

AN IMPLEMENTATION MODEL FOR MACHINE LEARNING

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Agenda & Discussion Points

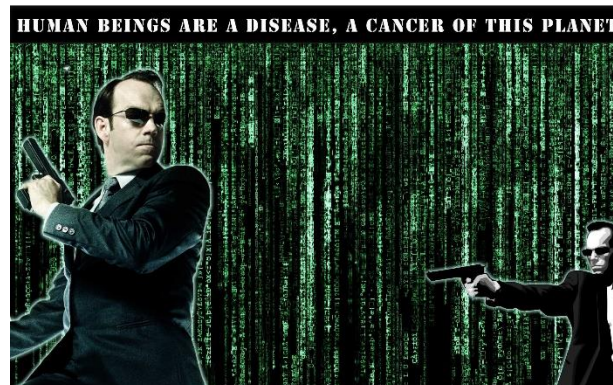
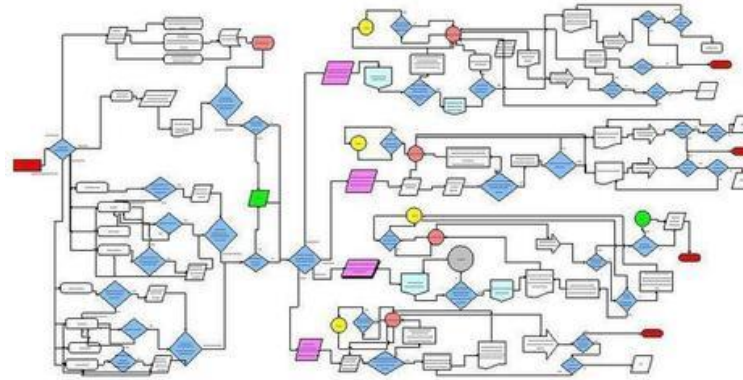
- Organizational Momentum
- Project Selection
- Leverage Capabilities
- Implementation Roadmap

Sources of the Constraints

Technology



Process



People



Focused Plan of Attack

Patients
targeting for
faster and
effective
yield of
clinical
subjects

Subject data
turned into
meaning
results
faster

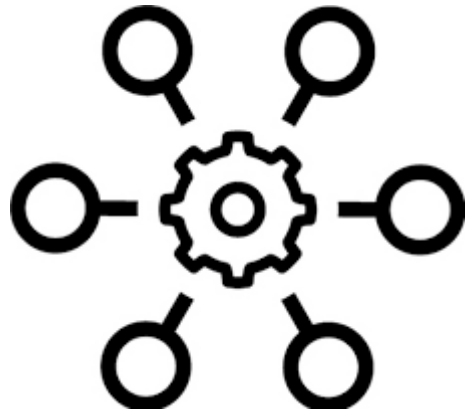


Guiding Principals

- 
- 1 Solve problems where we know the answer
 - 2 The process to achieve the answer is highly repeatable
 - 3 Easy accessibility to source data and rules to train the machine brain
 - 4 Keep the problems small and focused
 - 5 Solve problems that will continue or get bigger in the future

Implementation Roadmap

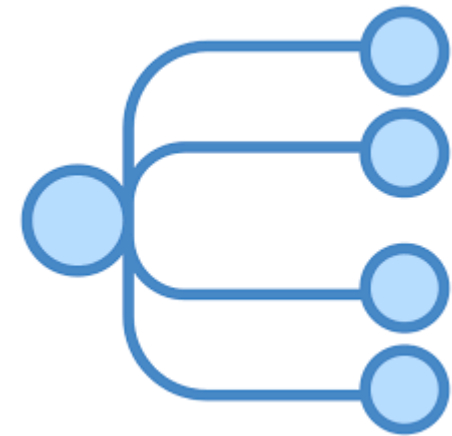
Now



Needed

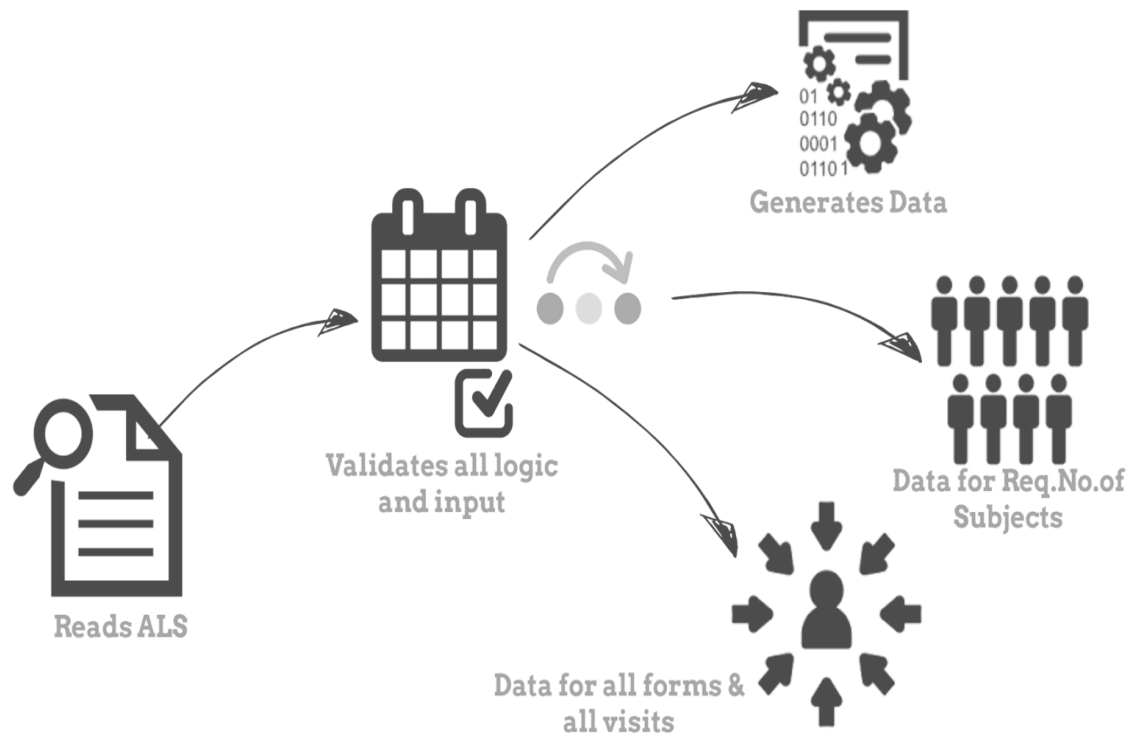


Next



Automation Examples

TEST DATA SIMULATION



DATA RECONCILIATION

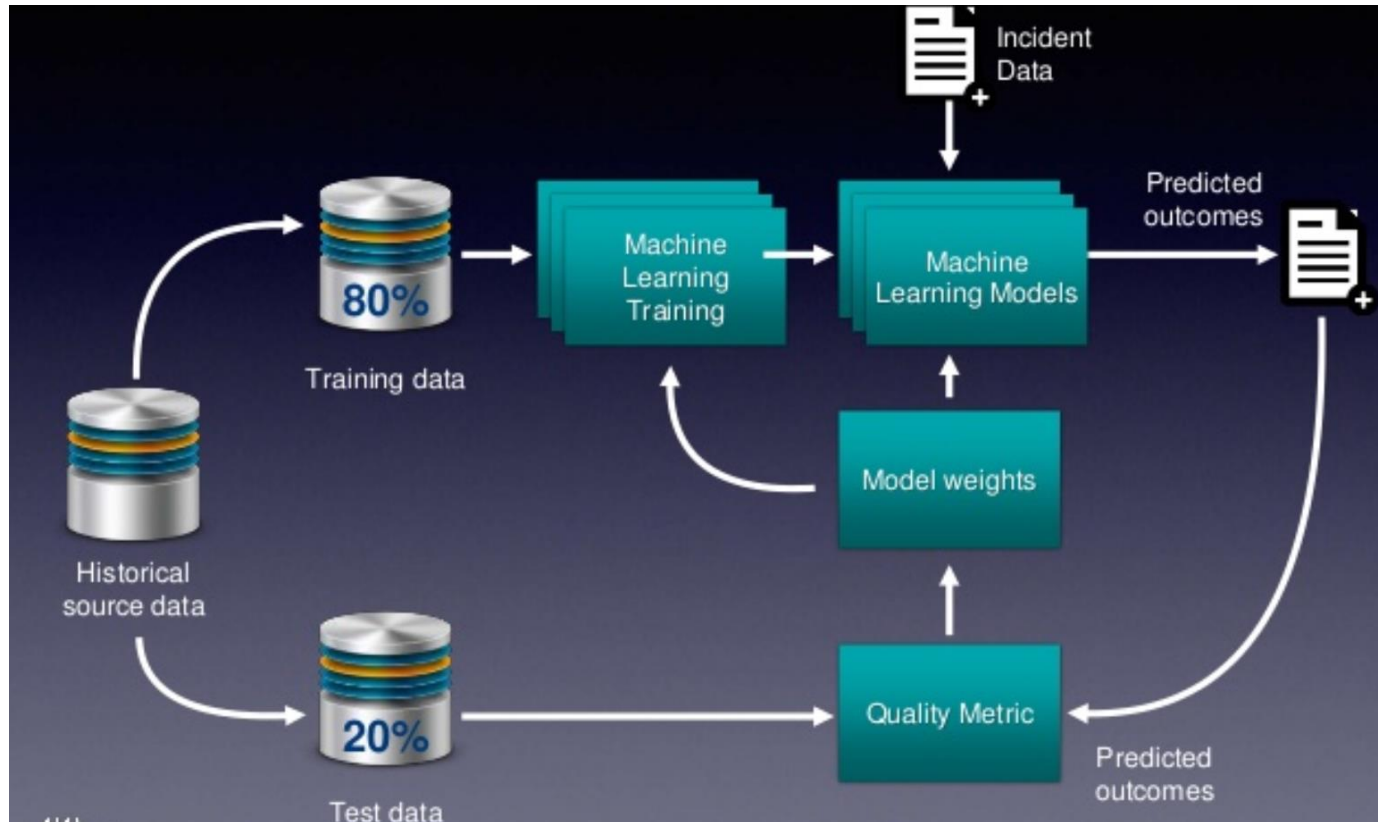


EDC Setup Reconciliation

Independent QC Programming Code

Safety Central Laboratory Reconciliation

Success is Correlated to Data



Amount and Variable of Data Needed

- Customer(s)
- Therapeutic Area(s)
- Safety / Efficacy
- Adverse Events
- Safety Laboratory Data

Investments in Building the Data

- Pull Historical Source Data
- Create the Training Data

<https://www.slideshare.net/KarlSeiler/mlaas-machine-learning-as-a-service>

Plan Summary

Leverage Automation Tools to Spring Board into Machine Learning

- Change Management
- Build Momentum
- Current Technical In-House Capabilities

Solve Focused Problems to Scale Following Guiding Principals

- Embed Machine Learning to Enhance Automation Tools Decision Making
- Create Fit For Purpose Source Data
- Partnering with Groups to Solve Specific Problems

Establish Business as Usual State

- Established ML Process
- Reproducible Project Plan
- Understand Maintenance and Continuous Learning
- Identify Long-Term Partners while Embedding Expertise within the Organization

THANK YOU!



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