



THE FUTURE OF DATA SCIENCE WITH Z BY HP

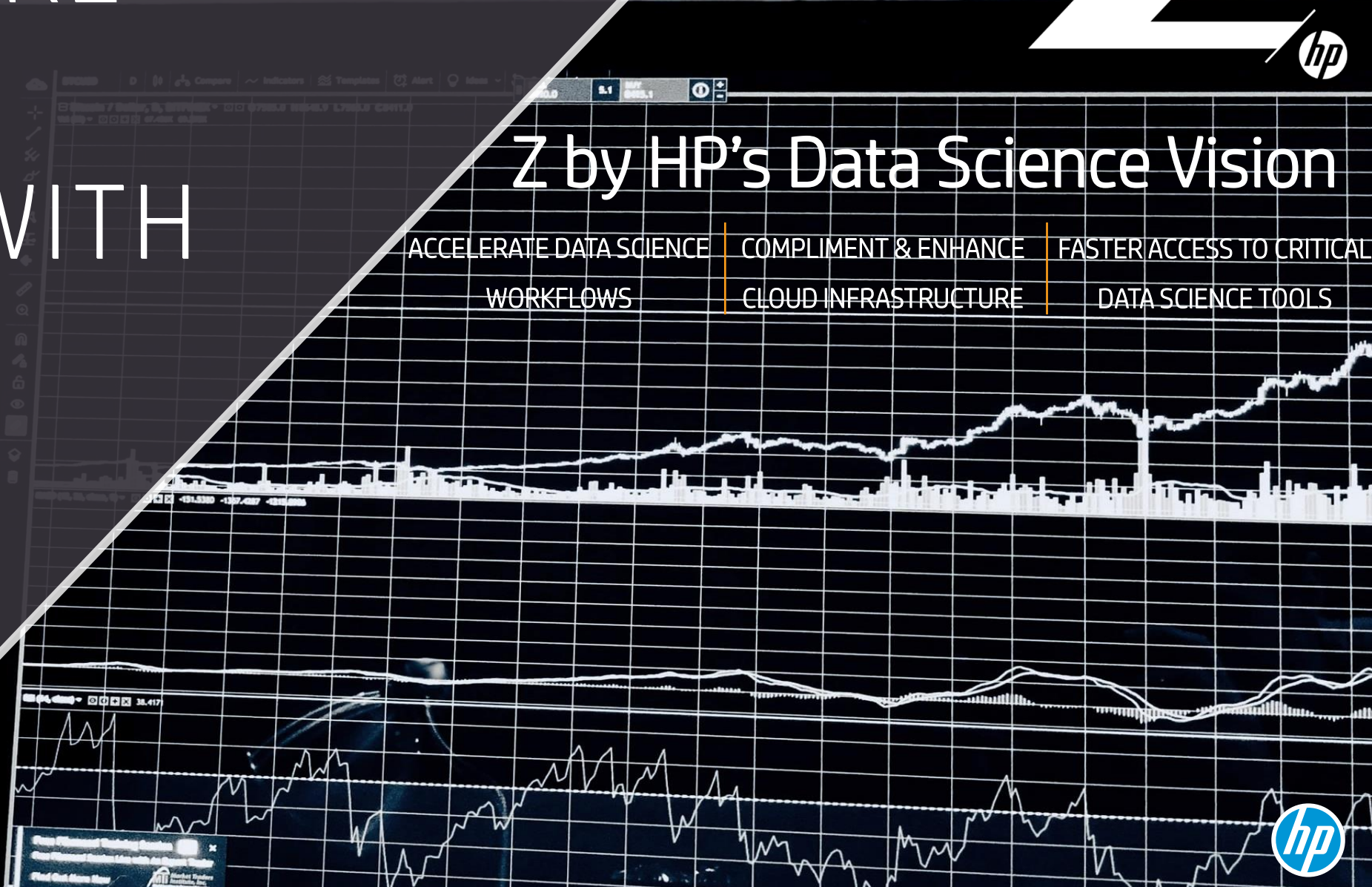
Webinar 30.
October 2020

Z by HP's Data Science Vision

ACCELERATE DATA SCIENCE
WORKFLOWS

COMPLIMENT & ENHANCE
CLOUD INFRASTRUCTURE

FASTER ACCESS TO CRITICAL
DATA SCIENCE TOOLS



Z IS TRANSFORMING HOW WE SOLVE BUSINESS PROBLEMS ACROSS NORMAL &



KEY SEGMENTS



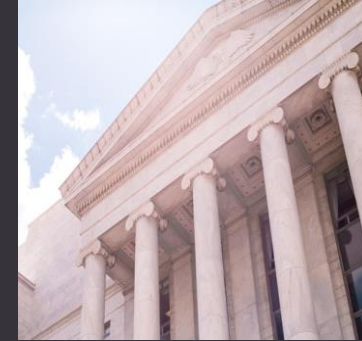
PRODUCT DEV.



MANUFACTURING



HIGHER EDUCATION



GOVERNMENT



HEALTHCARE



M&E



CHEMICAL



OIL & GAS



FINANCE



RETAIL






Dr Google must know what to do:

5 Best Desktops for Data Science 2020:


- **HP Pavilion** TP01 Desktop. Check Price at Amazon. ...
- **Acer Aspire Z24-890-UA91** AIO. Check Price at Amazon. ...
- **Lenovo Thinkcentre v530s** Desktop. Check Price at Amazon. ...
- Kingdel Mini Desktop Computer. Check Price at Amazon. ...
- **Lenovo ThinkCentre M920s**. Check Price at Amazon.

Feb 17, 2020



Best Laptops For Data Science in 2020

- Best For Everyone: **Apple MacBook Pro**. ...
- Best For Professionals: **Dell XPS 15 7590**. ...
- Best Value For Money: **Asus ZenBook 14**. ...
- Best For Data Mining: **Lenovo ThinkPad P53s**. ...
- Best with Touch Screen: **HP Envy 17T**. ...
- Best For Students: **Acer Swift 3**. ...
- Best 2-in-1: **Lenovo Yoga 730**. ...
- Best Value For Remote Server Access: **Apple MacBook Pro 13**.



Example USE CASES



ZCENTRAL SOLUTION: DATA SCIENCE IN RETAIL SEGMENT

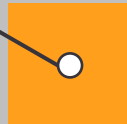
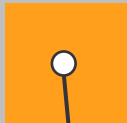
Company Size: 1000 Employees
Target Employees: ITDM, Data Science (Business Analytics), District Manager



Data Scientist

Want: To remotely access data at the source in each retail location and collect unstructured data, clean, model and pull insights quickly for District Managers to adjust promotions.

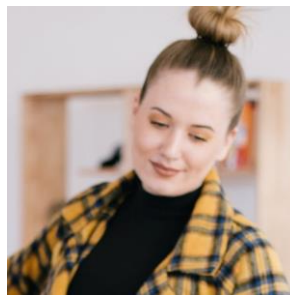
Current Problem: "Our retail locations have limited space in the data closet and the time to upload the data"



ITDM

Want: Flexible remote compute power and predictable costs with easy deployment in limited spaces

Current Problem: "I can't find a cost-effective way to optimize data closet/room footprint and keep ultra-high-end graphics performance, plus I need an easy way to deploy this solution"



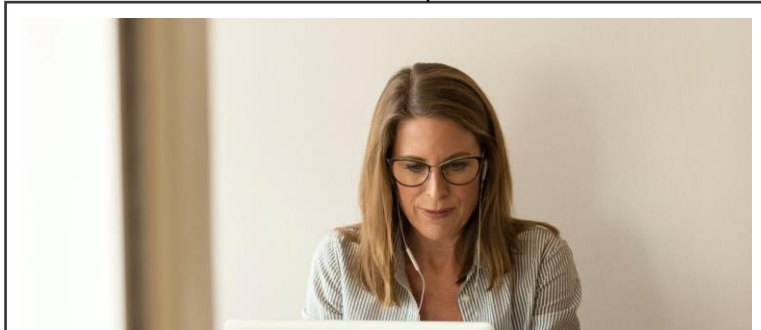
District Manager

Want: To pull customer purchase trends to make better business and deployment decisions even when I am not in the office or stores

Current Problem: "I need to be able to access customer purchase trends to maximize promotions and staff deployment when I am on the road"



ZCENTRAL SOLUTION



ITDM

Solution: ZCentral with DaaS options allows for easy procurement and deployment of ZCentral 4R, mobile devices and ZCentral Remote Boost across all teams with easy management of connections with ZCentral Connect.



Data Scientist

Solution: Remote access to data at the edge with ZCentral Remote Boost. Clean and run algorithms at the source of the data (the stores). No waiting for batch uploads to the cloud and deliver actionable insights to district managers.



District Manager

Solution: Access to trends and run promotion projections on thin and light laptops for real-time decision making



CUSTOMER TESTIMONIAL

NASA

*“The Z8 data science workstation **completely changed the field of possibility** for us... Computations that previously weren't imaginable, we can now do **10-100x faster** and open up entirely new questions to ask.”*

Michael Kirk
Research Astrophysicist at NASA Goddard





AMERICAN AIRLINES

*“With the data science workstations, we're able to **get high accuracy** with the models — **at least 90%**. This helps us plan our cargo freights better than we ever could before.”*

Tassio Carvalho
Head of ML/AI at American Airlines





Z BYHP DELIVER COST EFFECTIVE DATA SCIENCE SOLUTION



8 MONTHS TO BREAKEVEN vs. CLOUD⁴⁴

\$26K ANNUAL SAVINGS vs. CLOUD⁴⁵

Powerful Hardware

Secure Data Workflow



PRE-LOADED DATA SCIENCE SOFTWARE





CANONICAL

UBUNTU 20.04 (LINUX)

Built for Speed and Productivity

Hardware Stress Tested for Performance

Secure and Reliable

Premier Data Science Environment





PRE-LOADED DEVELOPER UTILITIES



GIT

Version-control system



Visual Studio Code

Integrated development environment



PyCharm

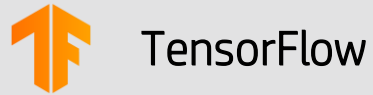
Integrated development environment



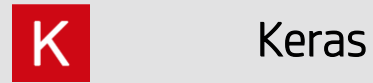
PRE-LOADED DS SOFTWARE TOOLS



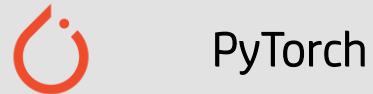
DEEP LEARNING/ML LIBRARY



TensorFlow



Keras



PyTorch



Scikit-learn



XGBoost

PROGRAMMING



Python 2 & 3

DATA SCIENCE LIBRARY



cuML & cuDF

CONTAINERIZATION & VIRTUALIZATION

Docker

Miniconda

GPU SUPPORT

CUDA

NVIDIA GFX

Driver

Virtual-
Container-Toolkit



ENHANCE YOUR CLOUD EXPERIENCE



Cloud Interoperability

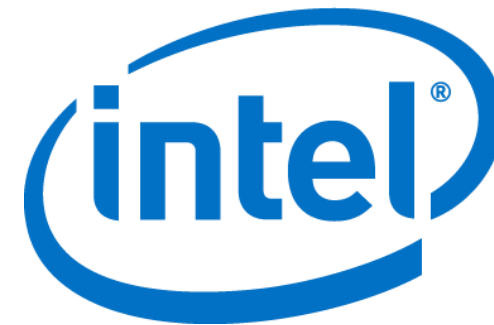
Z solutions now offer cloud command line access for seamless interaction with the main cloud environments AWS, Azure, and Google Cloud.





DATA SCIENCE RELATIONSHIPS

*Z BY HP IS LEADING DATA
SCIENCE INNOVATION WITH:*



kinetica



CONFIGURATIONS



Z Desktop Workstations For Data Science



ZCentral 4R

For data wrangling, cleaning, and visualization

2 to 3BN rows in milliseconds per click¹



HP Z4 G4

For data wrangling, cleaning, and visualization

2 to 3BN rows in milliseconds per click¹



HP Z8 G4

For complex simulation, ML, and processing large datasets

4 to 5BN rows in milliseconds per click¹

DATA SCIENCE TOOLS PRE-LOAD OPTIMIZED RECOMMENDATION

- NVIDIA® RTX 8000 GPU (48 GB)
- Intel® Xeon® W Processors 6C (up to 18 CPU cores*)
- 192-256GB RAM
- Up to (1x 3.5" HDD + 2x 2.5" SSD/HDD) or (4x 2.5" SSD/HDD)
- Ubuntu 20.04
- Optional Aggregated Power Supply

- NVIDIA® RTX 8000 GPU (48 GB)
- Intel® Xeon® W Processors 6C (up to 18 CPU cores*)
- 192-256 GB RAM
- 1TB⁴ HP Z Turbo drive
- 2TB⁴ HP Z Turbo data drive (optional)
- Ubuntu 20.04
- 1000 Watt Power Supply⁶

- DUAL NVIDIA® RTX 8000 GPU + NVLink (96 GB)
- DUAL Intel® Xeon® 8C CPU⁵ (up to 28 CPU cores*)
- 192-512 GB RAM
- 1TB⁴ HP Z Turbo data drive (optional)
- Ubuntu 20.04
- 1450 Watt Power Supply⁷



Z Mobile Workstations For Data Science



ZBook Create
For Data Science students



ZBook Studio
For business intelligence and managers



ZBook Fury 15/17
For business intelligence and managers

500,000 rows/minute

750,000 rows/minute

1 ~ 1.5 million rows/minute

DATA SCIENCE TOOLS PRE-LOAD OPTIMIZED RECOMMENDATION

- NVIDIA® GeForce RTX 2080S GPU (6 GB)
- Intel® Core™ Processors 6C (up to 8 CPU cores*)
- 16 - 32GB RAM
- >512GB SSD

- NVIDIA® Quadro RTX 5000 GPU (16 GB)
- Intel® Xeon® W Processors (up to 8 CPU cores*)
- 32 GB RAM
- >512GB SSD

- NVIDIA® Quadro RTX 5000 GPU (16 GB)
- Intel® Xeon® W Processors (up to 8 CPU cores*)
- 32 - 128 GB RAM
- >512GB SSD



Z Displays For Data Science



Z32 4K Monitor
For Data Science students

31.5" 4K UHD Resolution

- Get expansive screen space on a 31.5" color calibrated monitor
- Tackle complicated datasets with four times more pixels than Full HD
- Ultra-crisp visuals, reliable color and super-fine details



Dual Z27 4K Monitors
For business intelligence and managers

27" 4K UHD Resolution

- See all of your data at once on dual 27" displays
- Ultra-crisp visuals, reliable color and super-fine details
- With 4K UHD, get over 8 million pixels to see every detail of your dataset



Z38c Curved Monitor
For business intelligence and managers

37.5" 21:9 Ultra Wide Curve

- Immerse yourself in your work with an 2300mm radius curve that fits your natural vision
- Work productively on one large 21:9 ultra wide viewing area and 4K-wide resolution
- Ultra-crisp visuals, reliable color and super-fine details



Data Science Evaluation Program

How do I apply?

Evaluation Program Details:

- Trial and test before ordering.
- Provide insights and dialogue with our team to best build out the perfect configuration for your business needs.

Sign up: [Here](#)



THE Z ADVANTAGE

Provides
performance,
partnerships and
security
advantages over
other data science
solutions.



Tak for i dag og god weekend