

How the Metaverse and Crypto Mining will change the need for High Performance Computing (HPC)

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24 May 2022



**The Metaverse is the biggest disruption
in technology in this century**

Jan 2022

Goldman Sachs

“Anywhere from \$2 trillion to \$12 trillion, with **\$8 trillion** at the midpoint”

Feb 2022

Morgan Stanley

“The Metaverse will become the next generation platform to **replace the mobile internet**”

What is the Metaverse

Today

Virtual experiences with selected environments for self-expression



Future

Experience that blurs the line between our physical and digital lives



A typical day in the Metaverse

Virtually try on outfits
for a yoga class

Put on **AR glasses**
to join friends at
yoga class

Place a bid
on NFT for a
new avatar

Join a **virtual workspace** for
meeting with
colleagues

The increase in compute demand is enormous

Intel

“1,000x increase in power is needed over our current collective computing capacity”



Northern Data produces compute power essential to technical progress



Blockchain



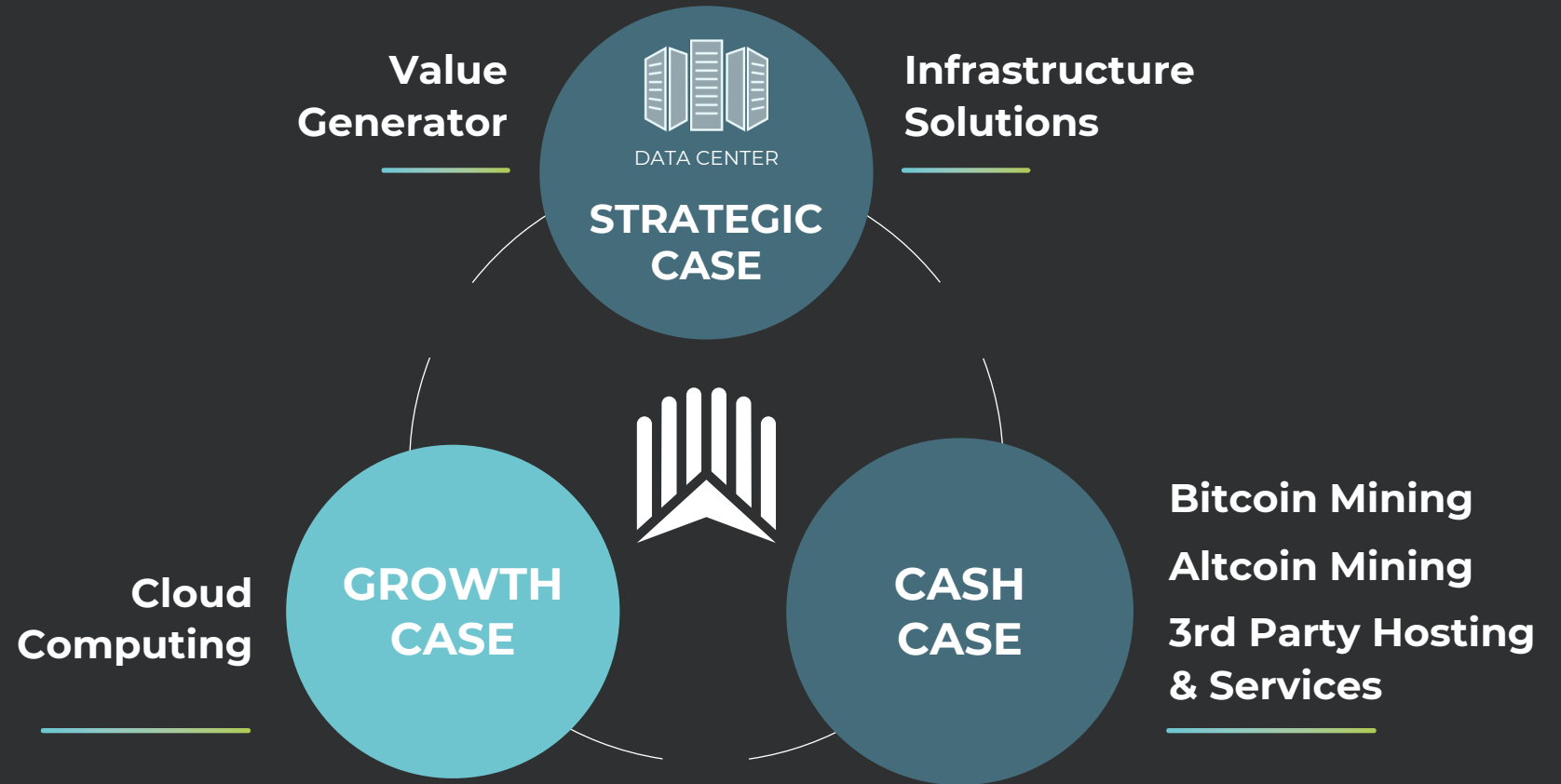
Cloud Computing



AI Compute / Metaverse

3 Business Cases, 1 Vision

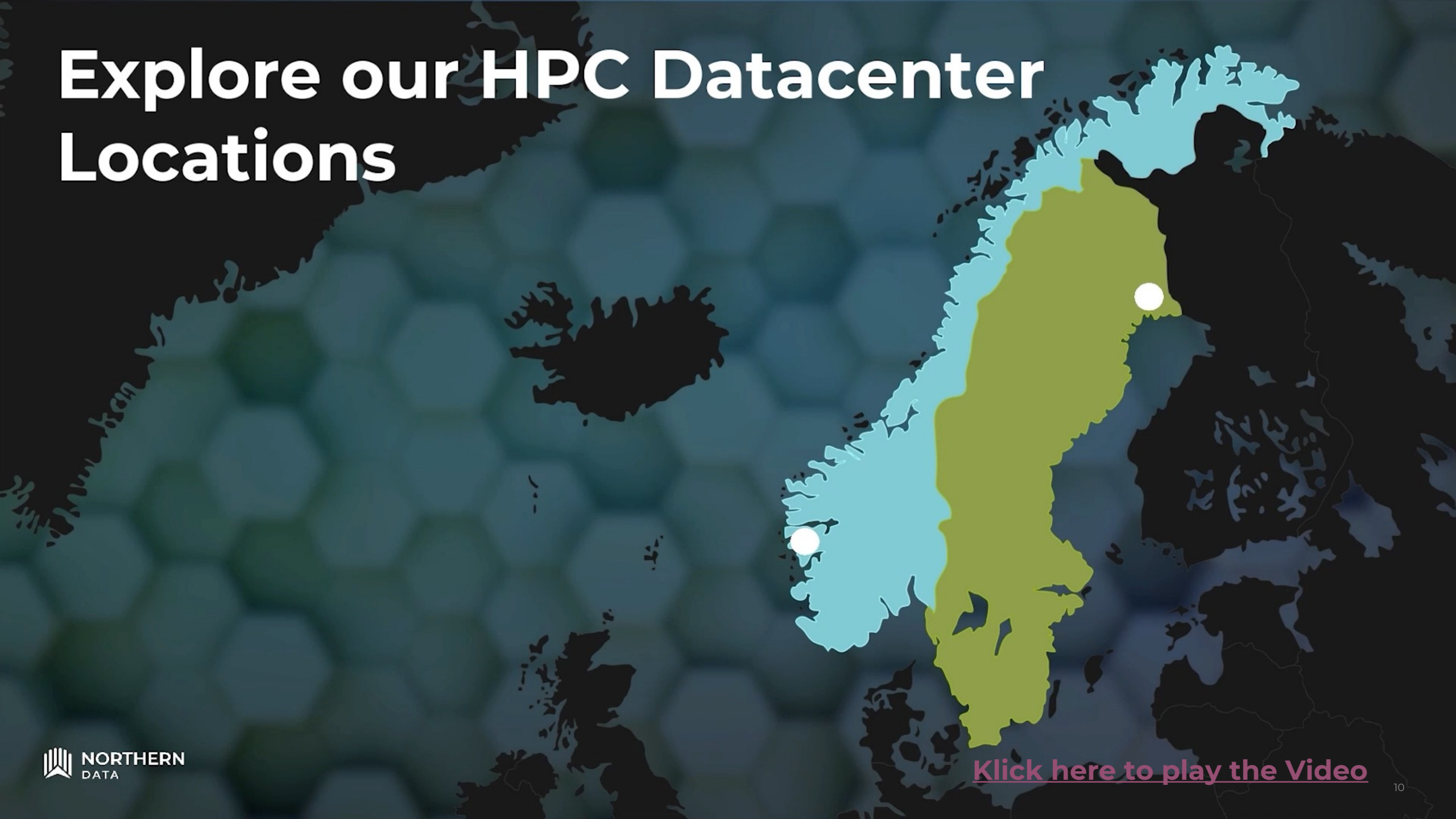
Becoming the
Leading Value
Generator



World Map of our Data Centers

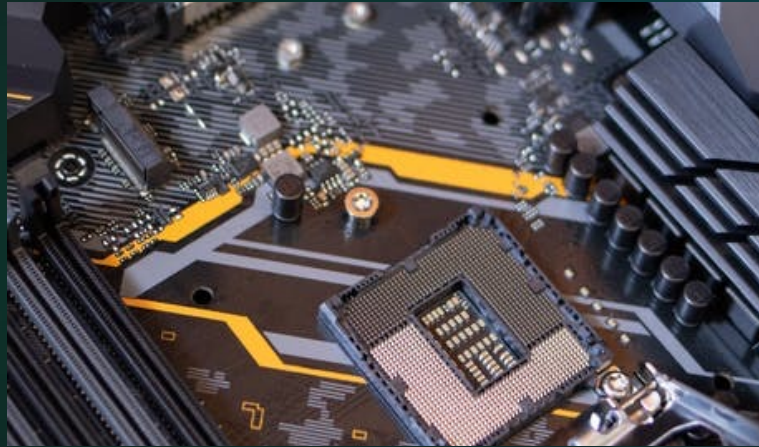


Explore our HPC Datacenter Locations



Various use cases that need Computing Power and Crypto in the Metaverse

HPC serves as the foundation for Metaverse



**HPC
Infrastructure**



**Crypto
currencies**



**Facilitate
Metaverse**

Metaverse

Virtual Content

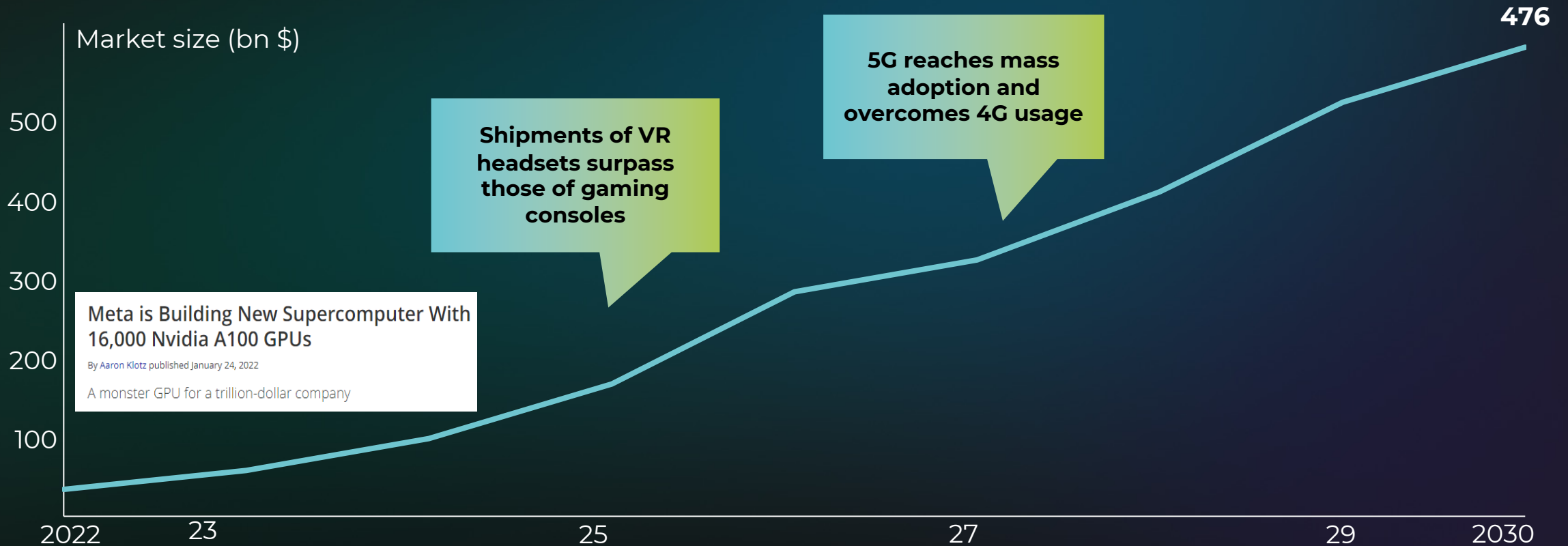
DAOs

(Decentralized Autonomous Organizations)

Art (NFT)

Overall GPU demand driven by Metaverse¹ is increasing immensely

Illustrative



Impact of Metaverse on Crypto Industry



Increase in use cases leads to **higher demand of Ethereum**



Changing **requirements for identity and contracts** boost alternative protocols and currencies



Higher Metaverse adoption needs **mass-market adoption** of crypto currencies

**Northern Data runs HPC data centers globally, is uniquely positioned to provide
... the HPC infrastructure
... and crypto services for the needs of the Metaverse**



Northern Data Cloud Services

Northern Data creates compute power through its HPC Cloud by combining ...



Green Data Center

Efficient datacenters powered with green energy



High-end Hardware

Latest NVIDIA & AMD GPUs



Cloud Platform

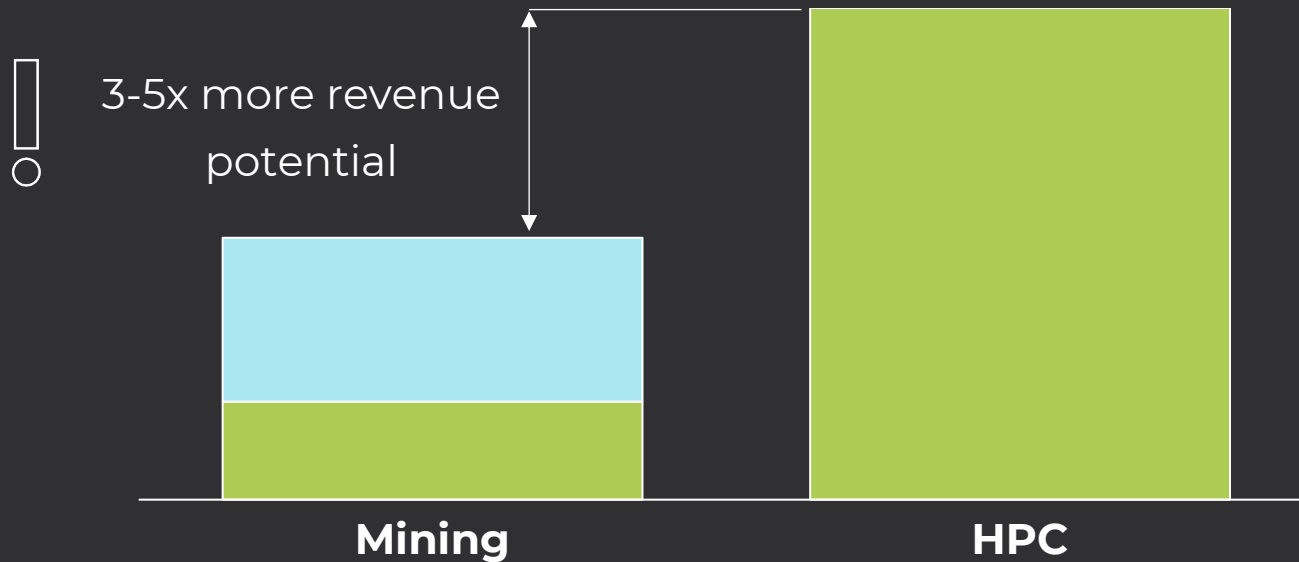
State-of-the-art cloud software stack

... to help our customers in solving complex business problems



Cloud computing services generate 3x to 5x more revenue potential compared to mining cryptocurrencies

Comparison of revenue potential¹



HPC customers are served **as high-priority customers** while mining generates revenues when HPC utilization is low

Northern Data to launch scaled HPC cloud in 2022...

... stay tuned

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