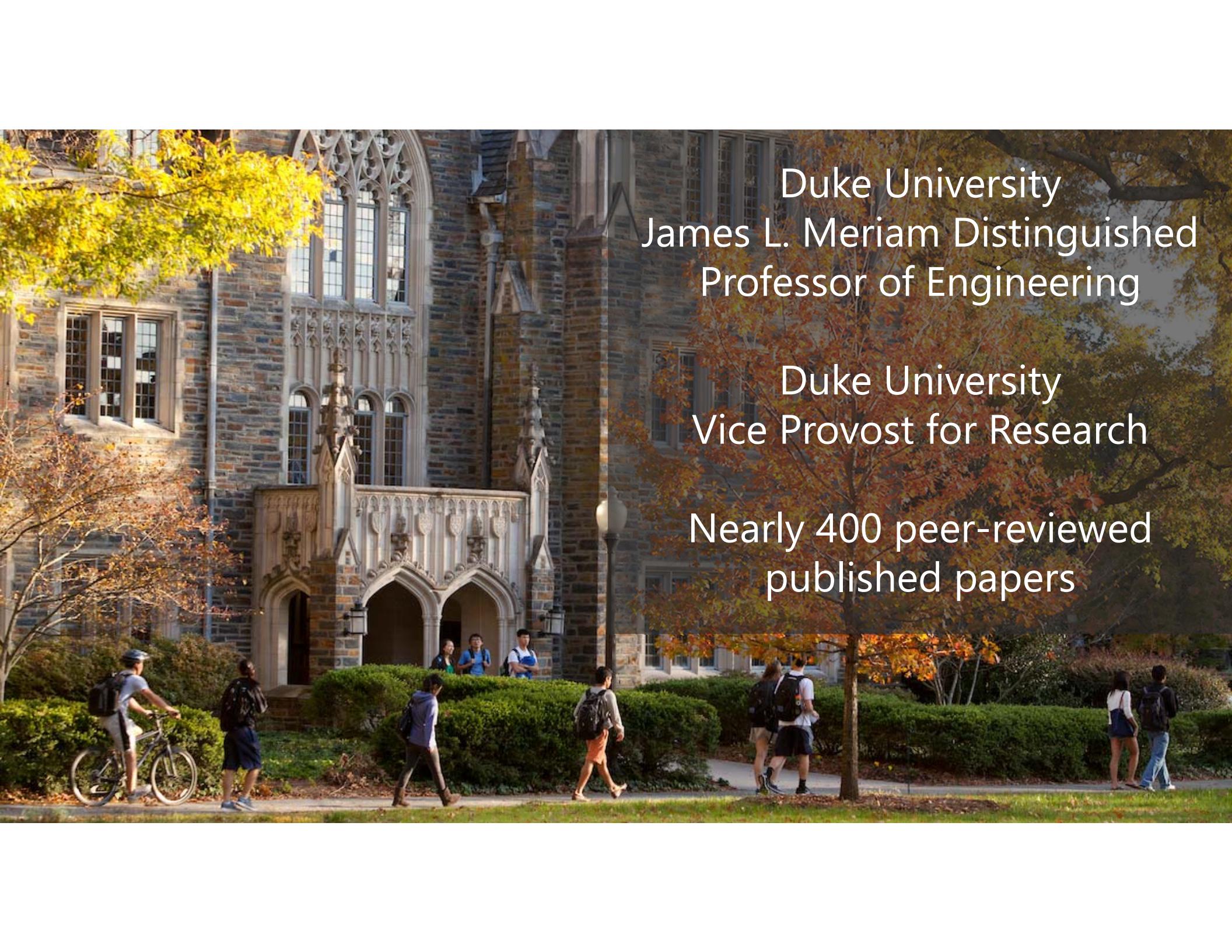




Infinia ML
REDEFINE POSSIBLE

From Cutting-Edge
AI Research to
Business Impact

17 April 2019



Duke University
James L. Meriam Distinguished
Professor of Engineering

Duke University
Vice Provost for Research

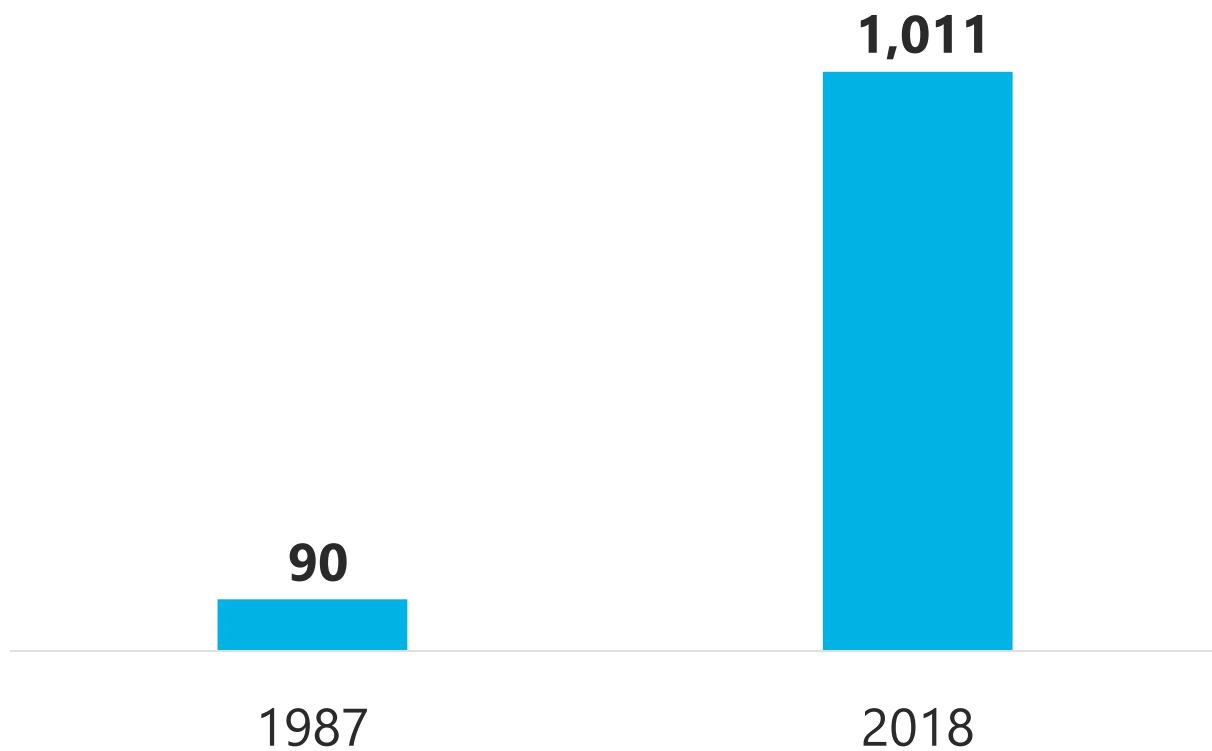
Nearly 400 peer-reviewed
published papers



ACADEMIA

BUSINESS

Neural Information Processing Systems Accepted Papers



The Seasons of Neural Networks



Multi-Layered
Perceptron

1960

The Seasons of Neural Networks



Multi-Layered
Perceptron

1960

Back
Propagation

1986

The Seasons of Neural Networks



SUMMER

Multi-Layered
Perceptron

Back
Propagation

Convolutional
Neural Network

1960

1986

1989

The Seasons of Neural Networks



Multi-Layered
Perceptron

1960

Back
Propagation

1986

Convolutional
Neural Network

1989

Neural Nets
in the Wild

1990–

The Seasons of Neural Networks



Multi-Layered
Perceptron

Back
Propagation

Convolutional
Neural Network

Neural Nets
in the Wild

Long
Short-Term
Memory

1960

1986

1989

1990–1994

1995

The Seasons of Neural Networks



More Neural
Nets In the Wild

1998–2005

The Seasons of Neural Networks



More Neural
Nets In the Wild

1998–2005

Banishment

2005–2010

The Seasons of Neural Networks



More Neural
Nets In the Wild

1998–2005

Banishment

2005–2010

Rename:
Deep Learning

2010–

The Seasons of Neural Networks



More Neural
Nets In the Wild

1998–2005

Banishment

2005–2010

Rename:
Deep Learning

2010–

CNN+GPU+
Image Net

2013

The Seasons of Neural Networks



More Neural
Nets In the Wild

1998–2005

Banishment

2005–2010

Rename:
Deep Learning

2010–

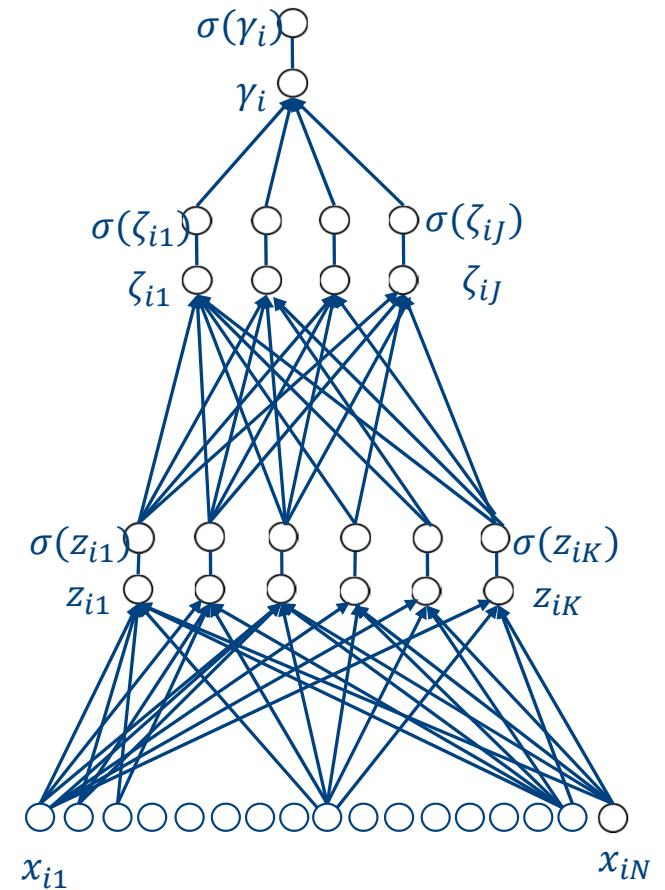
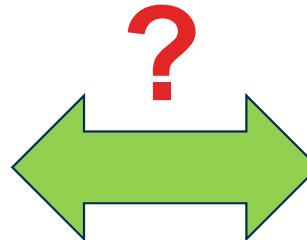
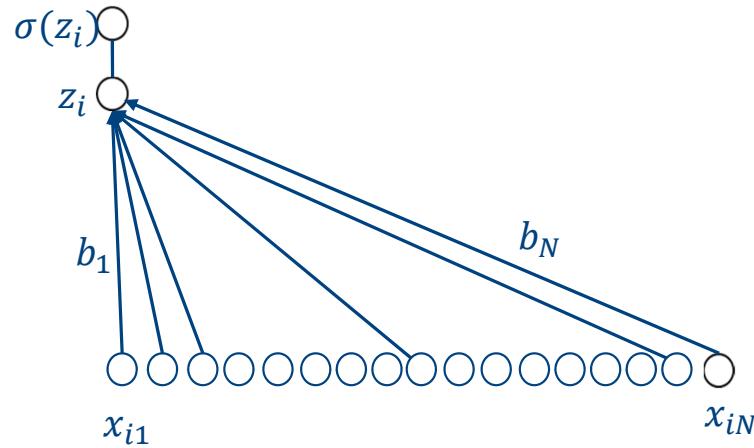
CNN+GPU+
Image Net

2013

Alpha
Go

2015

"Those Who Cannot Learn from History Are Doomed to Repeat It"





“All things being equal, the simplest solution tends to be the best one.”

William of Ockham



Technology

Demand for AI Talent Turns Once-Staid Conference Into Draft Day

Academic NIPS gathering is now a recruiting frenzy for tech giants, banks and hedge funds

By [Jeremy Kahn](#)

December 6, 2017, 5:00 AM EST *Updated on December 6, 2017, 6:56 AM EST*





KORN FERRY®



Korn Ferry is a global organizational consulting firm. We help clients synchronize strategy and talent to drive superior performance. We work with organizations to design their structures, roles, and responsibilities. We help them hire the right people to bring their strategy to life. And we advise them on how to reward, develop, and motivate their people.



Korn Ferry Pay Solution components



Pay Landscape & Market Insights



Key pay trends in one place, at one click.

Analytics & ready-to-go reports



Tools that supports detailed analysis of data from internal and external perspective.

Total Reward Diagnostic



Employees' opinion survey focused on reward aspects, that allows you to work on optimization of cost of rewards packages and attract and retain talent.

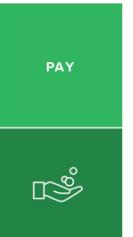
Organizational Benchmarking



Analysis of organizational shape, headcount and payroll structure, that supports discussion about organizational effectiveness.

Our Korn Ferry pay data

Key figures



130+



Countries where
we collect and
provide pay data.

25,000



Organizations in
our pay database
worldwide.

20m+



Job holders for
whom we have
salary data in 2018.

70%



of the Fortune 500 use
our pay data, & contribute
to our database.

70



Every 70 seconds,
a user logs into
the Pay database.

71%



of the 60 largest
countries where we are
#1 or #2 in data density.

15+



years of
sustained global
database growth.

OUR PAY
DATABASE IS NOW
AVAILABLE IN
130+ COUNTRIES
SEE WHERE
WE'VE GROWN

GLOBAL
130+ countries
25,000 organizations
20+ million job holders

EUROPE
49 Countries
13,000 Companies
8.7m Employees

NORTH AMERICA
2 Countries
2,900 Companies
6.3m Employees

LATIN AMERICA
23 Countries
2,500 Companies
3.1m Employees

ASIA
22 Countries
3,800 Companies
2.4m Employees

MIDDLE EAST
11 Countries
2,200 Companies
1.1m Employees

PACIFIC
5 Countries
900 Companies
485,000 Employees

AFRICA
21 Countries
1,200 Companies
480,000 Employees

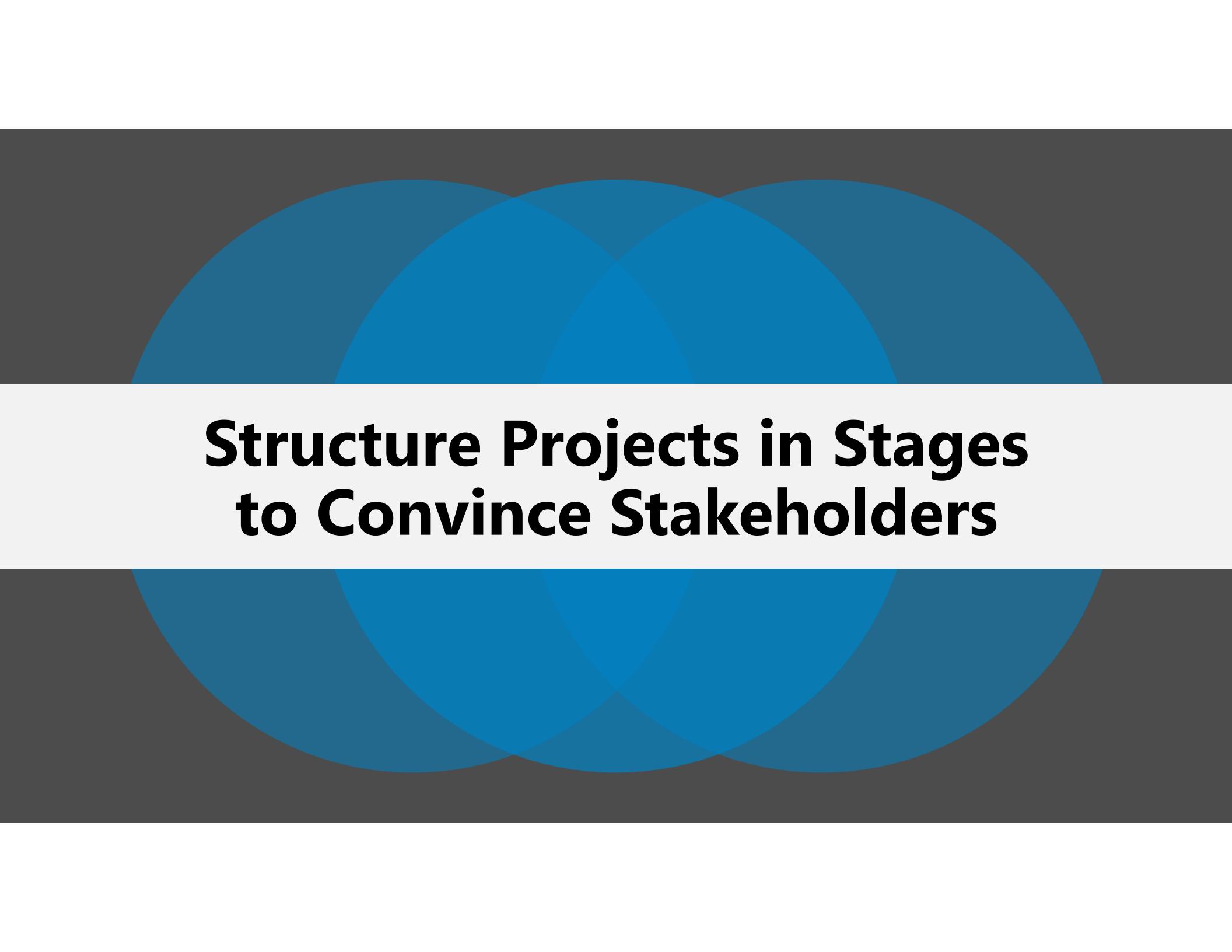


Problem: Scalability

- Clients submit their compensation data so that KF can aggregate it and provide useful comparisons against other companies
- KF maintains a global job model of 2000+ job titles. Each job title record must be manually mapped to a entry on this model
- 300+ multilingual team members required to work with our clients annually to map client job titles to our KF Global Job Model

PAY



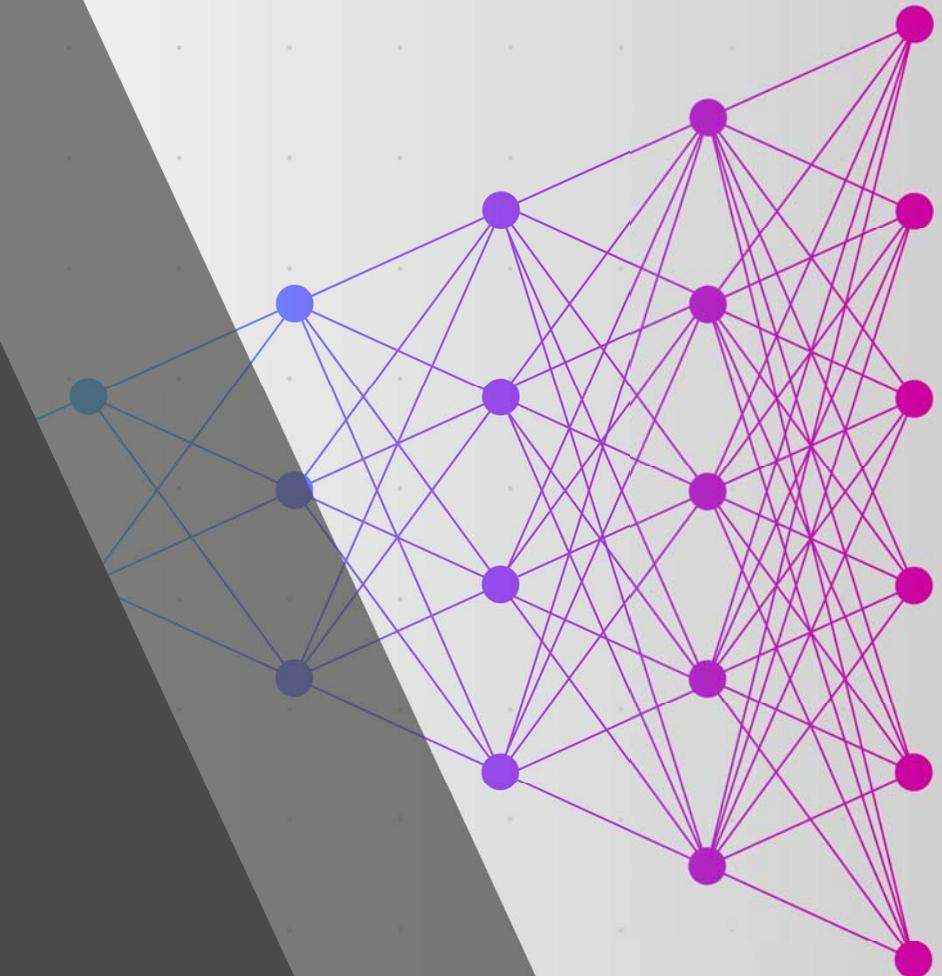


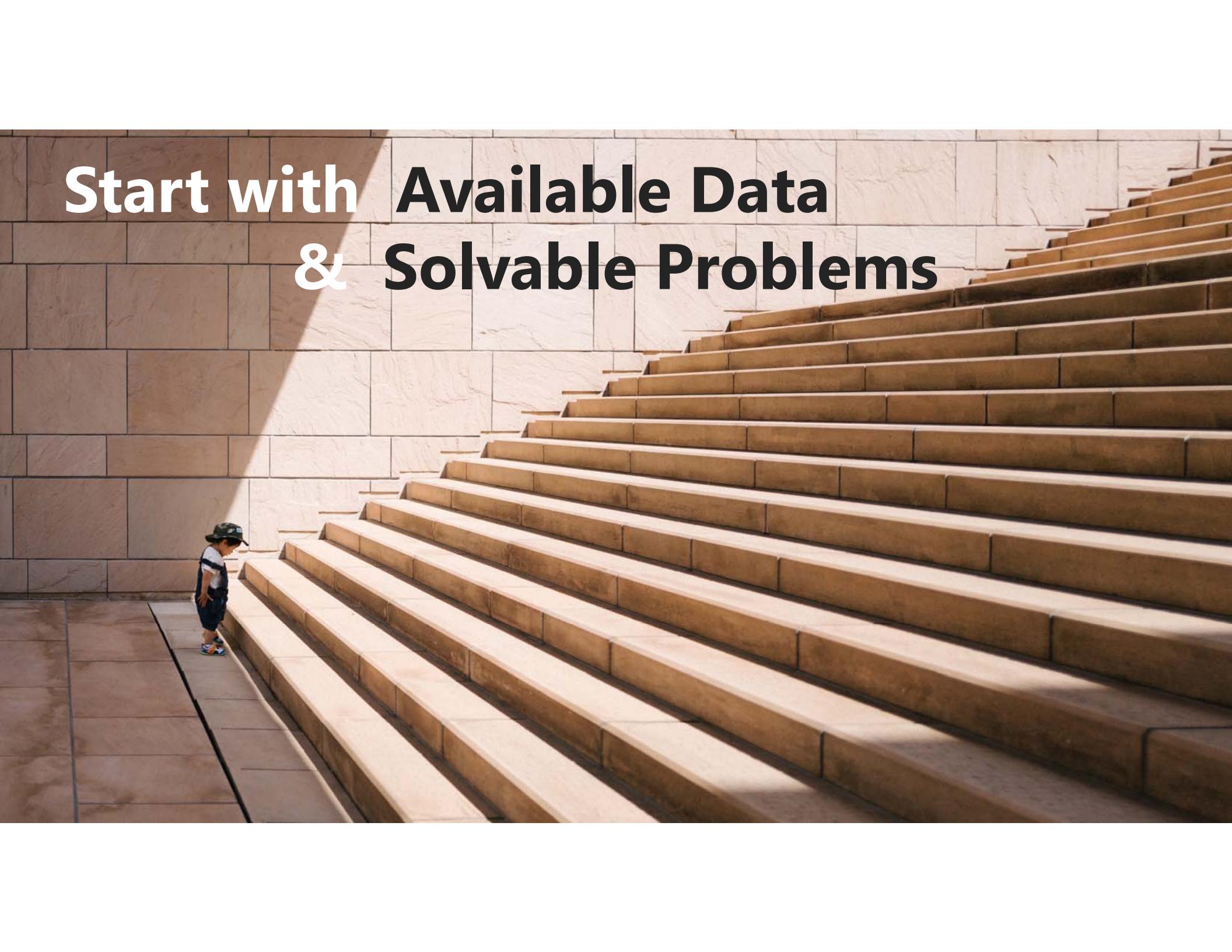
Structure Projects in Stages to Convince Stakeholders

Business Data Can Be Messy

Algorithms are the Easy Part

**Beware The
Idiosyncrasies of the Real
World**



A photograph of a young child standing at the bottom of a large, wide set of light-colored stone steps. The steps are arranged in a series of shallow, wide treads. To the left, a large wall made of rectangular stone blocks is visible, casting a long, sharp shadow of the steps across the ground. The child, wearing a dark cap, dark overalls, and a white shirt, stands on the first step, looking up towards the top of the stairs.

**Start with Available Data
& Solvable Problems**



Don't
Overlook
Older Tools



ML
Transformation Is
Just Beginning



Thank you!

larry.carin@infiniaml.com