ORACLE

Innovation with Al, Machine Learning & Data Science

Christopher Clewes

Director, Al & Data Science EMEA Al & Data Science Specialist Team

4th October, 2023



Innovation or just cool ideas

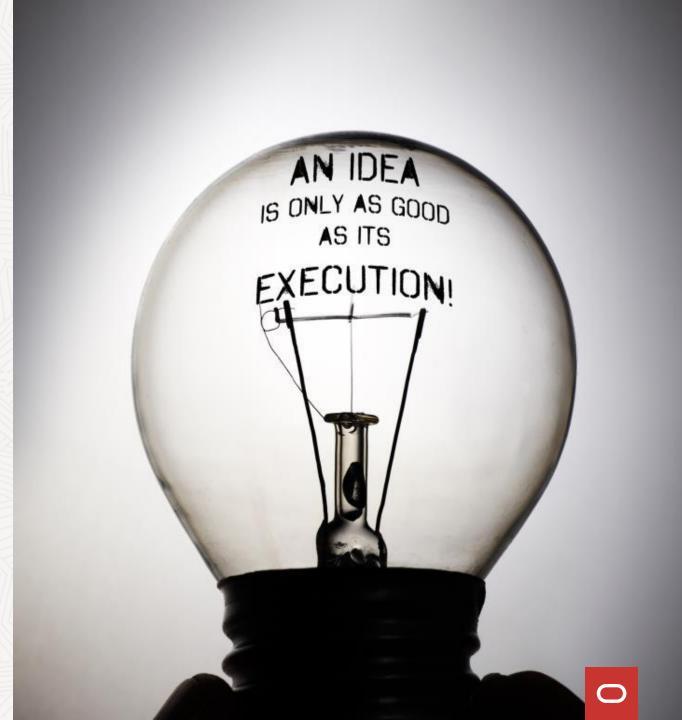
AI & ML ideas fueled by the Cloud

- Access to compute power
- Availability of data
- Access to pre-trained models for experimentation

Useful ... able to be used for a practical purpose

Usable ... capable of being used by someone

Meaningful ... significance & purpose that adds value



Innovating with AI, machine Learning and Data Science

Enhance customer experiences

Improving customer support and generating personalized recommendations

Improve decision making

Leveraging advanced analytics, predictive modeling, and machine learning to identify patterns and trends

Reduce costs & improve efficiency

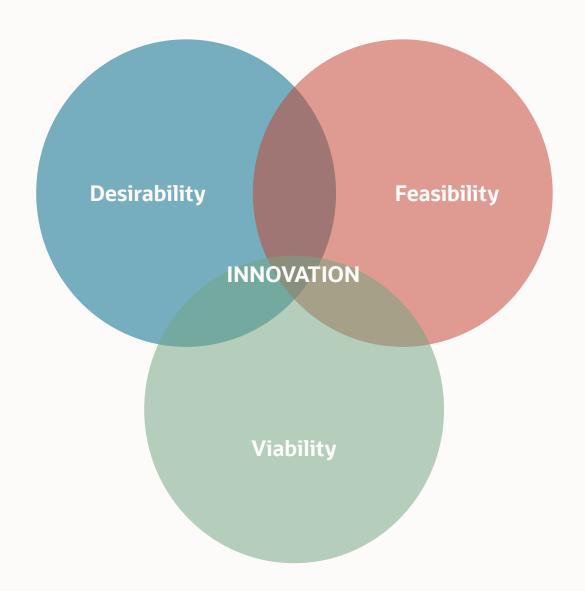
Automating repetitive tasks, optimizing resource allocation, and streamlining processes through intelligent algorithms and process automation

Create new products & services

Uncovering patterns, trends, and correlations that were previously difficult to identify, to stay ahead of the competition and grow market share



Innovation Framework



Desirability

All stakeholders have a need to solve the business challenge

Feasibility

Technically achievable with a reasonable amount of effort

Viability

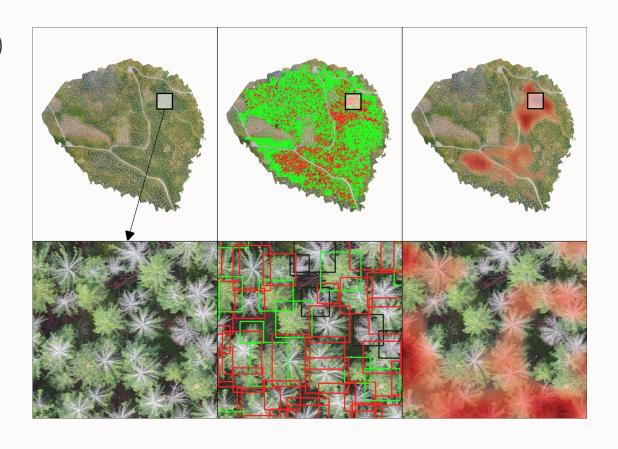
Business value is proportional to the effort required





NIBIO uses Oracle's modern data platform for machine learning

- NIBIO (Norwegian Institute of Bioeconomy Research)
- Transform forest operations by efficiently identifying trees, tree health and environmental impact of the forest, plus many more initiatives
- Desirability
 - Forestry Management, Food & Agriculture, Research teams
- Feasibility
 - Drones, Cameras, Sensors, Data Science, Apps
- Viability
 - Efficient data collection
 - Affordable GPU processing
 - Data capture automation through sensors, cameras attached to vehicles, drones and land management equipment



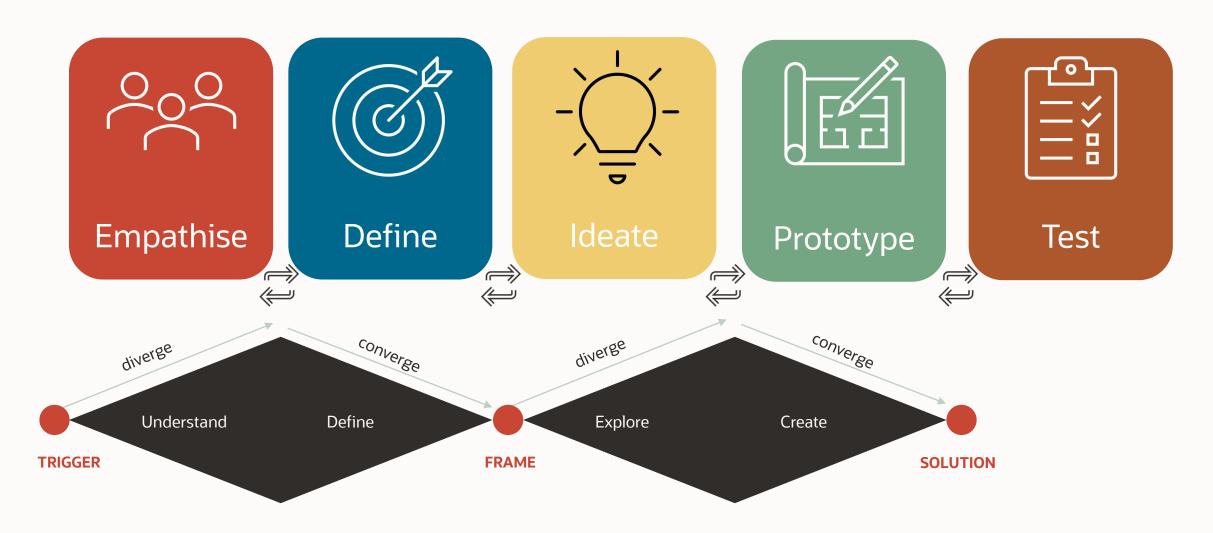


Al & Human Design Processes

- Empathise with the human who interacts or owns the AI & ML innovation
- Respect human attitudes towards Al technology and take them on a journey that builds trust and confidence
- Be clear on when to introduce Al & ML into the process i.e. at "the moment that matters"



Design Thinking





AI, ML & Data Science Platform From Prototype to MVP to Production

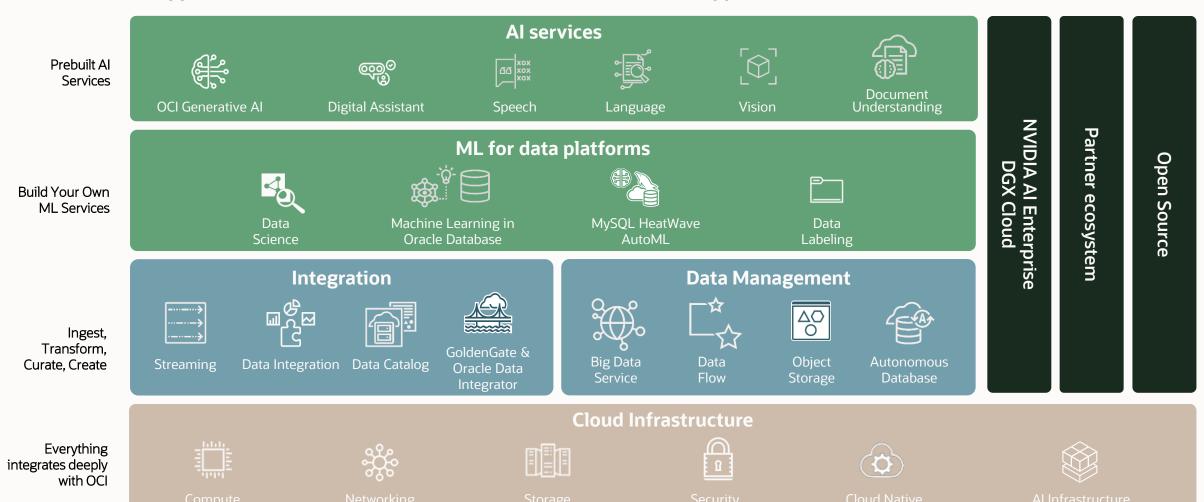
Innovation Culture

Data

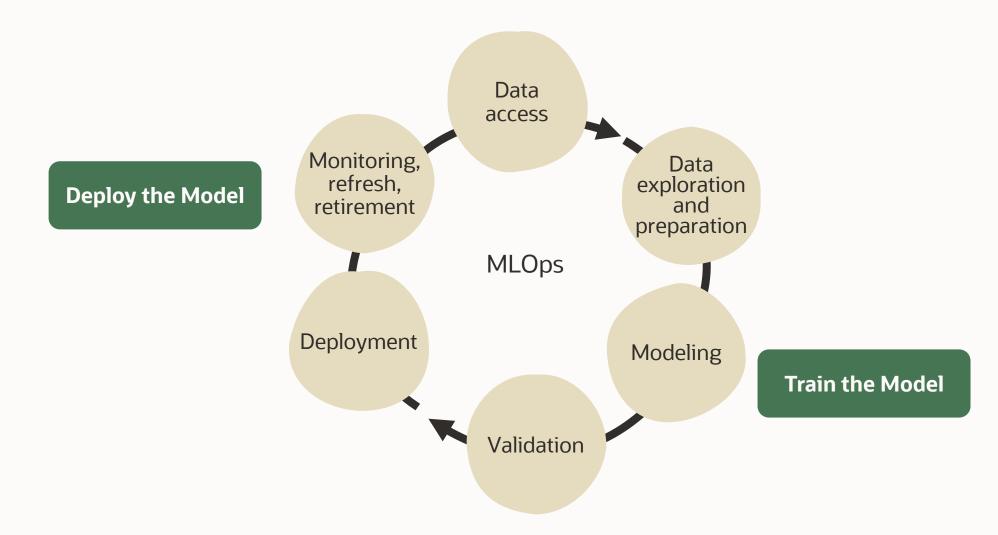


Oracle AI, ML & Data Science capabilities

Al Applications – Custom, Fusion, Cerner, NetSuite, and Vertical Applications



Machine Learning Lifecycle





Al & ML makes a difference in every industry

Manufacturing



MapleSoft created created a digital twin virtual environment for modernized, real-time asset monitoring with OCI Anomaly Detection.

Financial Services



Dojo prevents fraud with blacklisted credit cards and consumer profiles to continuously ensure security and minimize risk with Machine Learning in Oracle Database

Public Sector



Los Angeles County Assessor modernized its processes for 400,000+ documents and property appraisals. Using OCI Data Science, they predicted the market value of homes across the county and forecast budget accurately

Media



OUTFRONT Media trained OCI Vision to identify important characteristics of outdoor media resulting in the following business outcomes:

- ✓ Reduced manual work
- ✓ Reduced time spent organizing images

Higher Education



University of Michigan uses OCI Compute and NVIDIA A100 GPUs for AI training and inferencing; NLP has provided 25% time savings for text summarization.

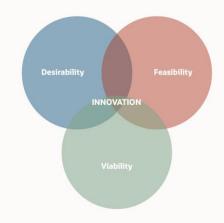
High Tech



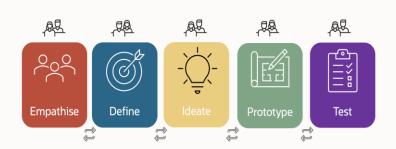
Adept is building a universal Al teammate that's trained with thousands of NVIDIA A100 GPUs and OCI's ultrafast cluster networking technology.



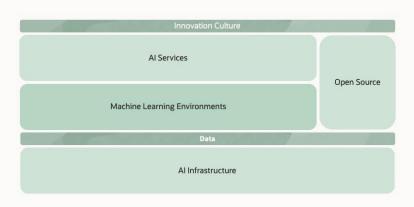
Approaches for successful AI & ML innovation



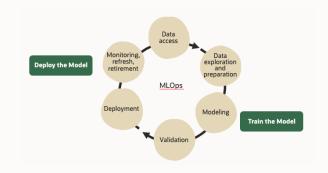
3 Pillars of Innovation



Design Thinking



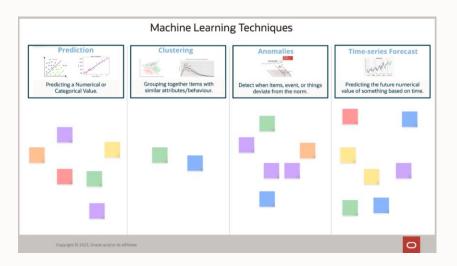
AI & ML Platform

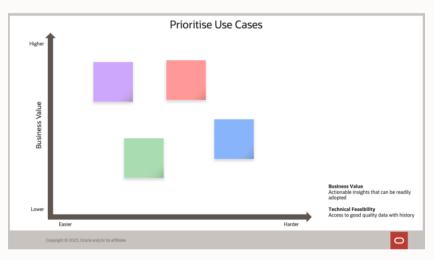


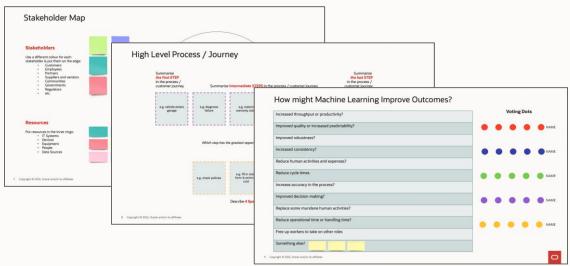
MLOps & ML Lifecycle



Make it a modern and fun experience









Data Science & Machine Learning Approach Workshop

Unlock the potential of AI, machine learning and data science through an interactive ideation workshop tailored to your business goals.

This interactive session empowers you to align Oracle's cutting-edge AI technology with tangible business outcomes. Join us in this workshop where the synergy of ideas and expertise converges into a business lead data science driven journey.

Request now



Overview

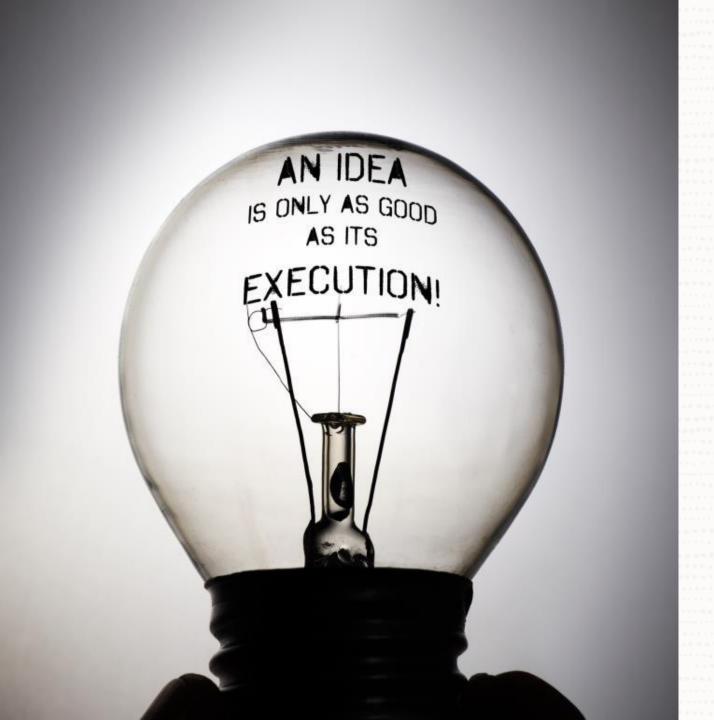
Oracle's 'Data Science & Machine Learning Approach Workshop' offers an engaging ideation session that takes participants on a journey from creating lots of ideas through to mapping the ideas to practical AI & ML techniques and then ultimately assessing the business value behind each idea. This is done in a fun an interactive way with lots of relevant customer examples showing practical solutions using Oracle's AI & ML capabilities.

You will spend 90 minutes with Oracle AI & Data Science specialists and at the end you will have a prioritised list of high value AI & ML use cases.

Hearing the latest customer examples and seeing Oracle Cloud Infrastructure in action you will leave the workshop equipped with the insights needed to transform AI and data science concepts into practical reality and ultimately deliver business value at speed.

This workshop is designed for existing Oracle Cloud Infrastructure customers with AI and machine learning objectives. Oracle have been using this engagement model for over an extensive period and our customers testify to this modern and innovative approach to technology.





Al and Machine Learning IDEAS EXECUTED

ORACLE