing,
Cisco



Richard Wright

EMEA AI Factory
Sales Manager,
NVIDIA

Cisco Secure AI Factory with NVIDIA

Eliminating friction with a modular reference architecture

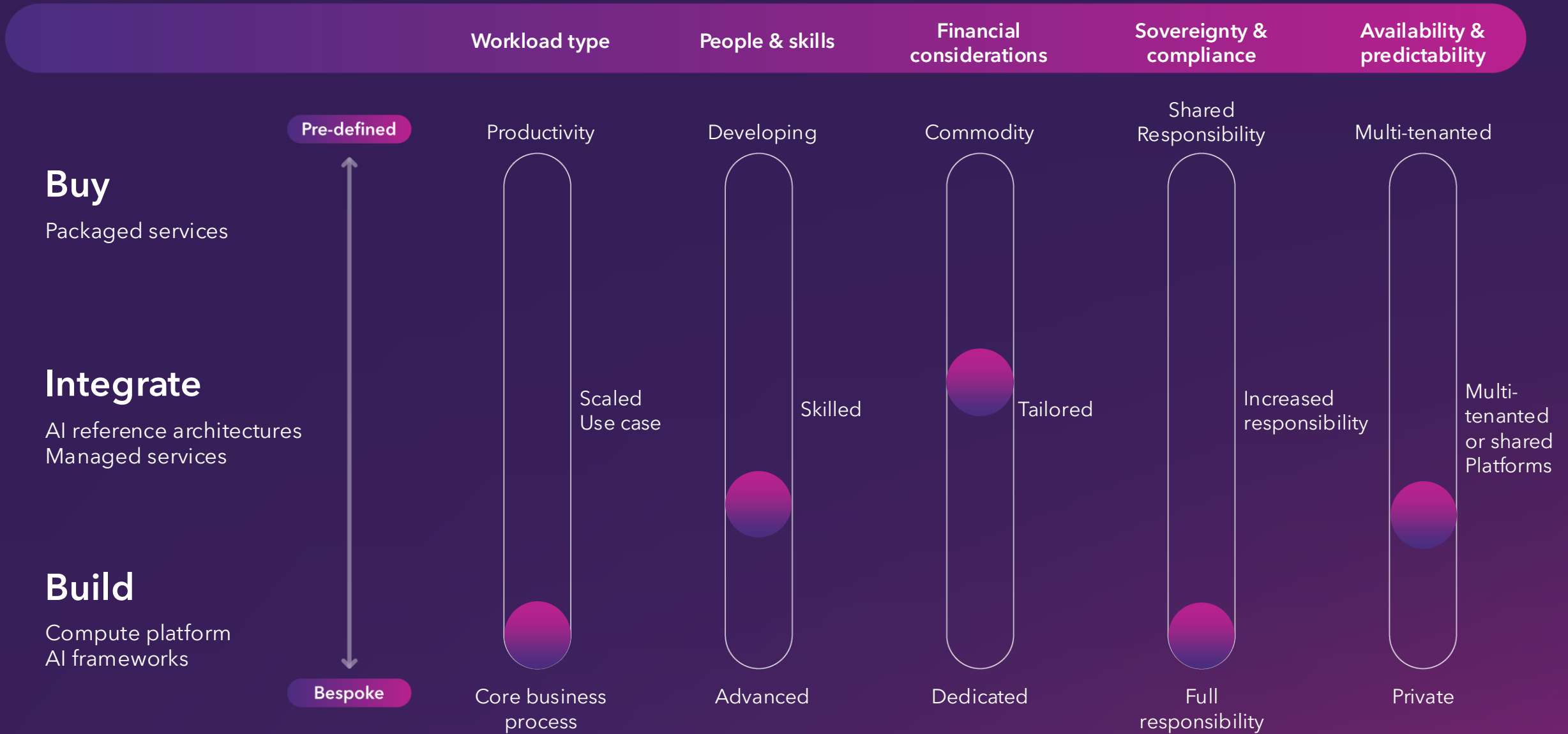


Cisco Secure AI Factory with NVIDIA

Eliminating friction with a modular reference architecture



AI Platform Framework



Want to hear more? Let's continue the conversation...

- ✦ Map your own workloads on the Framework
- ✦ Meet us in the Expo
- ✦ AI Readiness Assessment
- ✦ Register your interest for our Round Table



 SOFTCAT

Thank you

