APPLIED DIGITAL

Investor Update

June 2024

Forward-Looking Statements

Market and Industry Data

APPLIED DIGITAL

WHO WE ARE

Applied Digital (APLD: NASDAQ) is a U.S. based provider of next-generation digital infrastructure, redefining how digital leaders scale high-performance compute (HPC). With dedicated and experienced leadership in the fields of artificial intelligence/machine learning, power procurement, engineering, real estate & construction, and data center operations, we believe that Applied Digital is positioned to provide purpose-built, cutting-edge infrastructure for HPC + AI based applications.

STRATEGIC PARTNER

NVIDIA ELITE PARTNER

SOFTWARE PARTNERS

WEKA   zeet   FOUNDRY

R-STEALTH   ZEDEDA

BUSINESS OVERVIEW

Experienced Leadership

Wes Cummins
CHAIRMAN & CEO

- Holds a BSBA from Washington University in St. Louis, majoring in Finance and Accounting
- Founder and CEO, 272 Capital L.P. (2020 – Present)
- Research Analyst, Nokomis Capital (2012 – 2020)
- President, B. Riley & Co (2002 – 2011)
- Current Board Member at Sequans Communications (NYSE: SQNS)
- Former Board Member at Telenav (NASDAQ: TNAV)

David Rench
CFO

- Holds a BBA from the Neeley School of Business at Texas Christian University and an MBA from the Cox School of Business at Southern Methodist University
- CFO, Hirzel Capital (2017 – 2020)
- Co-founder, VP of Finance and Operations, Ihiji (acquired by Control4 – NASDAQ: CTRL) (2010 – 2017)

Kate Reed
CGO

- Director of Sales, Red Hat at IBM Corporation (2021-2023)
- Strategic Partnership Executive, with Watson at IBM (2019 – 2021)
- Business Unit Executive, IBM Security Trusteer (2017 – 2019)
- Strategy Leader – Enterprise Content Management, IBM Cloud (2014 – 2017)
- Leads teams in designing and integrating technology strategies that align with organizational goals

Jason Zhang
Co-Founder

- Holds a bachelor's degree in Economics from Harvard College
- Angel Investor, Startup Advisor, Serial Entrepreneur
- Sequoia Capital, 2017-2019, Investment Analyst
- MSD Capital (Michael Dell's Family Office), 2015– 2017, Investment Analyst

Mike Maniscalco
CTO

- Holds a degree in Computer Science from the Georgia Institute of Technology
- Serial entrepreneur with multiple startups and exits
- Extensive experience in web3, IoT, financial, telecommunications, and healthcare industries
- Former positions at StanleyX and various Fortune 1000 companies

Todd Gale
CDO

- Over 45 years of experience in data center design, engineering, construction, and mission-critical infrastructure
- Vice President of Engineering, Flexential: Led new data center designs and capacity upgrades
- Senior Vice President, Terremark Worldwide: Oversaw the rapid construction of the NAP of Americas, a major data center project
- Pioneer in high-efficiency cooling systems and direct-to-chip liquid cooling for GPU customers

Erin Kraxberger
CMO

- Holds a B.B.A. in Finance from Texas A&M University
- Nearly two decades of experience in marketing and business development
- Former positions include Chief Operating Officer of 272 Capital LP, Head of Marketing & Investor Relations at SCW Capital Management and Senior Relationship Manager at Carlson Capital, LP

BUSINESS OVERVIEW

Company Timeline

Key Achievements

2021
Data Center Business Launched

2021
Broke Ground on First **Blockchain** Data Center in Jamestown, ND **(100MWs)**

2022
Broke Ground on Second **Blockchain** Data Center in Garden City, TX **(200MWs)**

2022
IPO and NASDAQ Uplisting

2022
Broke Ground on Third **Blockchain** Data Center in Ellendale, ND **(180MWs)**

2023
Onboarded First Major Cloud Service Customer

2023
Launched Cloud Service Business **Applied Digital Cloud**

2023
Formed Strategic Partnerships With Top-Tier OEMs, such as Supermicro, HPE, and Dell. Named as NVIDIA Elite Partner

2023
Broke Ground on First **HPC Data Center** in Jamestown, ND **(9MWs)**

2022
Strategic Shift Into HPC; Rebranded as **Applied Digital**, Capitalizing on New Market Opportunity

2023
Broke Ground on Second **HPC Data Center** in Ellendale, ND **(400+ MWs)**

2023
Applied Digital Cloud Continued to Grow its Customer Base, Signing Three of the Largest **AI labs**

2024
Entered into Exclusivity and Executed a Letter of Intent With a **US-Based Hyperscaler** For a **400MW** Capacity Lease

- Over 6,000 H100s deployed as clusters across three data center footprints

- Building one of the largest AI factories capable of housing one of the world's largest supercomputers (up to 60,000 H100s)

- 1.3GW+ in development

- 5 HPC co-location agreements under contract with a robust pipeline of future capacity

- NVIDIA Elite Partner

- First 500MW ESA capacity secured in first 24 months

- Leveraged our position as one of the largest BTC hosting companies to become a top new CSP in the market

Offering Industry Leading Infrastructure Solutions and Compute Intensive Applications

	What We Offer	**Who Are Our Customers**	**Key Segment Stats**
HPC DATA CENTERS	Provide hosting infrastructure through purpose build HPC data centers	Large companies looking for data centers that can handle the power requirements of the new AI / GPU demand	100MW data center under construction with over 1GW of total accessible power + more in the pipeline
APPLIED DIGITAL CLOUD SERVICES	Rent AI/ML companies access to cloud servers to train and run applications	Initial customers are startup AI companies with significant funding We are now seeing demand from mid to large size businesses	Clusters of 1024 GPUs are being installed in our location and third-party data centers
BLOCKCHAIN DATA CENTERS	Provide hosting infrastructure (power and maintenance) to blockchain infrastructure companies	Bitcoin miners – largest customer Marathon Digital Stock Symbol: $MARA	~280MW

THE AI BOOM

The Rise of AI Adoption

Chat-GPT sprints to 100 million users

The time it took for selected online services to reach **100 million users**

Years	Year
11 years	2008
10 years	1999
8 years	2008
5 years	2006
4.5 years	2004
4 years	2008
3.5 years	2009
2.5 years	2010
9 months	2016
2 months	2022
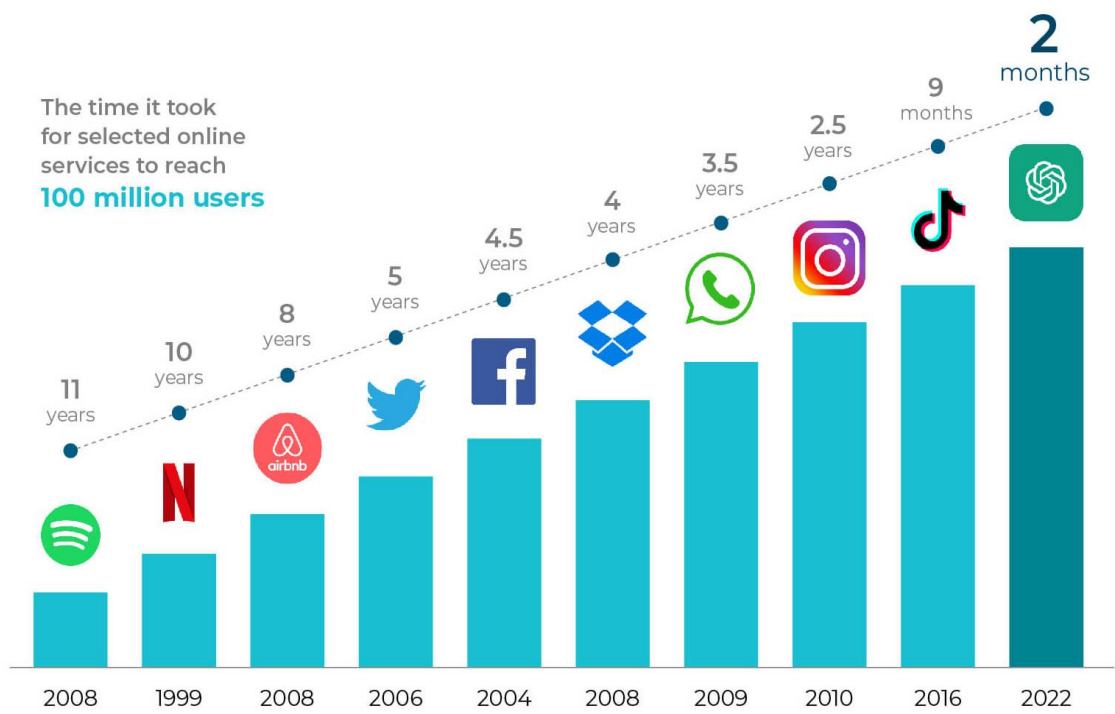
Source: World of Statistics

ChatGPT Monthly Visits

Month	Number of Visits	Change Over Previous Month (%)
November 2022	152.7 million	-
December 2022	266 million	↑ 74.2%
January 2023	616 million	↑ 131.58%
February 2023	1 billion	↑ 62.34%
March 2023	1.6 billion	↑ 60%
April 2023	1.8 billion	↑ 12.5%
May 2023	1.8 billion	-
June 2023	1.6 billion	↓ 12.5%
July 2023	1.5 billion	↓ 6.25%
August 2023	1.4 billion	↓ 6.67%
September 2023	1.5 billion	↑ 7.14%
October 2023	1.7 billion	↑ 13.33%
November 2023	1.7 billion	-
December 2023	1.6 billion	↓ 5.88%
January 2024	1.6 billion	-
February 2024	1.6 billion	-
March 2024	1.8 billion	↑ 12.5%
April 2024	1.8 billion	-
May 2024	637 million	↓ 64.6 %

Source: 365DataScience

THE AI BOOM

AI's Demand for Power

As AI models evolve, their complexity and power requirements are rapidly increasing. Each upgrade brings a significant rise in the number of parameters, leading to higher energy consumption.

GPT-3

175 Billion Parameters
499 Billion Tokens
100 Tokens = 75 Words

GPT-4

10X GPT-3

LLMs

High Speed Networking

Massive GPU Compute

The AI Perfect Storm
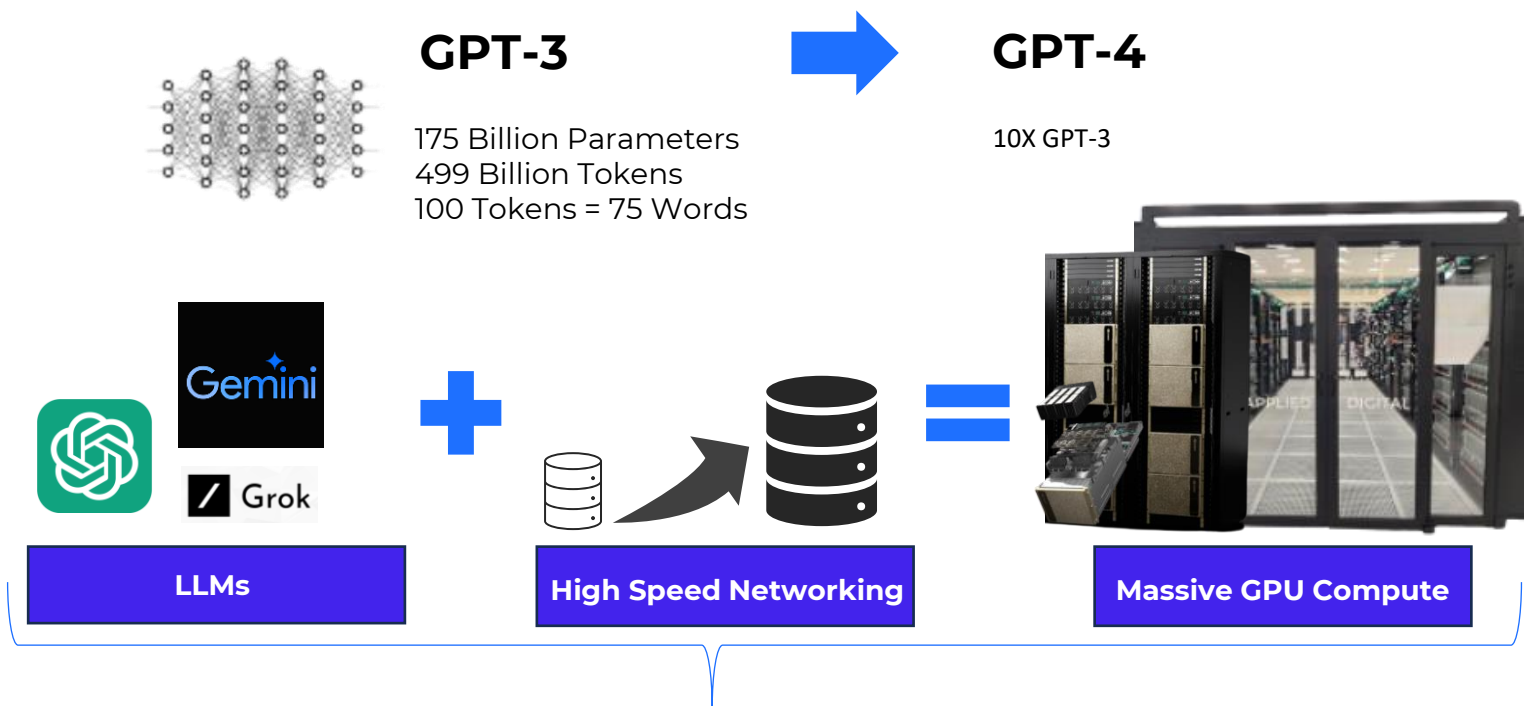
Model Name	Release Date	Parameters
GPT-1	2018	117 million
GPT-2	2019	1.5 billion
GPT-3	2020	175 billion
InstructGPT	2022	1.3 billion
GPT-3.5	2022	200 billion
ChatGPT	2022	200 billion
GPT-4	2023	8x 220 billion
Code Interpreter	2023	-
GPT-4o	2024	-

Source: 365DataScience

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AI's Demand for Power

To keep up with the rapid adoption and evolving requirements of AI, a significant increase in power consumption is necessary.

Data centers' electricity consumption is projected to grow 125% by 2030, using 9% of all electricity in the U.S.
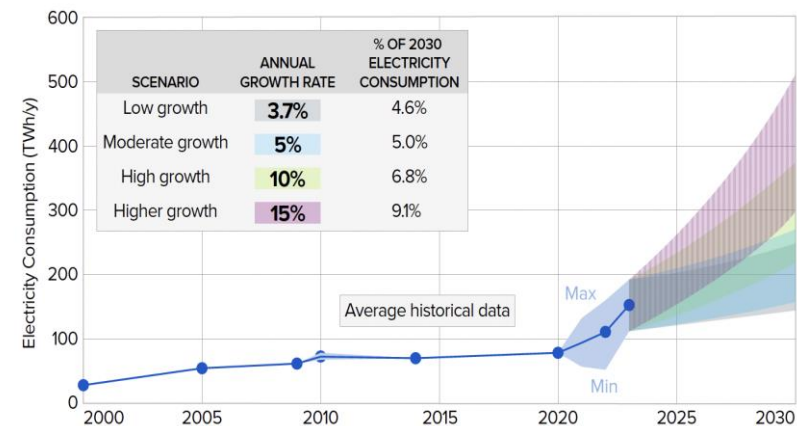
Figure ES-1. *Projections of potential electricity consumption by U.S. data centers: 2023–2030 . % of 2030 electricity consumption projections assume that all other (non-data center) load increases at 1% annually.*

Source: 2024 Electric Power Research Institute

Comparative Power Consumption: AI vs. Traditional Computing

AI hardware demands significantly more power than traditional computing devices:
- Typical CPU in a data center uses approximately 300 watts per hour.
- Nvidia H100 GPU can use 700 watts per hour (comparable to an average American household).

AI queries require 10x the electricity of traditional Google queries:
- *Google request*: 0.3 watt-hours
- *ChatGPT request*: 2.9 watt-hours

Source: 2024 Electric Power Research Institute

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Understanding AI Data Centers

TRADITIONAL
DATA CENTERS

- Low IT MW Load
- Low-Power Density Design (12-15kW)
- Located Near Major Cities
- Optimized for High-Speed, Ultra Low Latency

NEXT-GEN AI
DATA CENTERS

- Requires Purpose Built Infrastructure Designed to Support Significant Energy Consumption
- High Density Support (Up to 120kW)
- Better Suited for More Remote Geographies
- Training is Latency Insensitive

NOT efficient to convert legacy to AI data centers due to design layout and power demands

Traditional Data Center Purpose Built for These Markets	Next-Gen AI Data Centers

Web 1.0
- Internet backbone
- Individual Servers
- Buffering and Waiting

Web 2.0
- Internet backbone
- Centralized Data
- Streaming Apps-Instantaneous

High Performance Compute
- Artificial Intelligence
- Machine Learning
- Language Processing
- Drug Discovery
- Graphics Rendering

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EVOLUTION OF DATA CENTERS

From Population to Power

The number of data centers in the U.S. has doubled in three years

AI data centers are shifting the paradigm. They are less dependent on being near population centers and consume up to 300% more power compared to traditional data centers

New data centers are being built with capacities from 100 to 1000 MW—roughly equivalent to the load from 80,000 to 800,000 homes.

facebook

Microsoft

Google
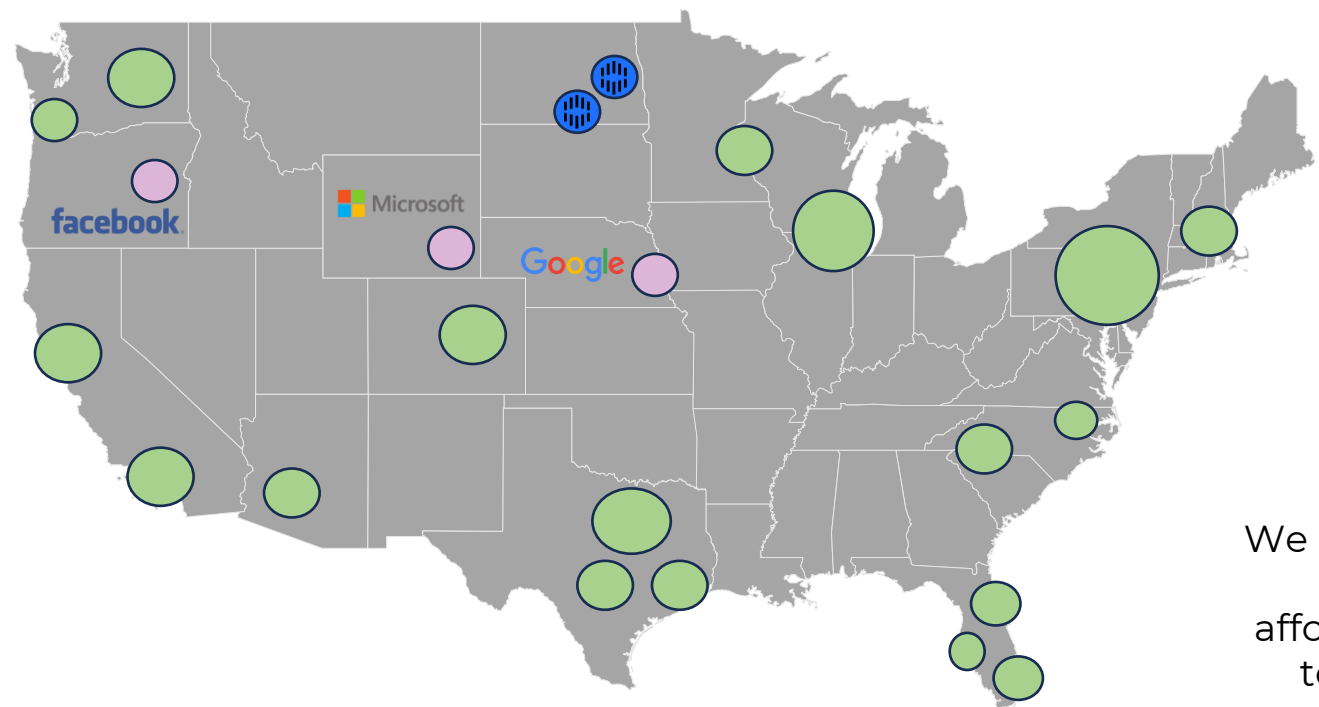
New Hyperscale Data Centers

Traditional Data Centers

Applied Digital Locations

We believe our advantage lies in our access to 100s of megawatts of affordable energy, coupled with our team's ability to rapidly construct quality data centers

REGION OVERVIEW

Data Center Footprint

Custom Built HPC Data Centers

Region	Total Power	Initial Energization
North Dakota, JMS	7.5MW	Energized
North Dakota, ELN	Up to 600MWs	Q1 2025

Applied Digital Cloud (Third-Party Colocation Data Centers)

Region	Total Power
Minnesota	1.5MW
Utah	12.5MW
Nevada	2.25MW
Colorado	4.5MW

Blockchain Datacenters

Region	Total Power
North Dakota, JMS	~106MW
North Dakota, ELN	~180MW

*Currently, we are no longer accepting new clients for blockchain hosting.

Dallas, Texas Headquarters
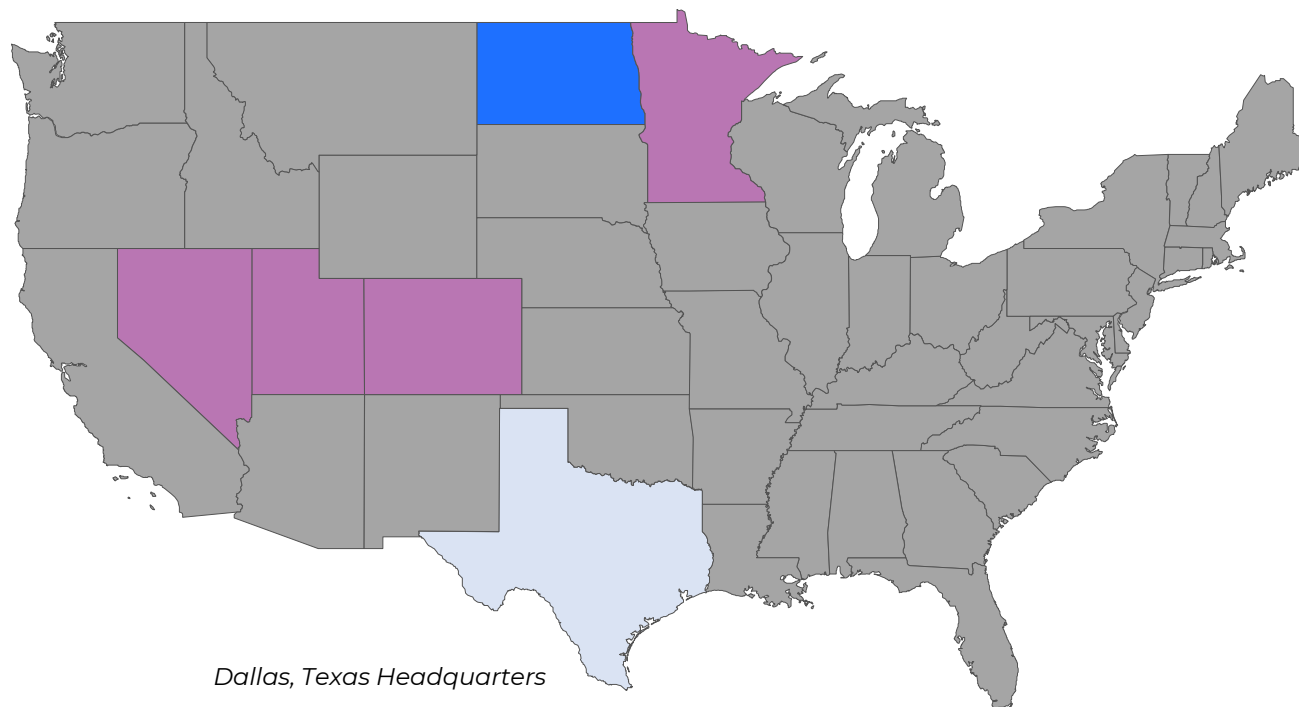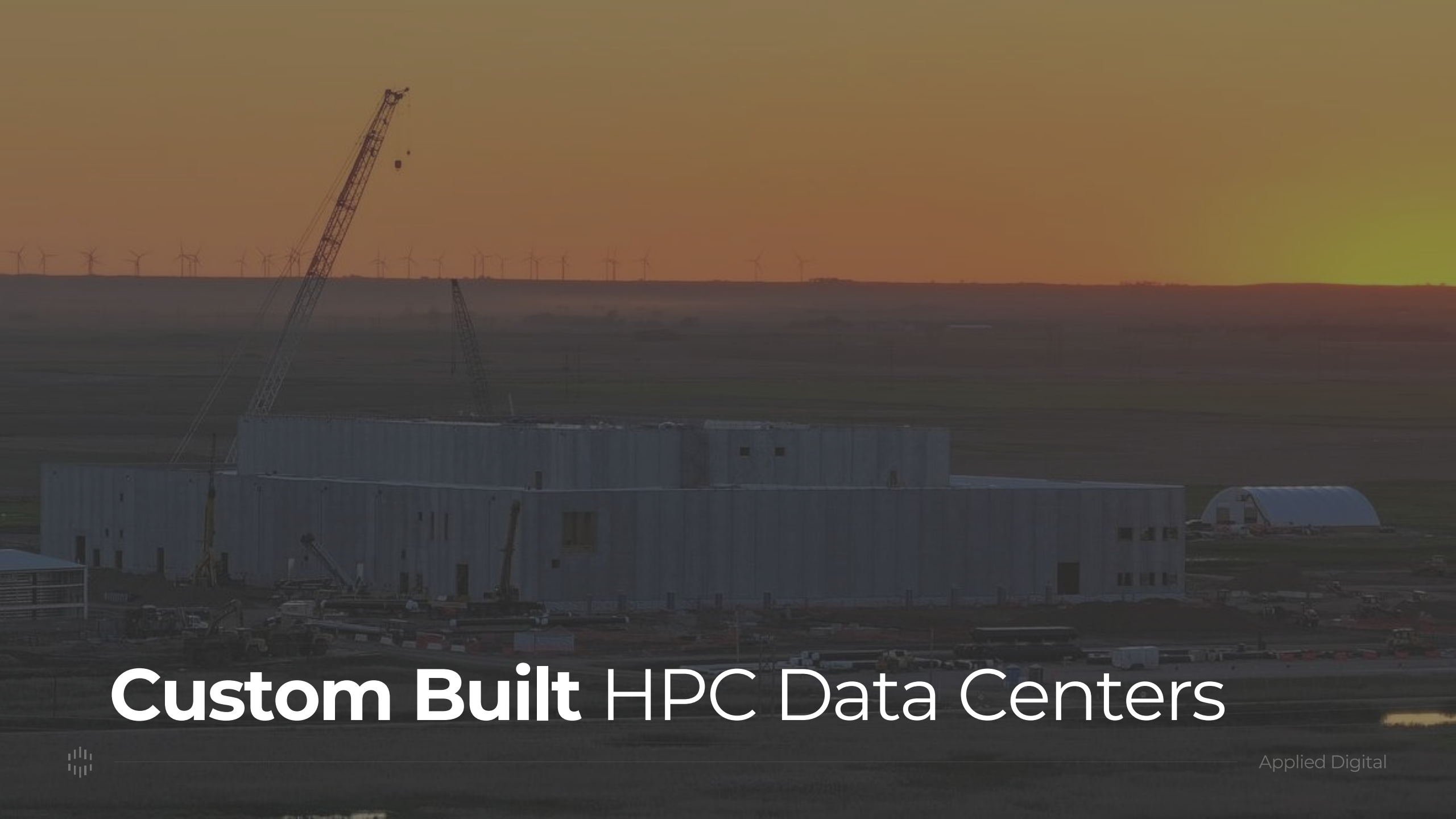
Custom Built HPC Data Centers

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Data Center Solutions

Applied Digital aims to provide next-generation infrastructure solutions, engineered to bring workloads directly to the point of generation. Our data centers are being purpose-built for high power density, optimized performance, and energy efficiency. By leveraging a power-centric design and innovative liquid cooling technologies, we aim to ensure maximum efficiency and reliability. Customers will benefit from a managed hosting environment with state-of-the-art equipment, enabling them to execute critical AI, ML, and HPC workloads effectively.
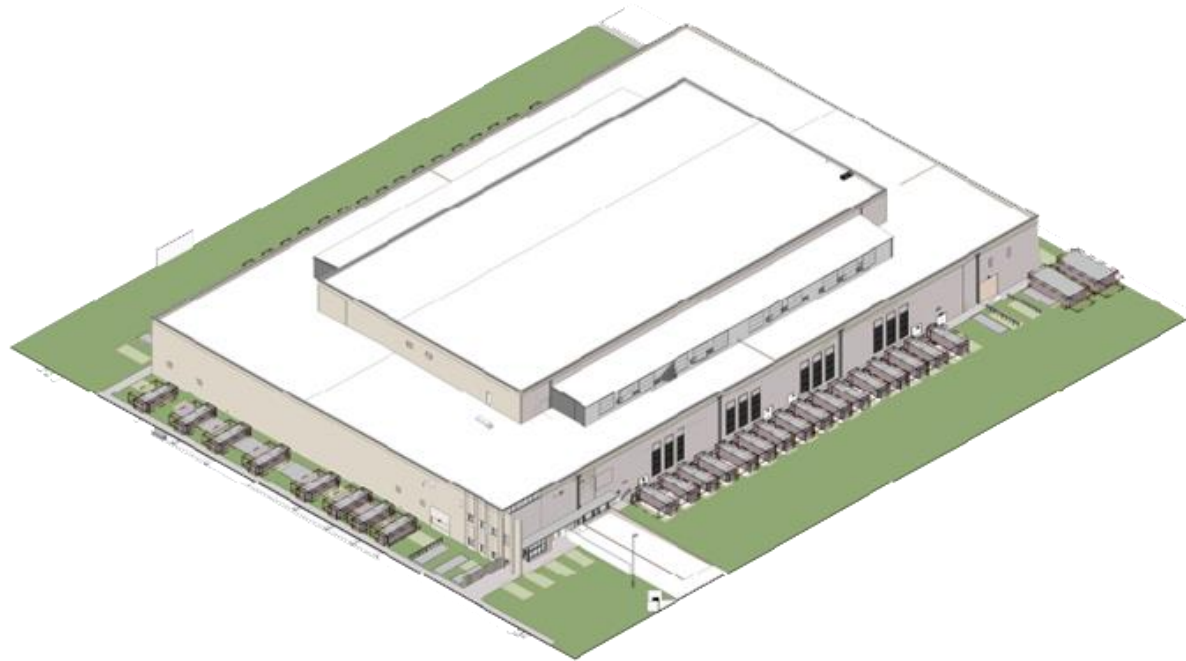
HPC DATA CENTERS

Ellendale AI Data Center: High-Level Overview

Data Center Block - Building A

- Critical IT Capacity – 100MW

Typical Building

- Three story building
- 369,000 GSF building
- 1st floor – Central Utilities
- 2nd & 3rd floors – Data Halls
- 2 Data Halls – 50MW IT Load Each

Technical Details
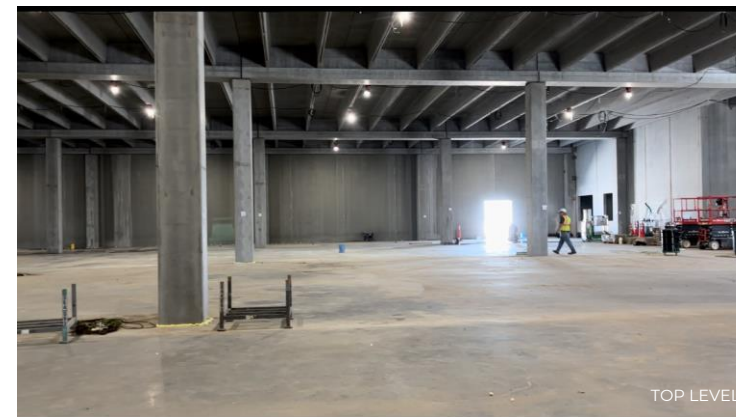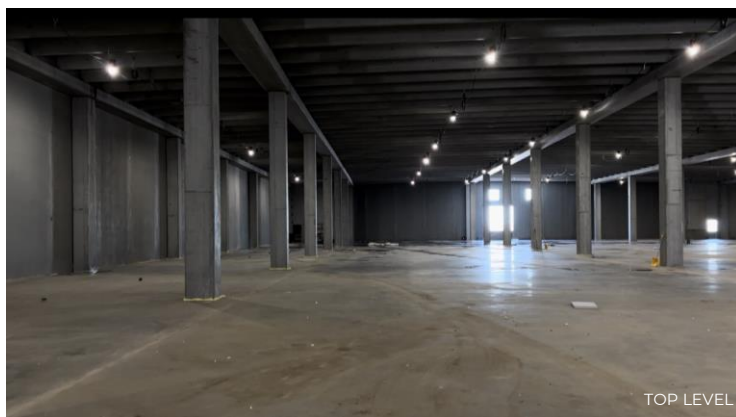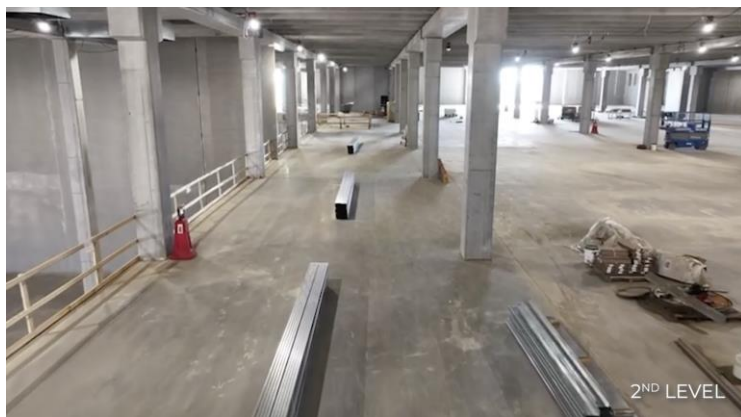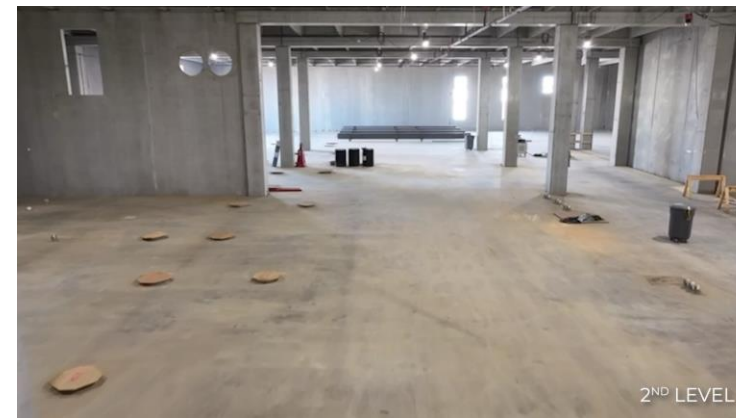
- Peak rack load of 120kW/rack
- Cooling mediums for servers – Direct Liquid to Chip Cooling and Air Cooling
- Peak PUE of 1.3 annual average of 1.2
- Designed to provide higher levels of availability in accordance with industry standards

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HPC DATA CENTERS

Ellendale Construction Progress

EXTERIOR

MAIN LEVEL

2ND LEVEL

2ND LEVEL

TOP LEVEL

TOP LEVEL

Hyperscalers Look for New Markets

Constraints are pushing hyperscalers to explore rural markets and outsource builds

Record Pace of Demand Growth

Description: The recent AI boom is driving significant increases in data center demand. AI applications are highly compute-intensive and will continue to require more computational power as they evolve.

Impact: Deployment sizes in data centers are much larger, consume more power, and need to support new compute requirements. Hyperscalers are increasingly outsourcing to meet this demand.

Resource Availability

Description: Power is increasingly scarce in America, and major data center hubs face significant land constraints, limiting expansion opportunities.

Impact: Hyperscalers are outsourcing to rural markets where power and land are more readily available, enabling more effective data center expansion.

Supply Chain Constraints

Description: Supply chain disruptions are affecting the availability of critical components and equipment needed for data center expansion.

Impact: Deployment sizes in data centers are much larger, consume more power, and need to support new compute requirements. Hyperscalers are increasingly outsourcing to meet this demand.

Rising and Unstable Pricing
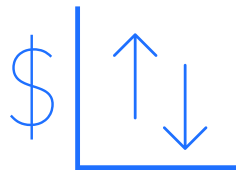
Description: Increasing demand and constrained supply are driving up prices, with build costs significantly rising. Additionally, yields have stabilized, adding pressure on profitability.

Impact: To manage costs effectively and mitigate the impact of stabilized yields and rising build expenses, hyperscalers are looking at rural markets for data center expansion.

HPC DATA CENTERS

Strategic Advantages in North Dakota

Capitalizing on First Mover Advantage Ahead of Growing Demand

Abundant Energy ✓

North Dakota's excess energy supply supports our operational stability and growth.

North Dakota exports the majority of power generated, ensuring a reliable energy source for data centers.

Low Build and Operational Cost ✓

Competitive energy costs lower our operational expenses, maximizing profitability

Energy costs in our North Dakota locations are below national and state averages, potentially saving millions per year on electricity for a 100 MW data center.

Favorable Climate ✓

North Dakota's cold weather offers natural cooling benefits for our data centers.

Leveraging the cold climate, along with advanced liquid cooling technologies, can drive down Power Usage Effectiveness (PUE) and significantly increase cost savings

Economic Incentives ✓

State incentives reduce initial capital expenditure and ongoing operational costs.

Sales tax exemption for owners, operators, and tenants on the information technology equipment and computer software, including replacement equipment and software, of a qualified data center.

First Mover Advantage ✓

Locked in energy prior to the AI movement, ensuring ample resources amidst rising demand

2024 Electric Power Research Institute (EPRI) projects that electricity consumption in North Dakota data centers will nearly double from 15.4% in 2023 to 31.1% in 2030.

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Applied Digital Cloud

GPU as a Service

Applied Digital Cloud

Applied Digital Cloud, a wholly-owned subsidiary of Applied Digital, offers GPU compute solutions to help customers cost-effectively execute critical AI, ML, rendering, and other HPC workloads. Our infrastructure is purpose-built for high performance at low cost. Customers pay a fixed rate to the Company in exchange for a managed hosting environment supported by Company-provided equipment.

Supercomputer Experts

Our specialists ensure smooth deployments, enabling customers to leverage advanced expertise for optimal performance

Leading GPU Deployment

Our access to cutting-edge GPUs enables us to drive substantial growth and scalability

Proven Success

Signed leading AI clients like Together.ai

Deployed 4096 GPUs last quarter

Growth Potential

Competitors' multi-billion-dollar valuations indicate strong prospects for raising capital for Applied Digital Cloud.

APPLIED DIGITAL CLOUD

Applied Digital Cloud Service Overview

GPU Inventory

Applied Digital Cloud owns, maintains, and has access to cutting-edge GPUs

Colocation Deployment

GPUs are deployed and maintained by in-house supercomputer experts in various third-party locations

GPU as a Service

GPUs are available for rent, providing flexible and scalable solutions to meet diverse computational needs

Blockchain Data Center

Operation Update

Applied Digital

OVERVIEW
Blockchain Data Center

Applied Digital operates data centers to provide energized space to blockchain mining customers. The Company has two Blockchain data centers with a combined capacity of ~286MWs. These data centers are dedicated to third-party hosting; Applied Digital does not own any equipment and solely focuses on the infrastructure and supporting services.

Operation Update:

- Ellendale location faced power outages & transformer issues starting in early 2024.
  - ✔ Installing replacement transformers and bringing the power back online.

- Sold 200 MW Garden City location in Texas (non-core strategic asset)

Jamestown, North Dakota Facility
106MWs

Ellendale, North Dakota Facility
180MWs

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