



AI at LinkedIn:

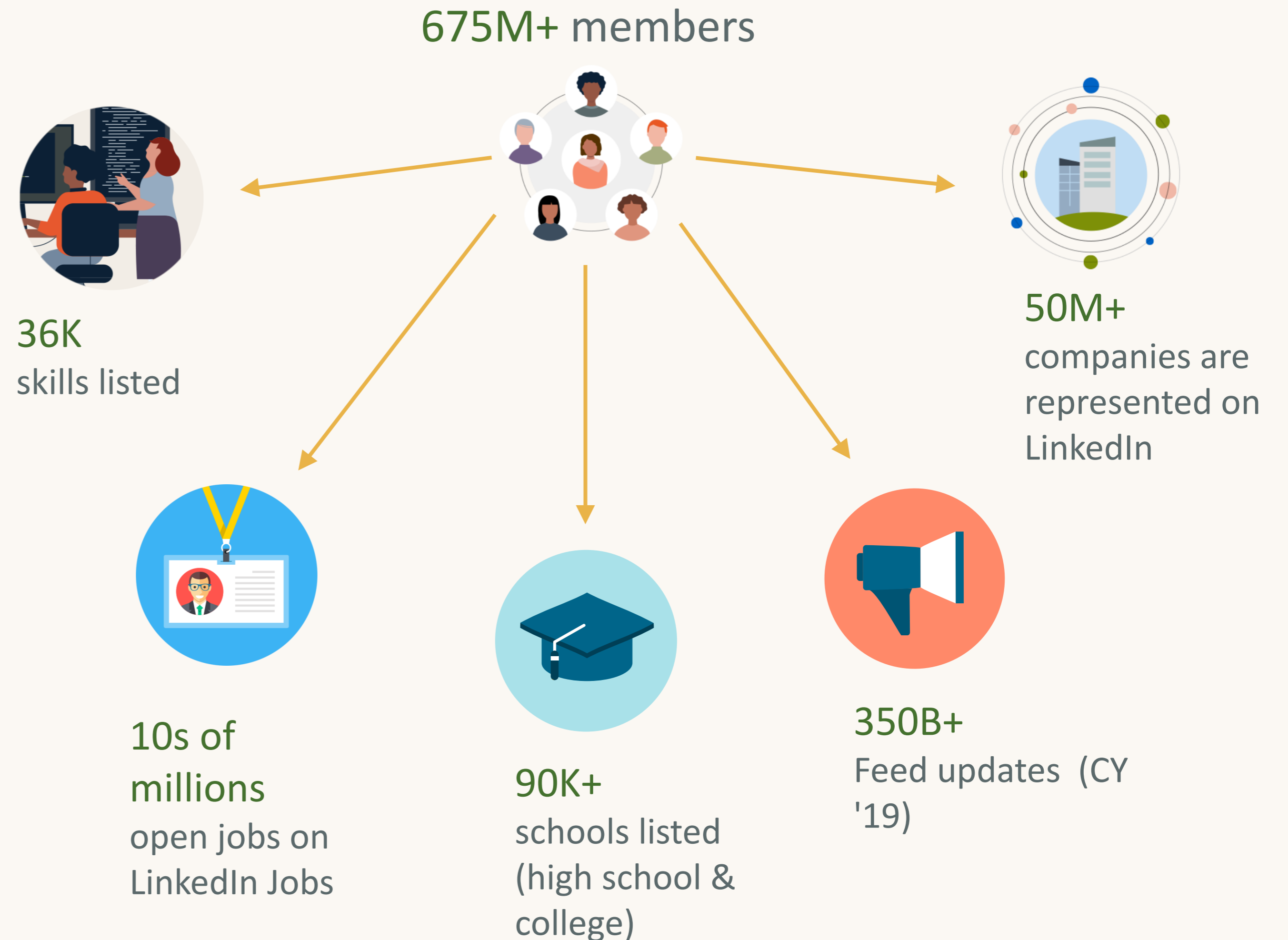
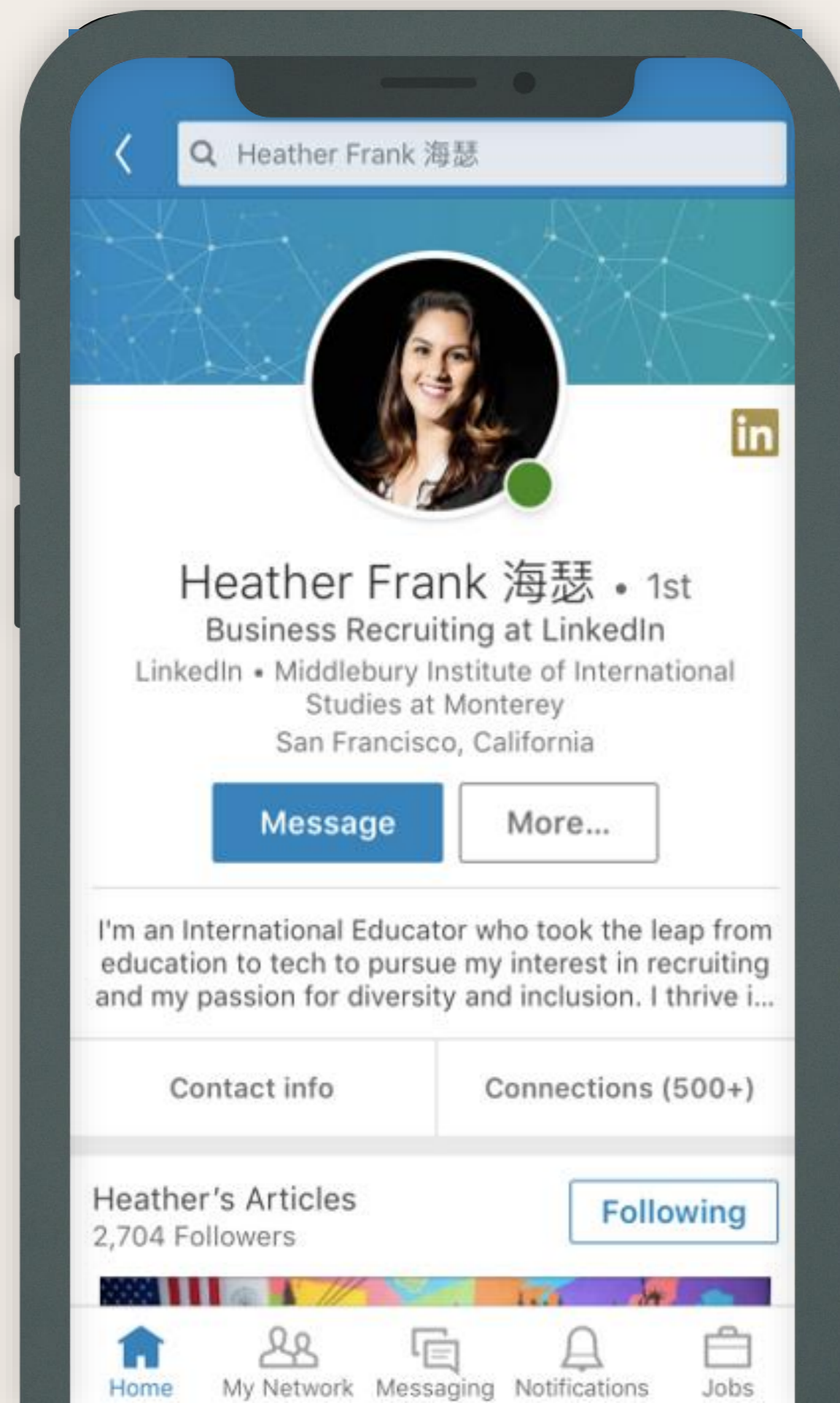
Connecting Members with Opportunity at Scale

Mary Hearne



LinkedIn operates the largest professional network on the Internet

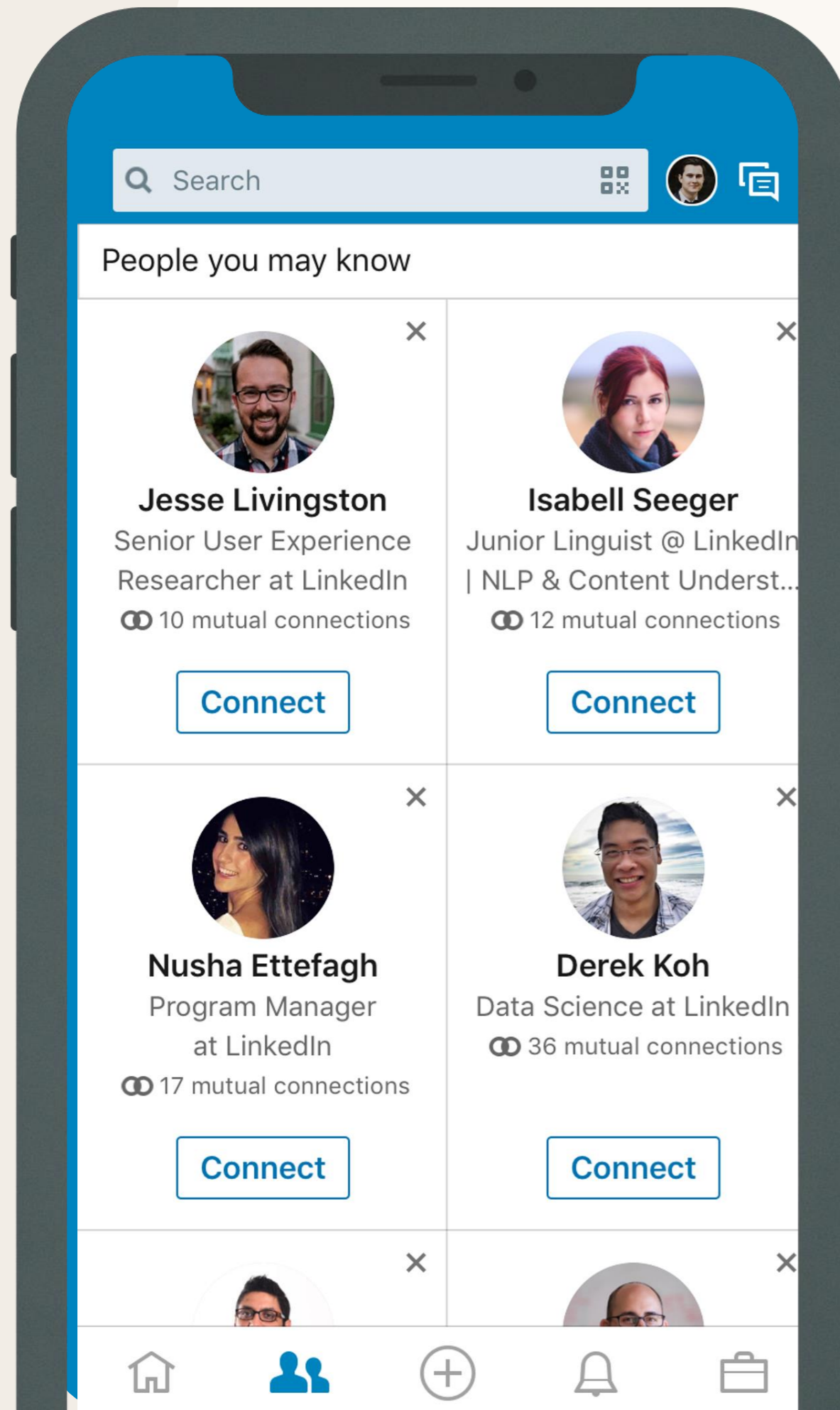
Tell your story →



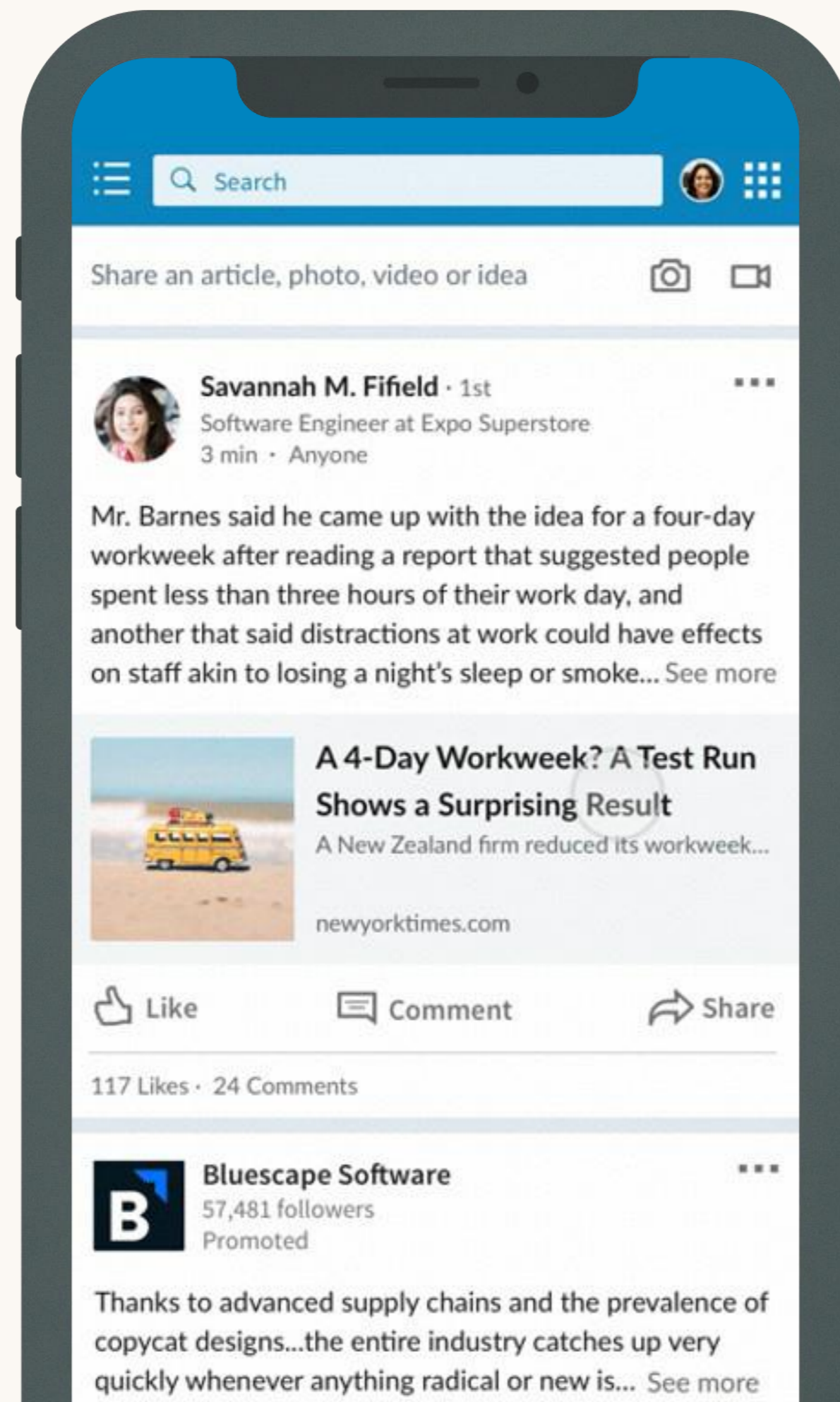


AI is like Oxygen
at LinkedIn

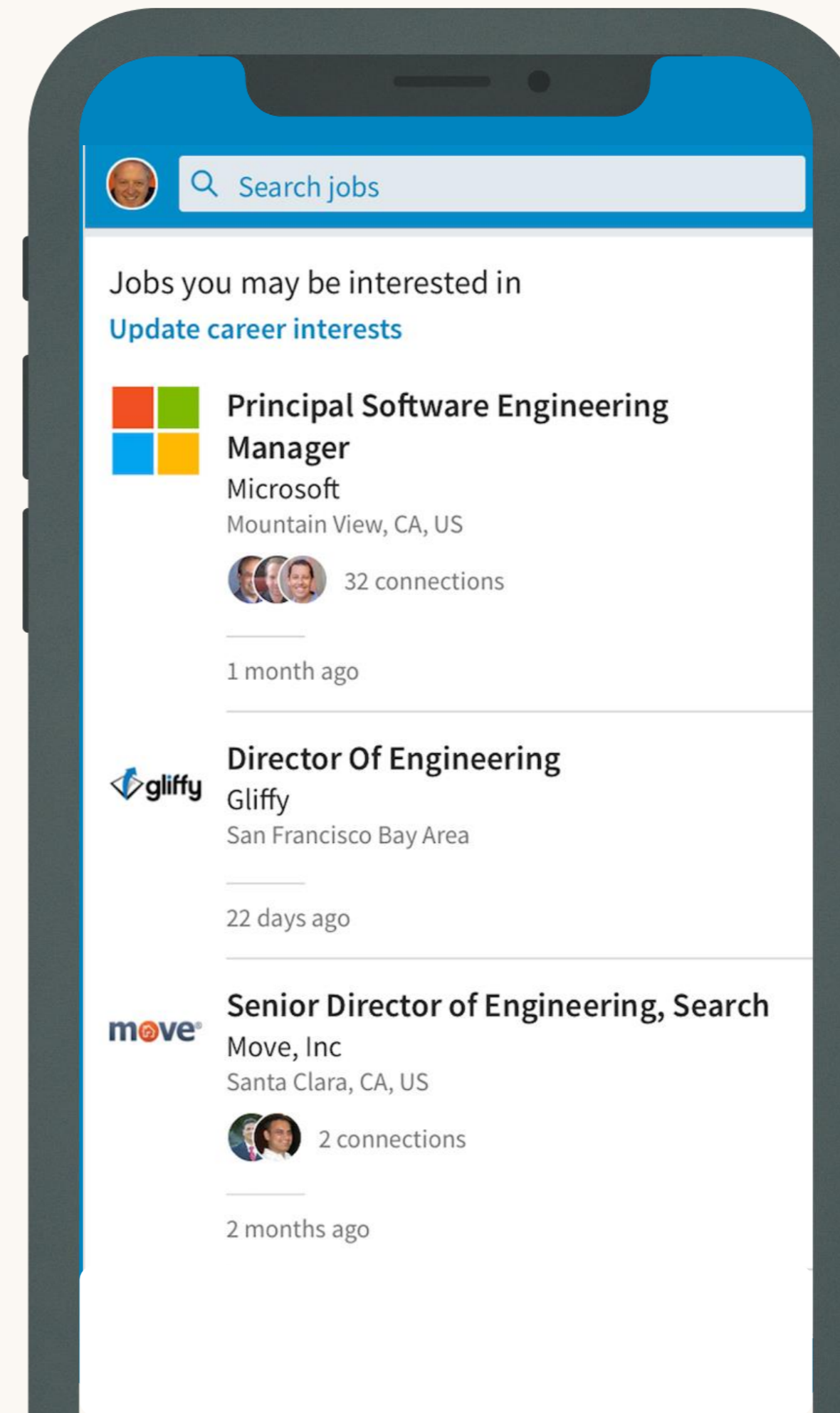
My Network



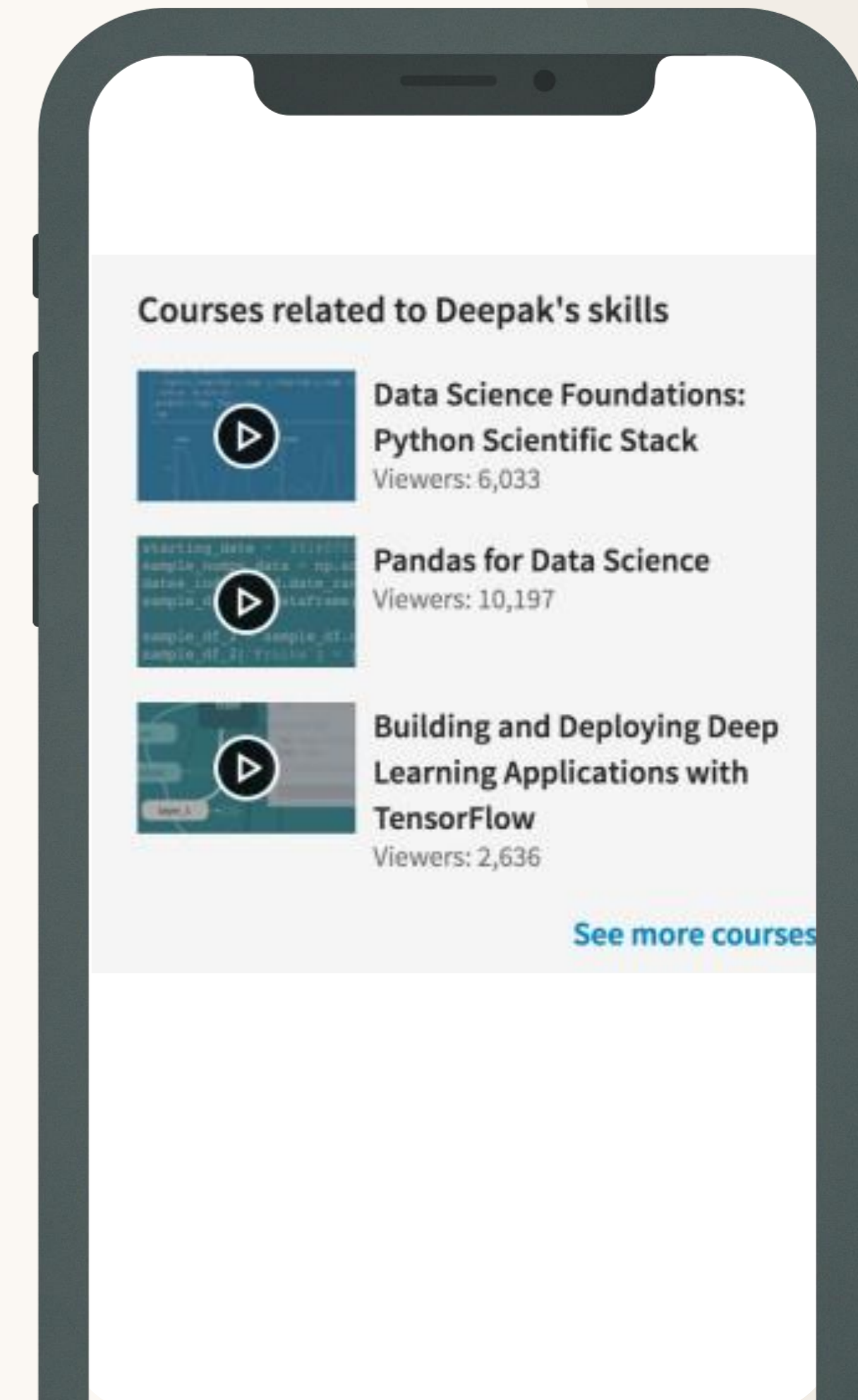
Feed



Jobs

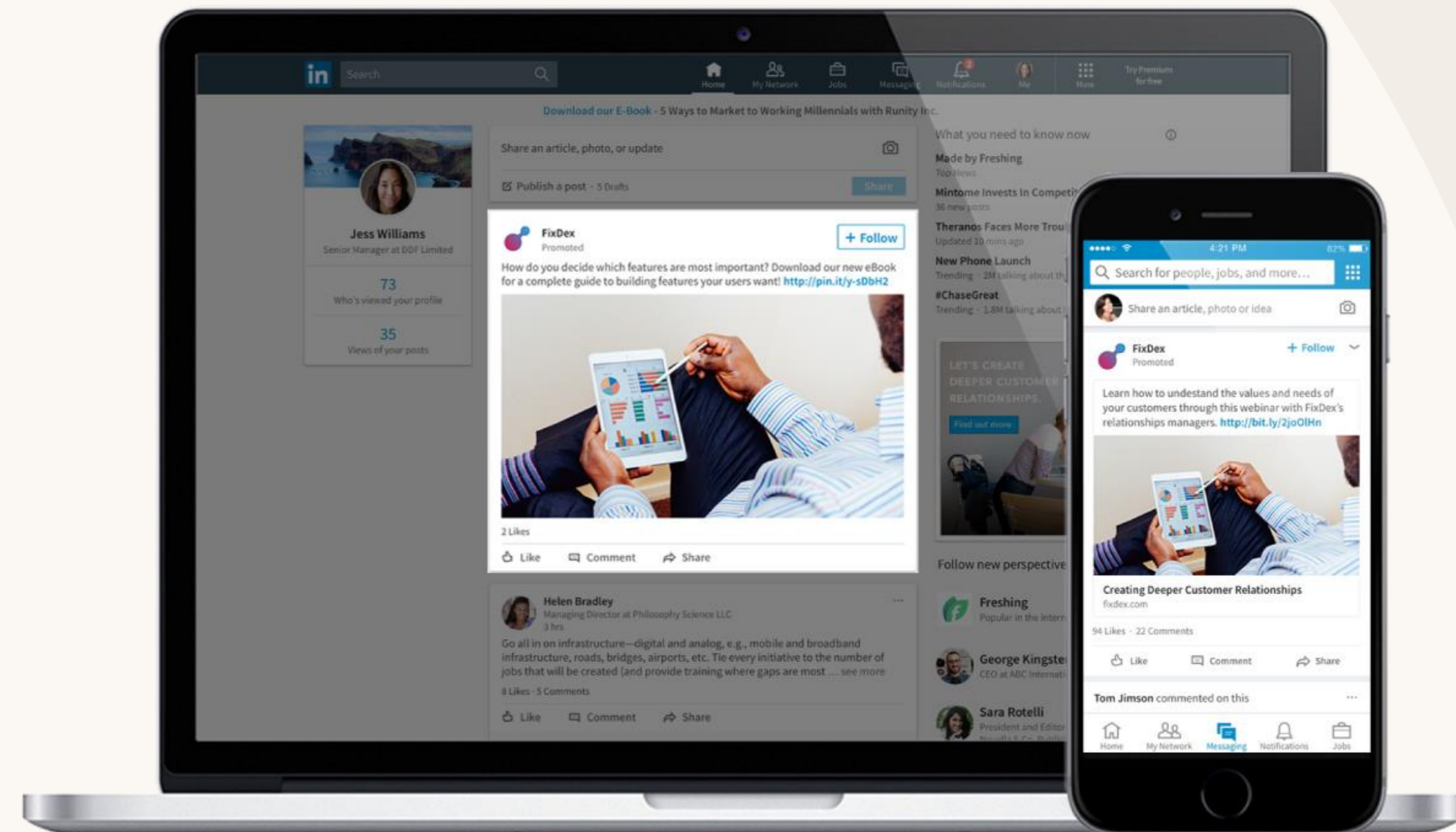
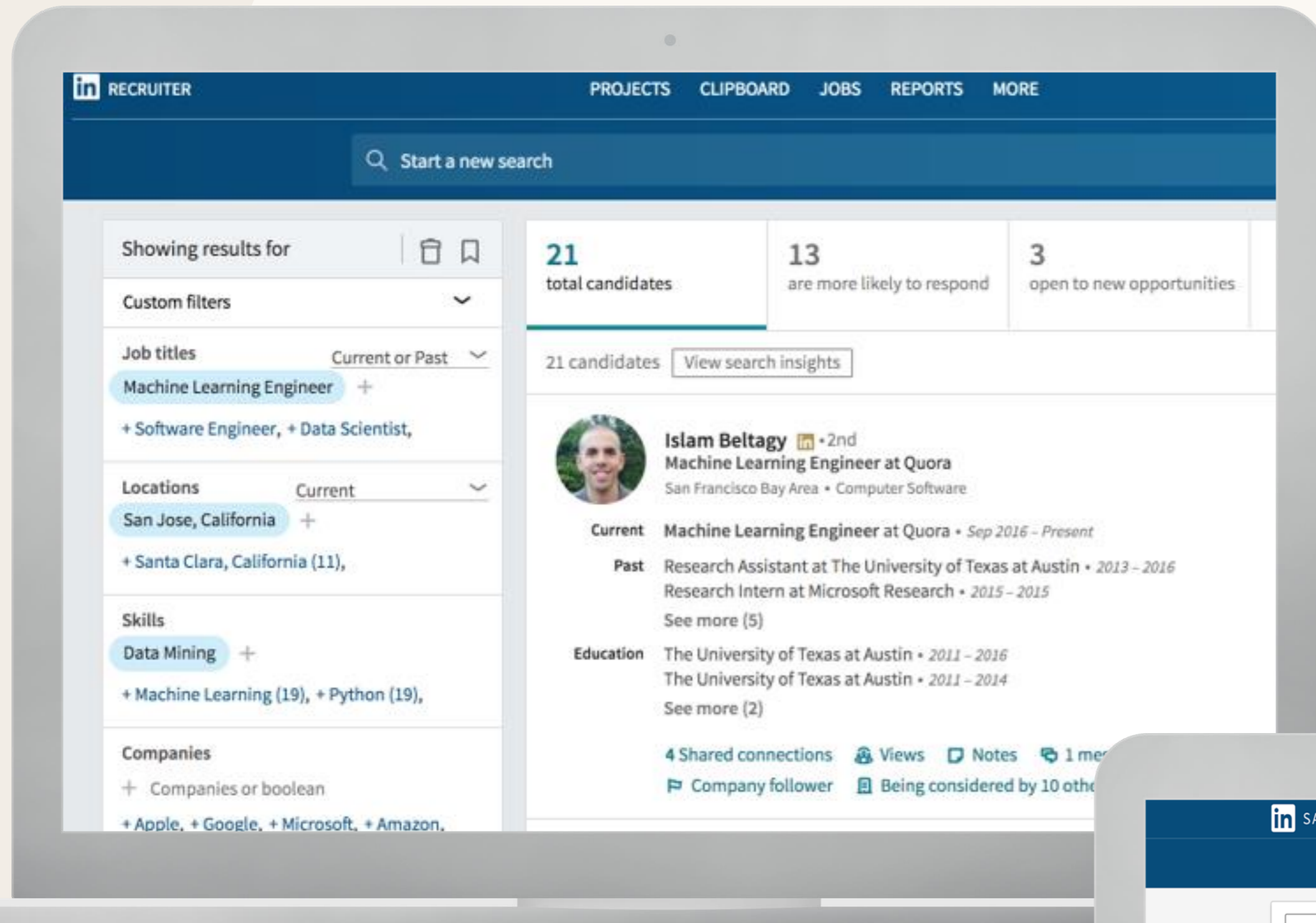


Learning

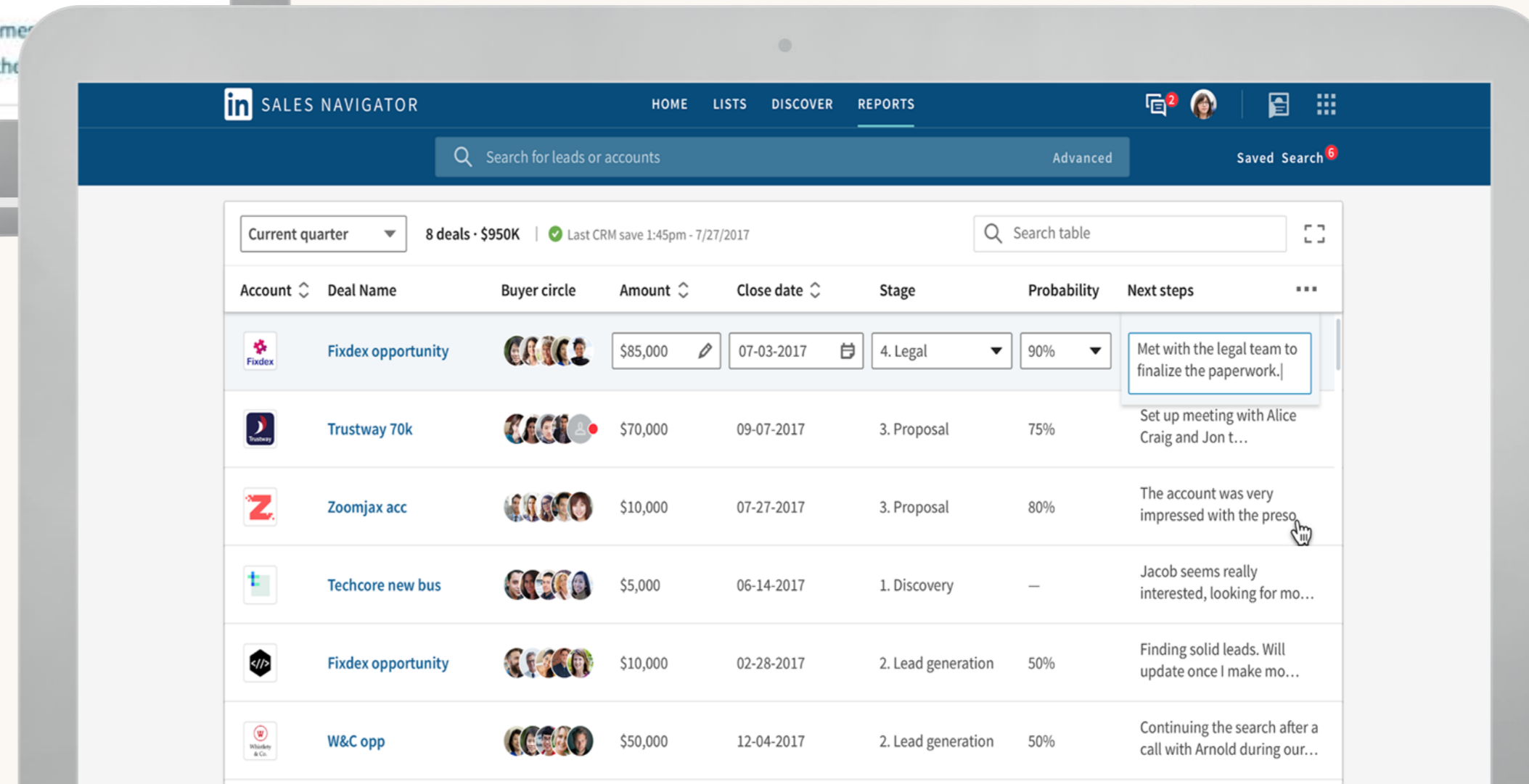


Sponsored Updates

Recruiter Search



Sales Navigator



AI at LinkedIn

Scale

2 PB

Data processed
offline

2.15 PB

Data processed
nearline per day

25 B

Parameters in ML
models

200

ML A/B experiments
per week

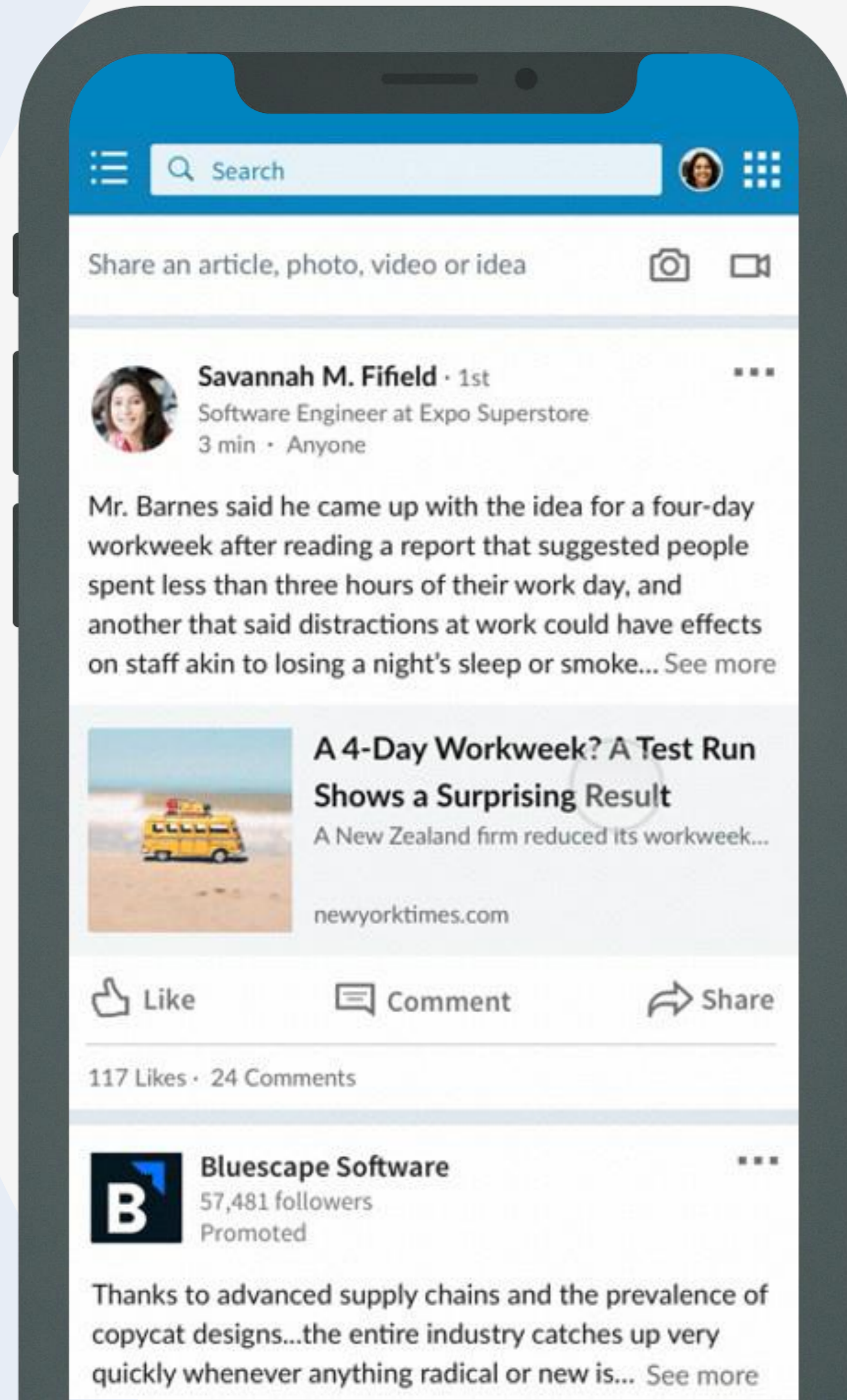
53 B

Graph edges with
1B nodes

Intelligence Everywhere

Communities & Conversations





2M+ posts a day generating **tens of millions** of responses (likes, reshares, comments)

Tens of thousands of comments every hour

60% Y/Y growth in feed updates viewed

Members who engage with content heavily are **5x** more likely to return daily

ML Workflow

High QPS
Low latency

Large amount of data
Periodic model
refresh



Scoring infrastructure

L0: Candidate Generation

L1: Ranking

L2: Multi-Objective
Optimization, Impression
Discounting, diversity,
business logic,..

Features

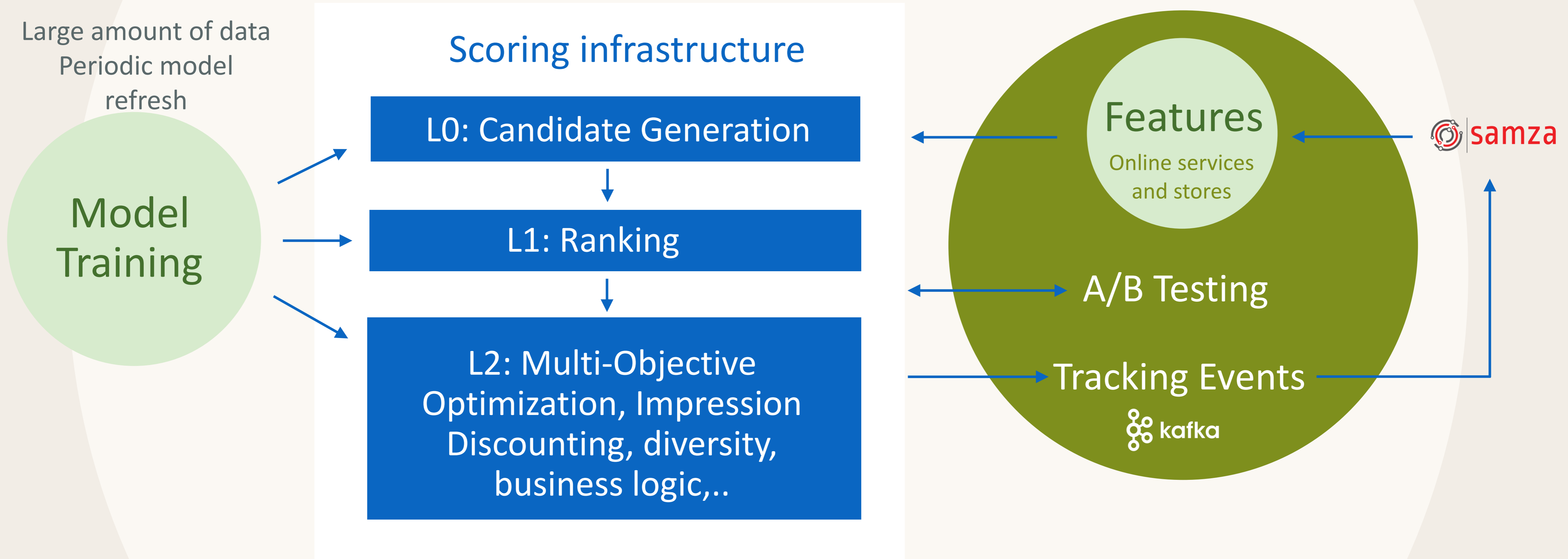
Online services
and stores

A/B Testing

Tracking Events

kafka

samza



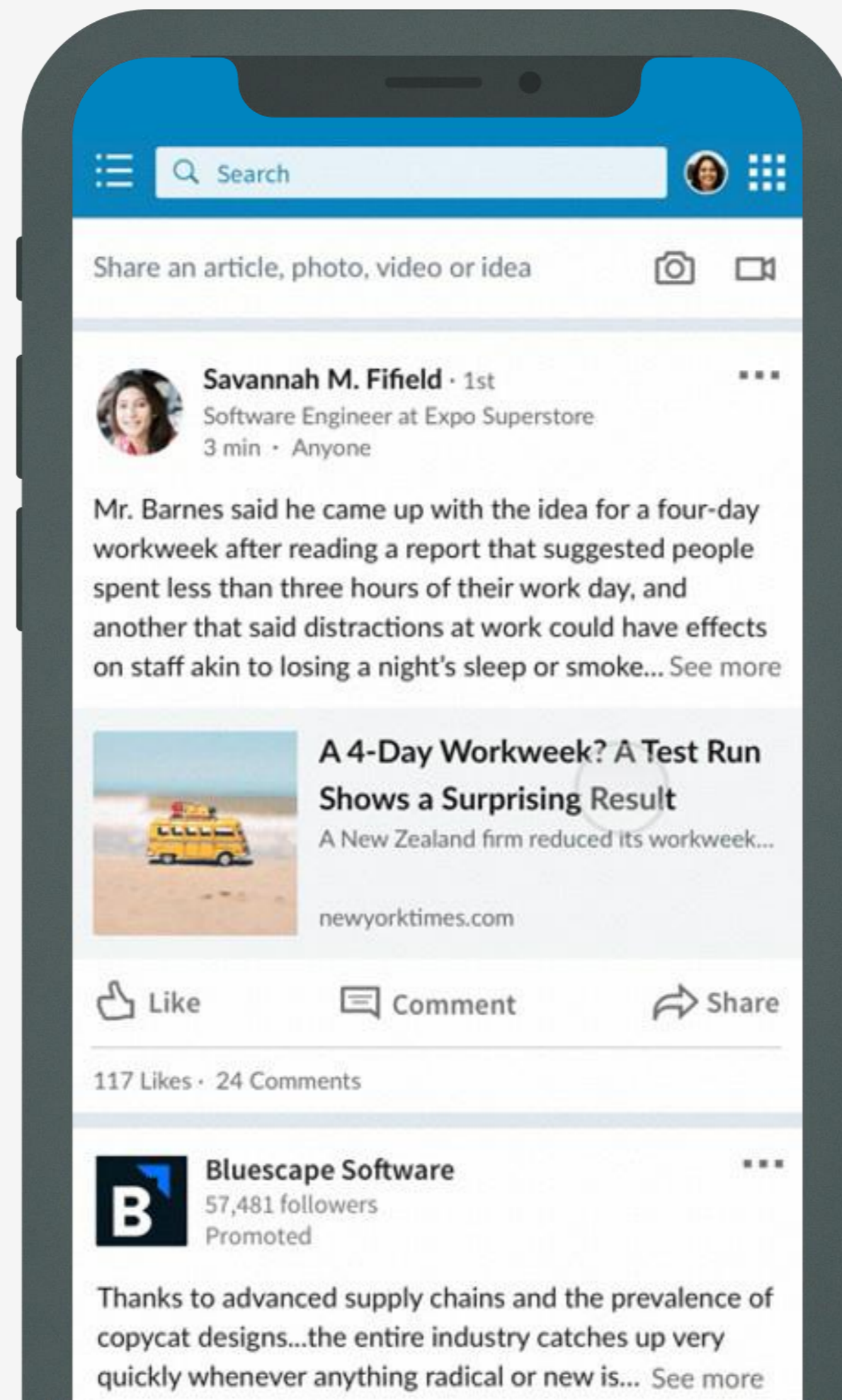
Product strategy of long-term engagement

Build an ecosystem where members regularly talk to people they know, about things they care about with active interactions, not just passive consumption



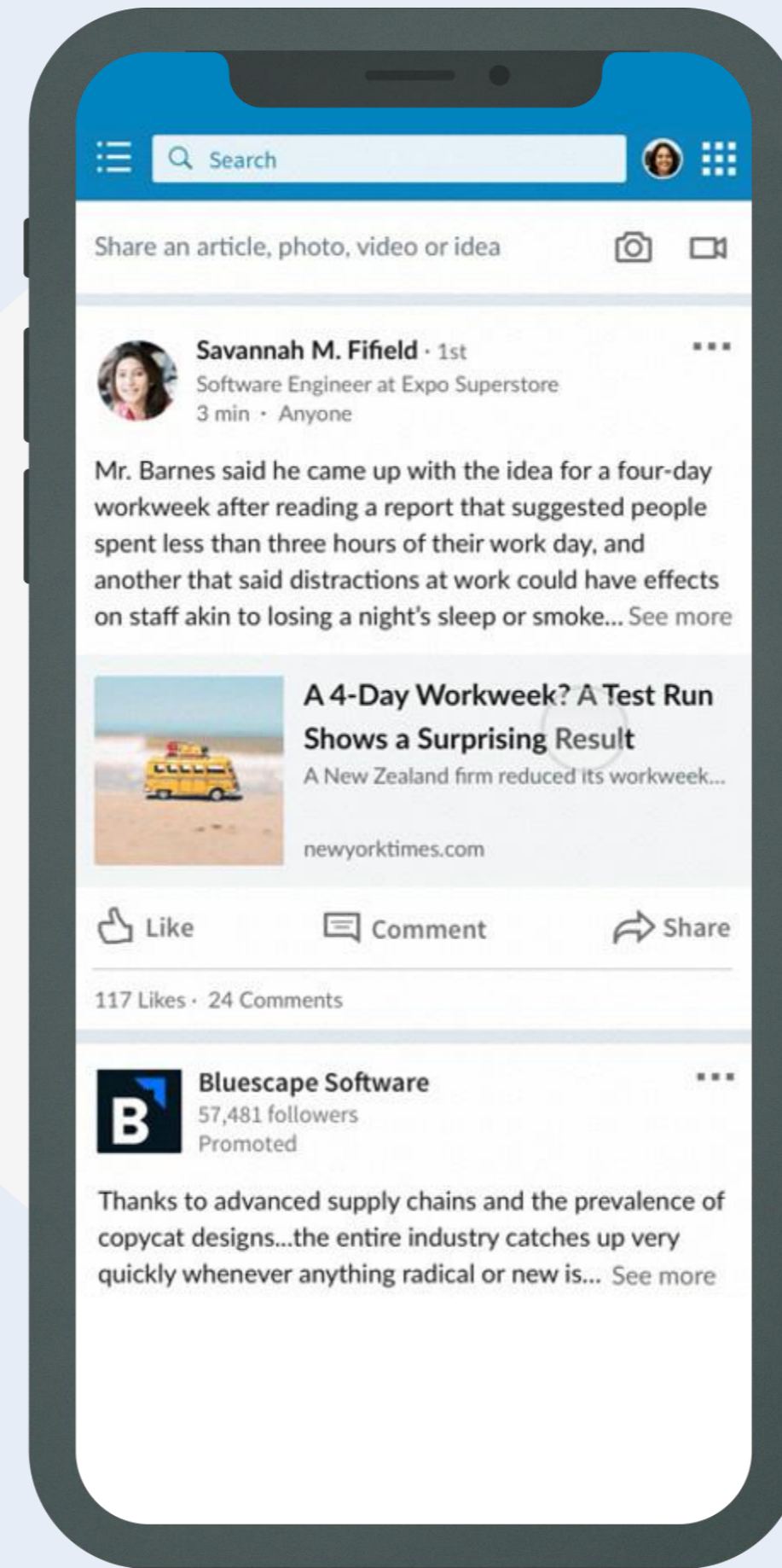
How to define the objective?

Feed





Viewer



Like



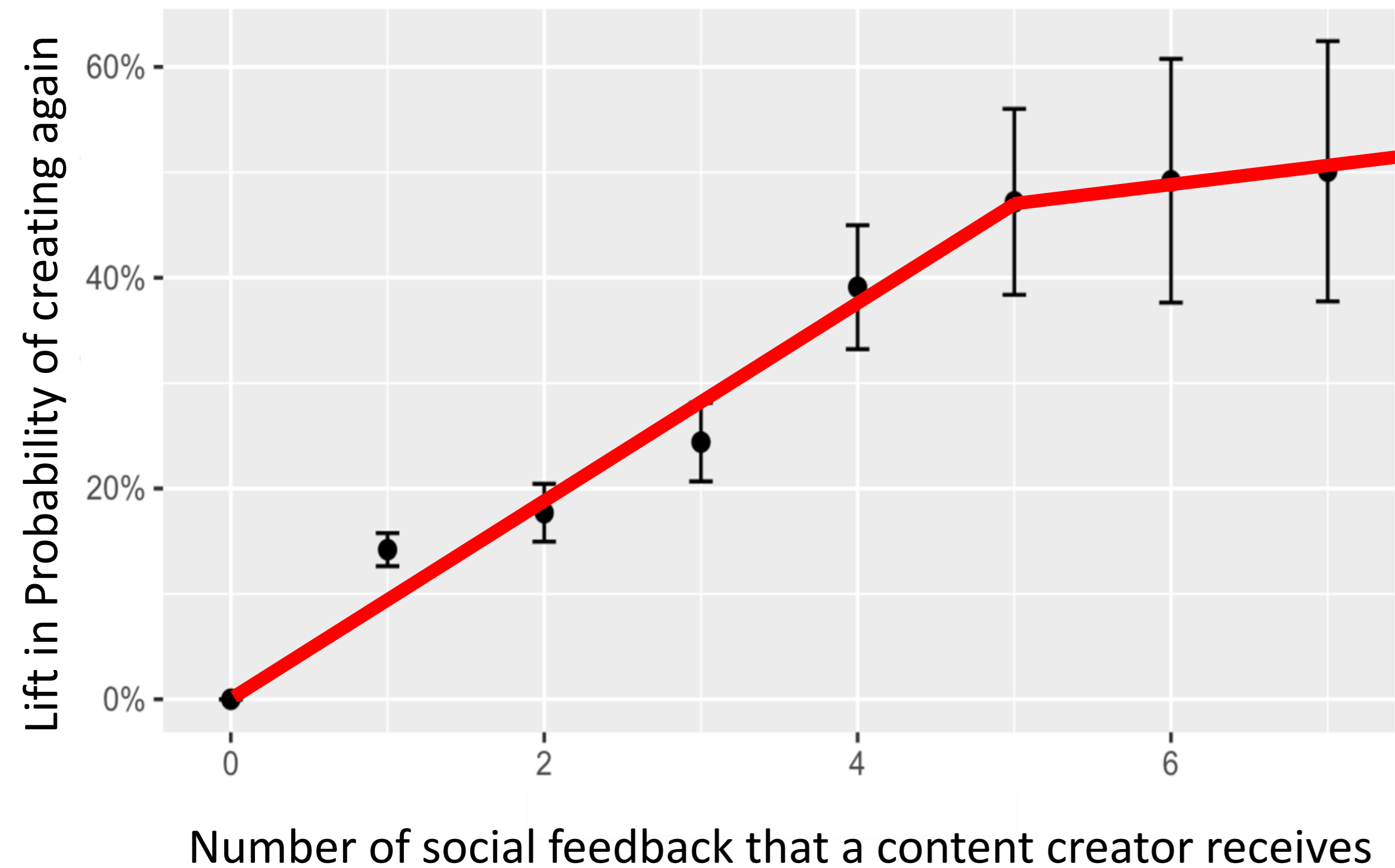
Comment



Share

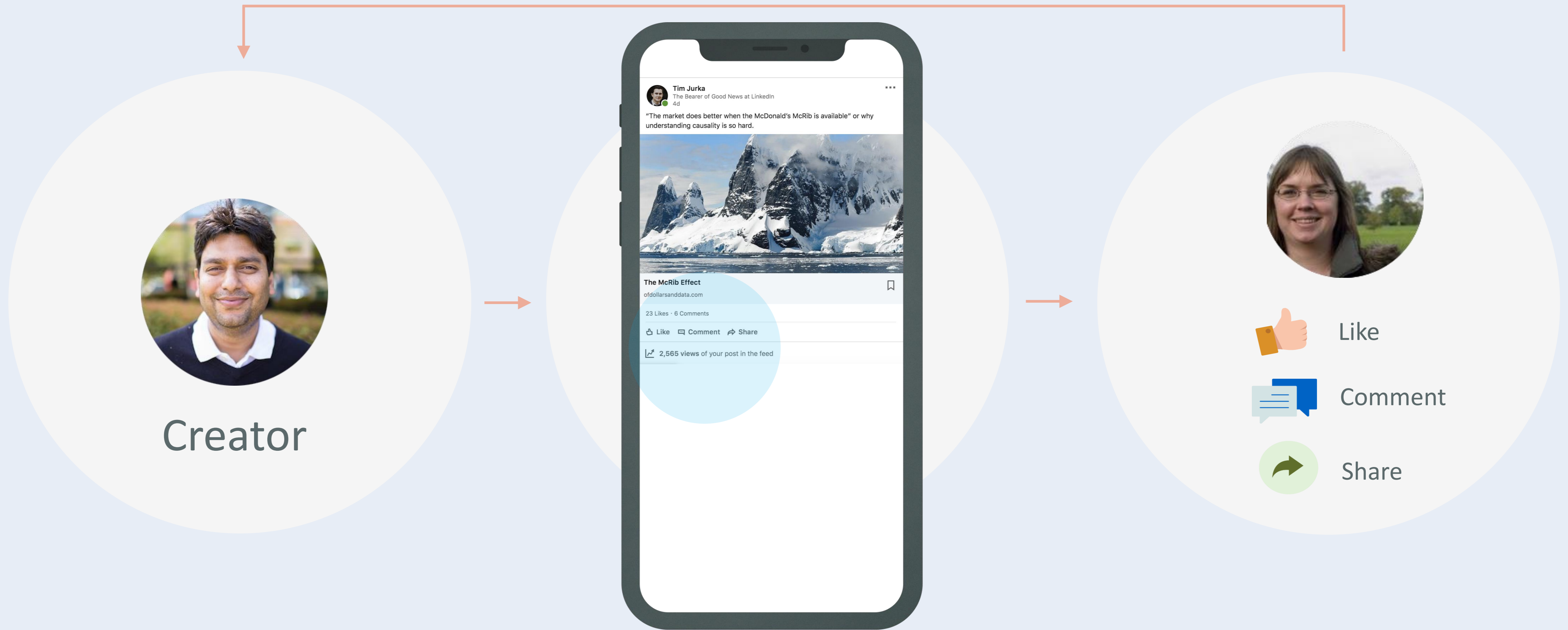
Objective: Maximize Contributions

Social feedback drives content creation



More social feedback a content creator receives \Rightarrow More content creation

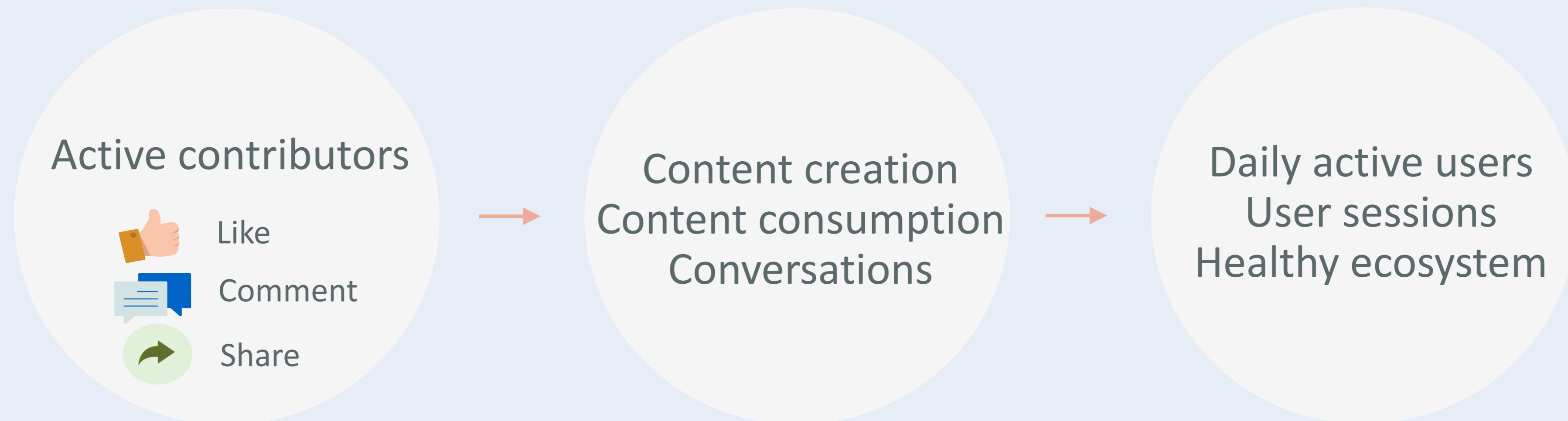
Social feedback



Objective: Maximize content creation

Product strategy of long-term engagement

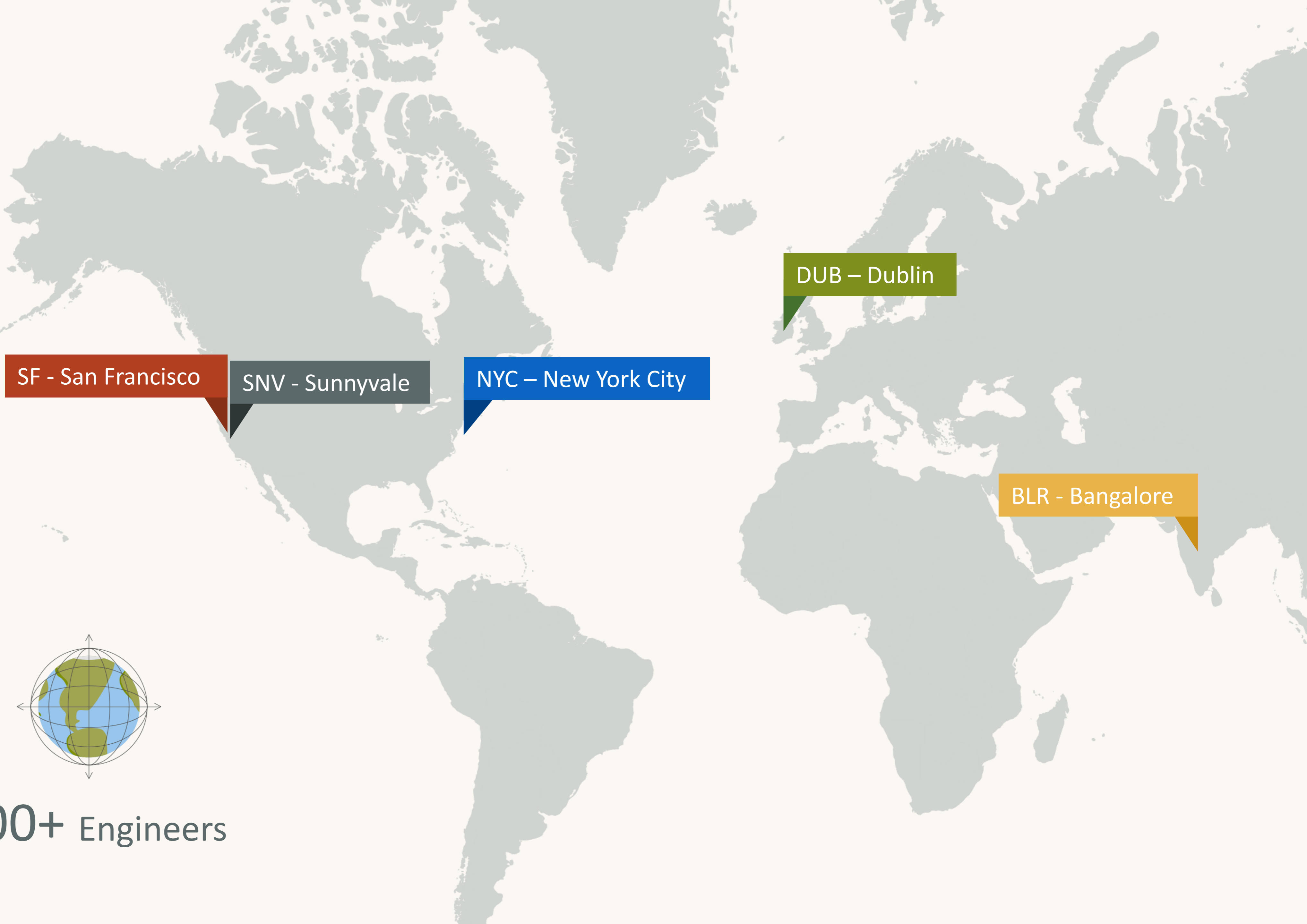
Build an ecosystem where members regularly talk to people they know, about things they care about with active interactions, not just passive consumption





It Takes a Village

Core AI Team



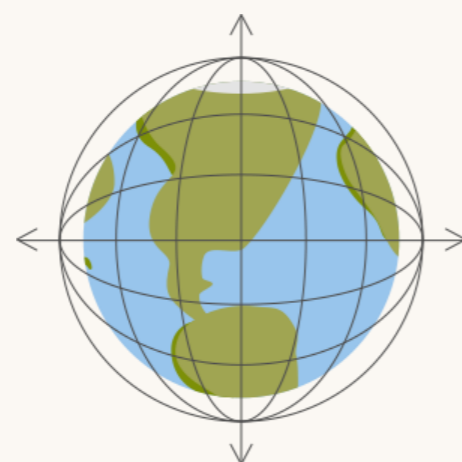
SF - San Francisco

SNV - Sunnyvale

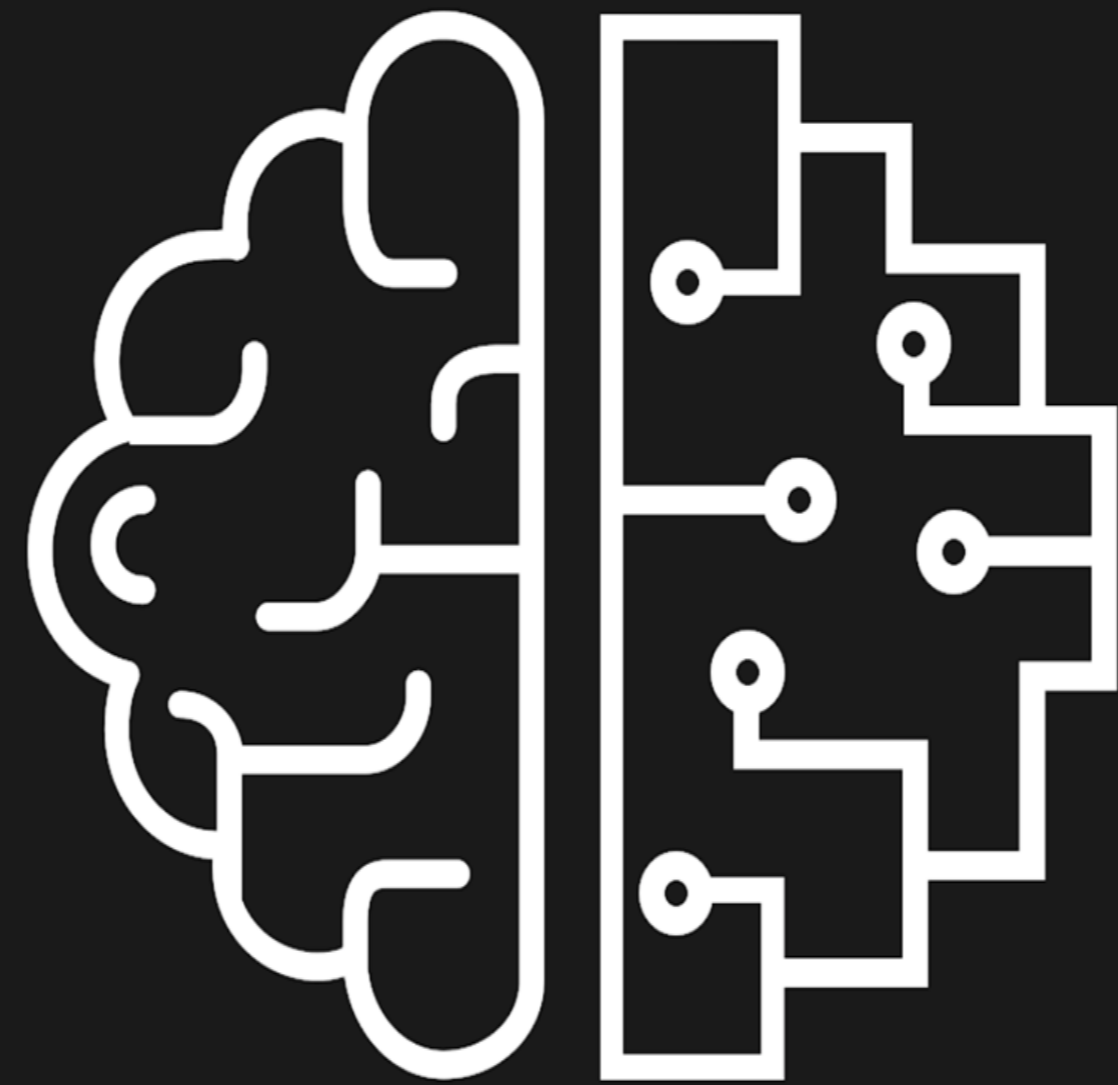
NYC - New York City

DUB - Dublin

BLR - Bangalore



500+ Engineers



 AI ACADEMY

 AI is like Oxygen

Thank you