

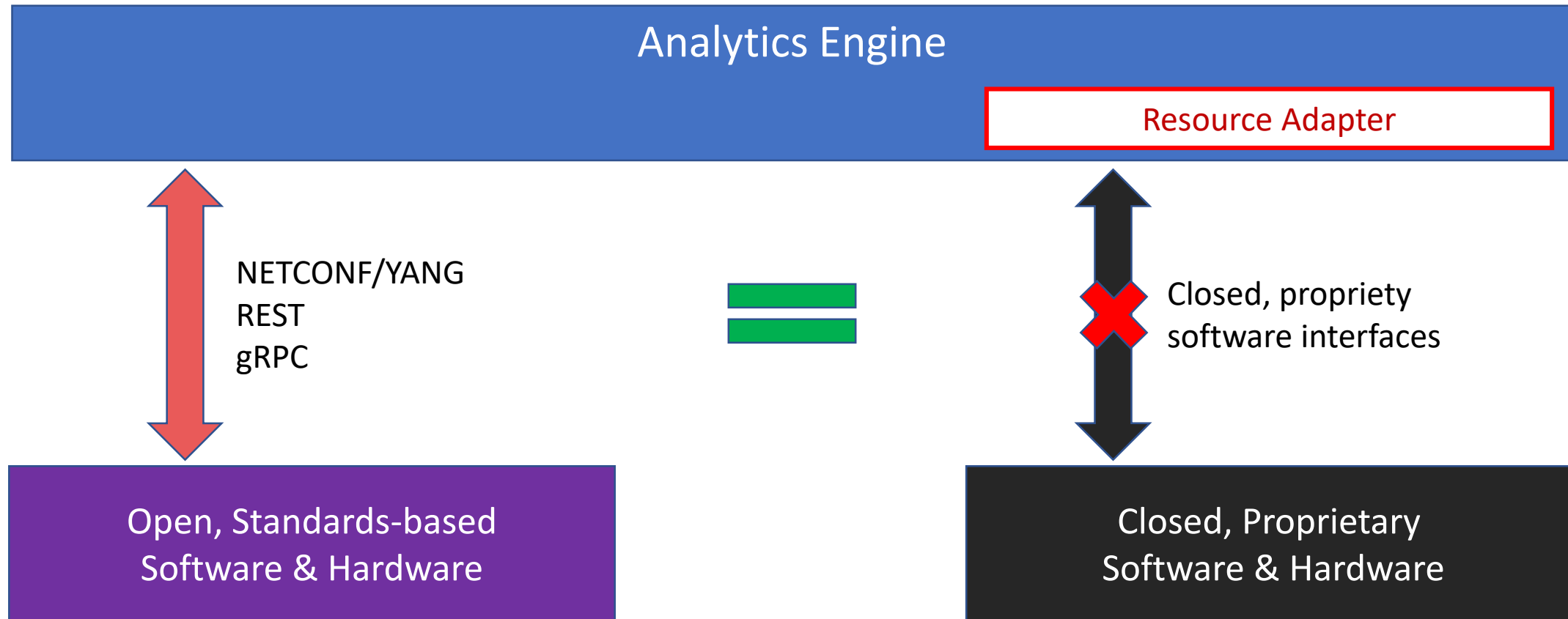
# LISTEN TO YOUR NETWORK

Leveraging Analytics in Submarine Networks

Who better to tell you how the network  
is feeling than the network itself?

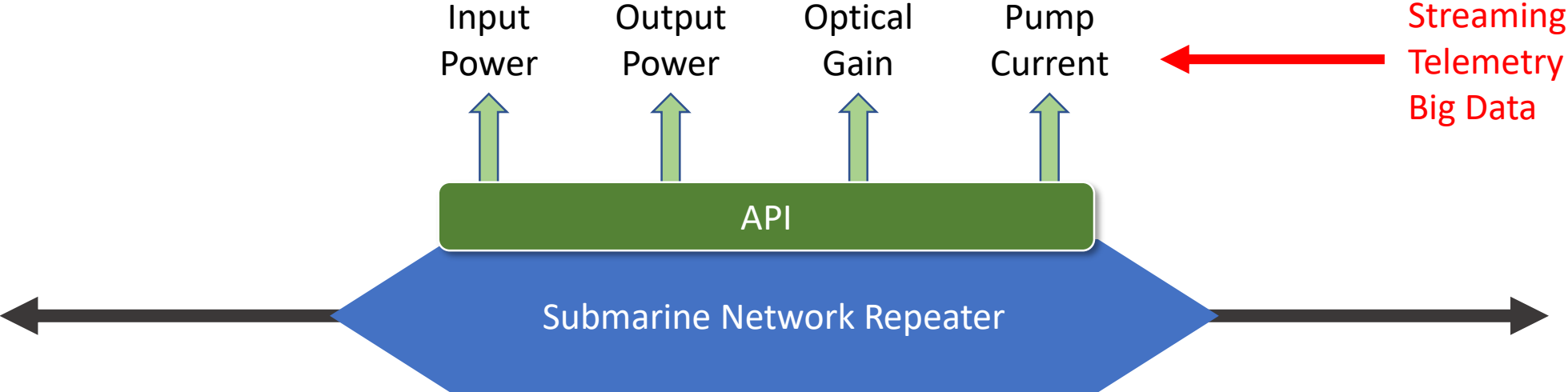
Listen to your network

# Application Programming Interface (API)

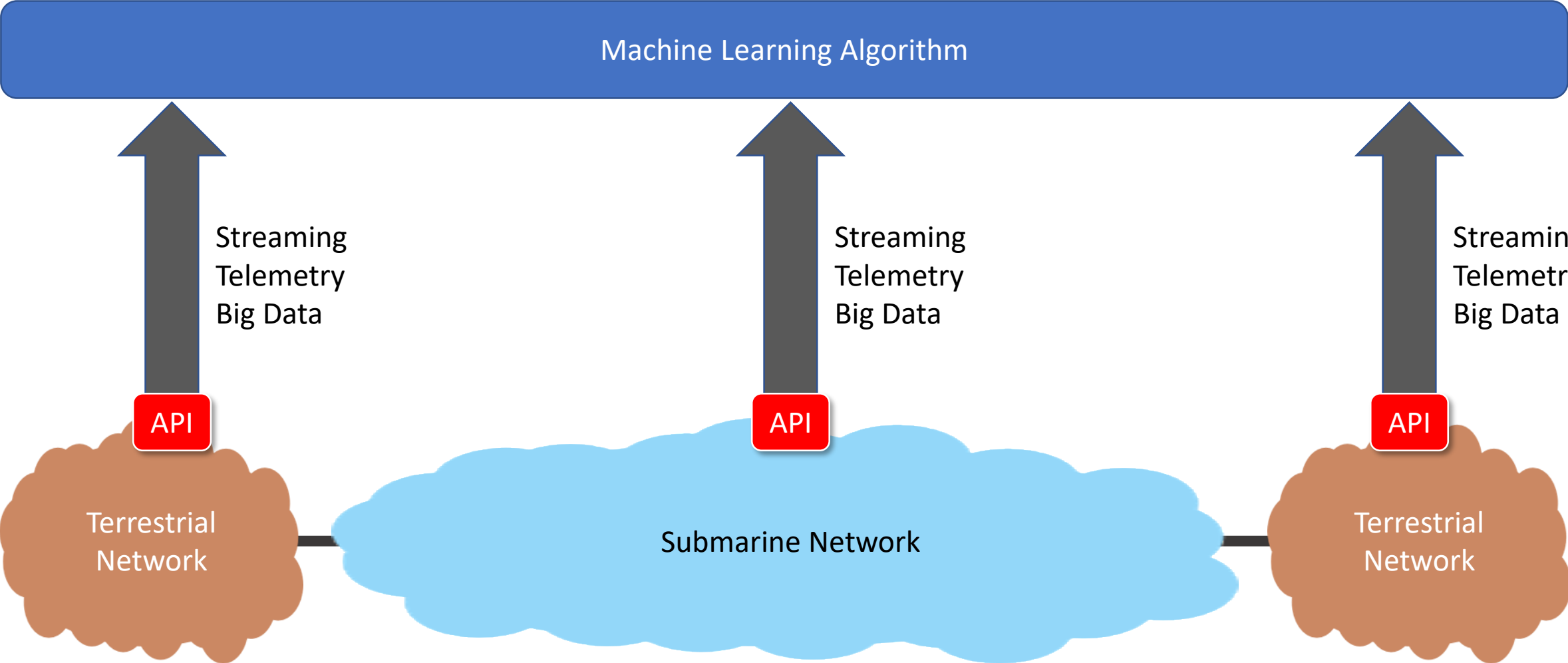


# Listen to Your Repeaters

*“There’s an 85% chance this repeater will fail within 6 months.”*

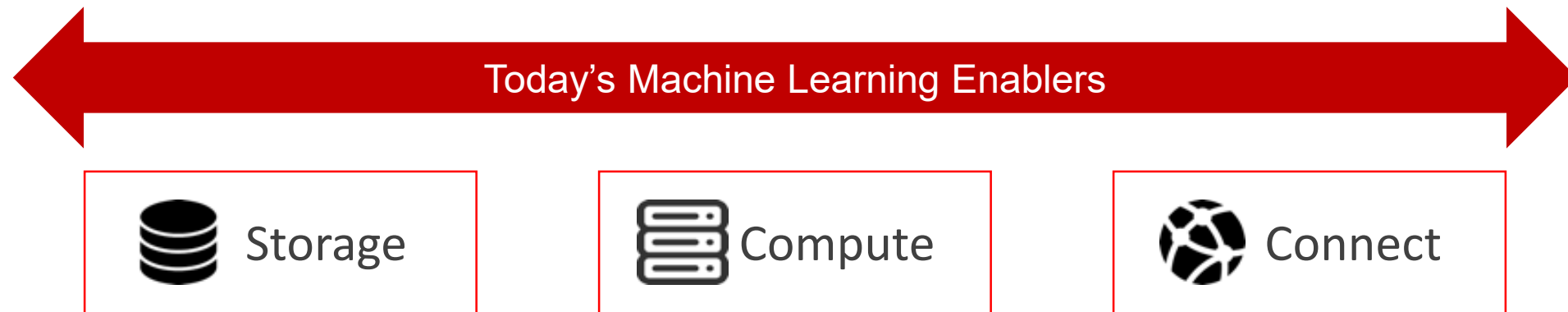


# Listen to Your Whole Network



# What Is Machine Learning?

- Concept explained in the **IBM Journal of Research & Development**, way back in **1959**
- With Machine Learning, **the data itself creates the algorithm**, and the more data fed to an algorithm, the more sophisticated and accurate the algorithm becomes over time
- **Machine Learning** is a specific type of **Artificial Intelligence (AI)** put into practice



# Analytics: Opportunities

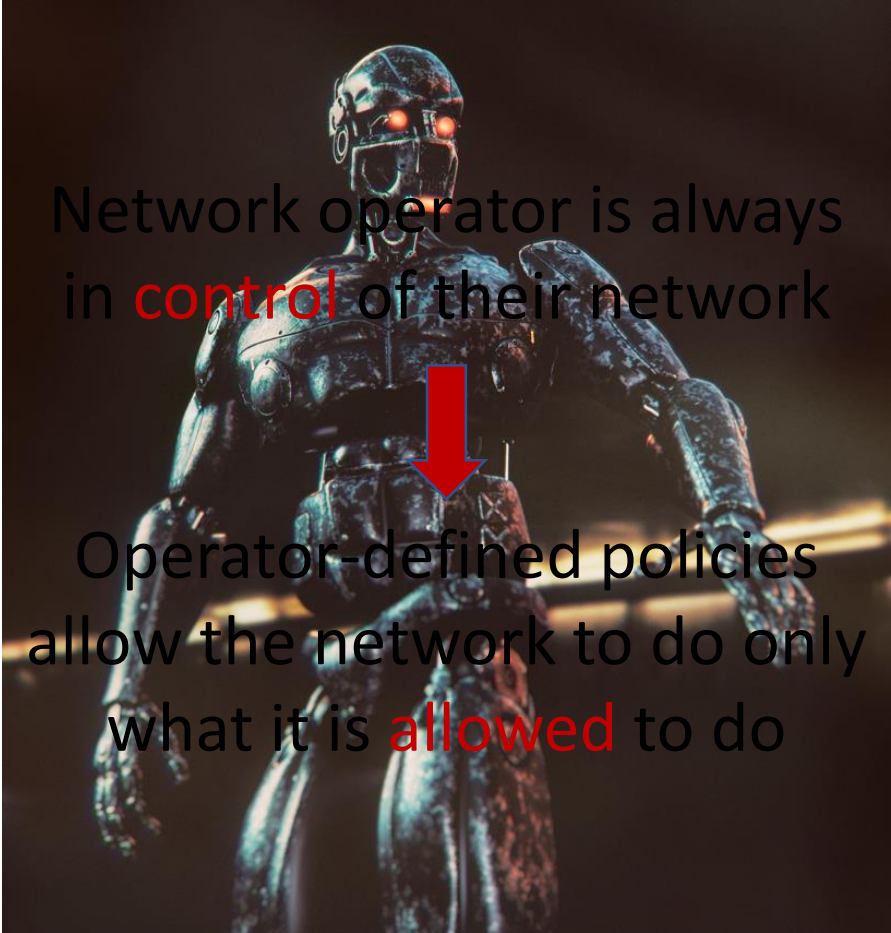
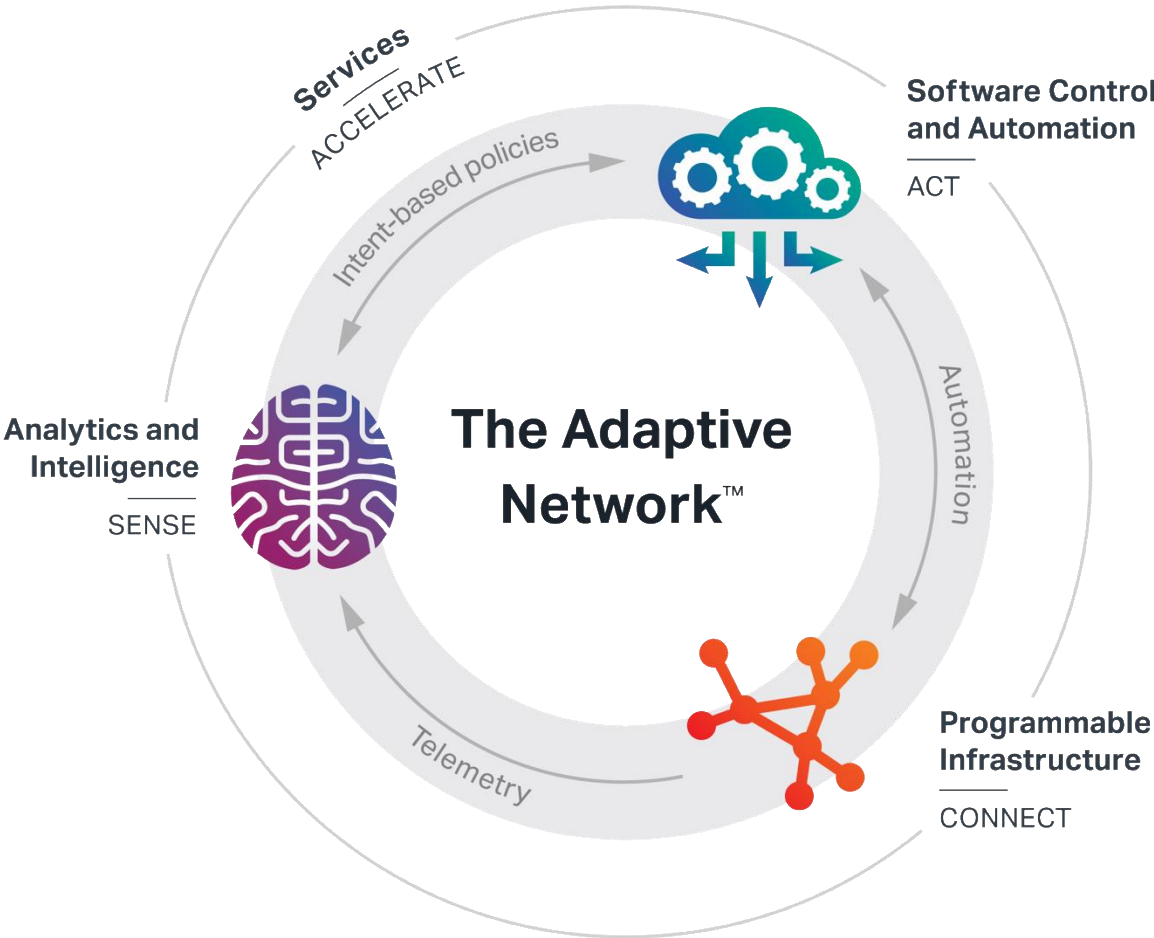
- Predictive maintenance to address issues before they occur
- Increase network availability for competitive differentiation
- Continually optimize the utilization of end-to-end network assets
- Actionable insights enable intelligent and autonomous automation

# Analytics: Challenges

- Humans learning to trust machine learning and insights provided
- How much data should we capture (store and compute costs)?
- Where should the ocean of captured telemetry data be stored?
- How much autonomous control should the network be given?



# Intelligent Closed-Loop Automation



# Summary

- ✓ Your network knows how it's feeling, so listen to what it's saying
- ✓ Old and new network equipment can leverage machine learning
- ✓ Any data can benefit from machine learning-based analytics
- ✓ Analytics was borne in the data center, so why not use it on the networks enabling it in the first place, overland and undersea?

# Mahalo