

— January, 2020





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January, 2020





COLORADO LAB GOALS & OUTCOMES

GOALS

Study Colorado's Data Ecosystem
Conduct Stakeholder Workgroups & Pilots
Build & Test New Infrastructures
Unify Fragmented Institutions
Quantify Student Outcomes & Skills

DELIVERABLES

Local Research & Stakeholder Workgroups
Foundational Pilots
Community Pilot Sandbox
CO State Learning Ledger & Skills Graph
A Suite of Applications & Dashboards
CO State Implementation Report & Roadmap





The **C-Lab** (Colorado Education Work Lab) provides the whole state of Colorado with a unified but decentralized ecosystem for innovation, pilots, research, and collaboration for the future of education and work. It will incubate and launch a statewide Colorado Learning Ledger and Skills Graph then publish a report for other states to implement similar 21st century education and workplace infrastructures.

Colorado Lab

C-Lab Stakeholders

Government

- CO Department of Higher Education (CDHE)
- Office of Economic Development and International Trade (OEDIT) / Blockchain Council
- Governor's Office of Information Technology

University

- CU Boulder / CU Blockchain Alliance
- University of Denver
- · CSU Pueblo

Non-Profit

- Colorado Technology Association
- Denver Education Attainment Network
- Western Interstate Commission for Higher Education
- Aproflow
- T3 Innovation Network

Service Partners

- BrightHive
- Salesforce
- Credential Engine
- Linux Foundation / Hyperledger

Foundational Research

American Workforce Policy Advisory Board

White Paper on Interoperability Learning Records

Harvard Kennedy School

Enhancing Blockchain Innovation via Regulation: The Case for an Economy Corporation (E-Corp)

T3 Innovation

Competency is the New Currency (Report) Learning & Work Data Workgroup Reports

Claremont McKenna College

21st Century Student Equity & Governance

IBM

Blockchain Revolution in Education and Lifelong Learning

San Jose State University

Blockchain (Library Futures Series, Book 3)

Senior Advisors

Carissa Carter Director of d.school at Stanford

Chloe Autio Al Policy, Intel Corporation
Alex Philp Data Scientist, IBM, NASA

Phil Long ASU's Trusted Learner Network

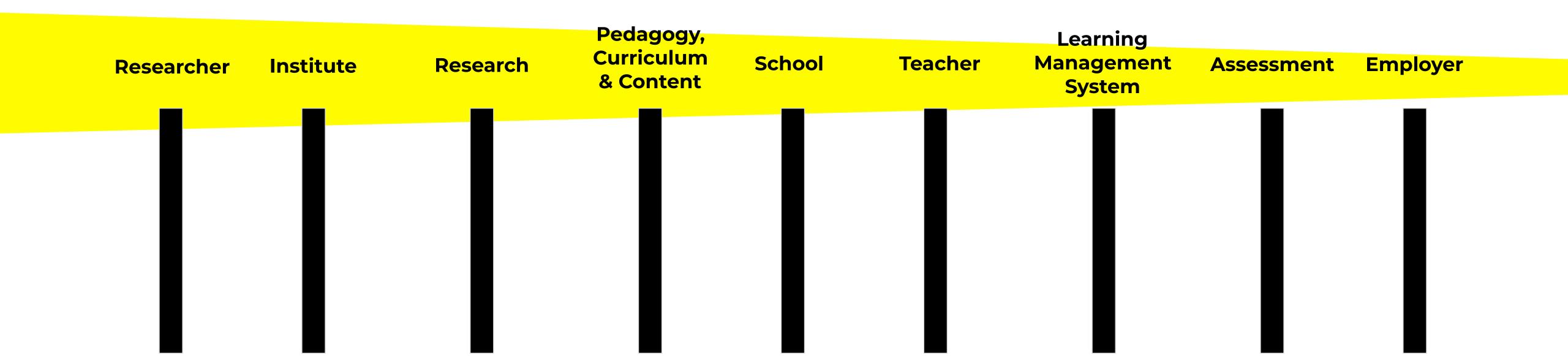
Conor Lennon Public Information Officer, UN

Hiram Chodosh President, Claremont McKenna College

Bob Sumner Sr. Director, Disney Research
Phil Komarny VP Innovation, Salesforce

36 Total Advisors

TODAY'S EDUCATION AND EMPLOYMENT ECOSYSTEM IS COMPLETELY FRAGMENTED.

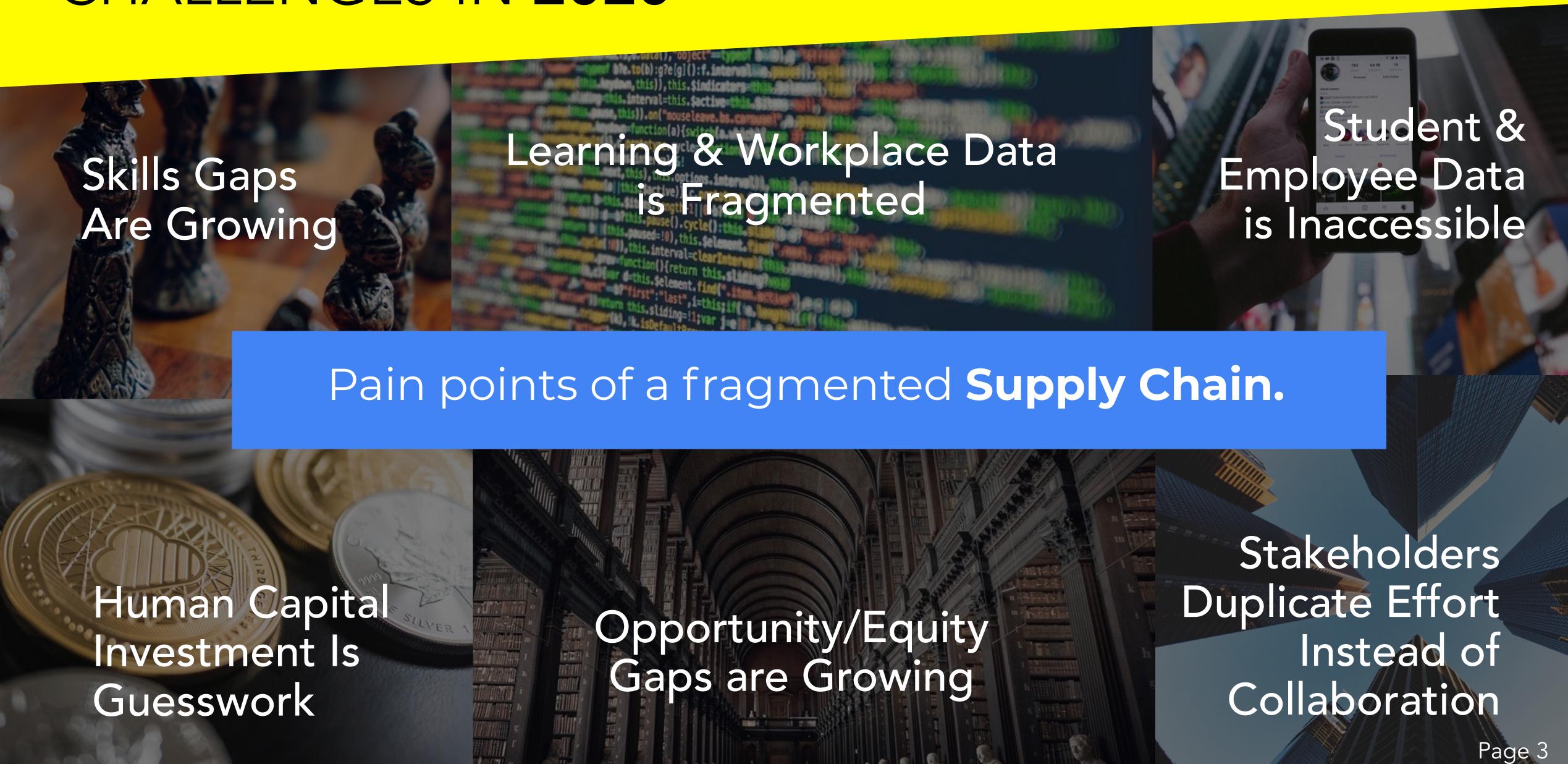


A BROKEN SUPPLY CHAIN SYSTEMS & DATA—Total Fragmentation

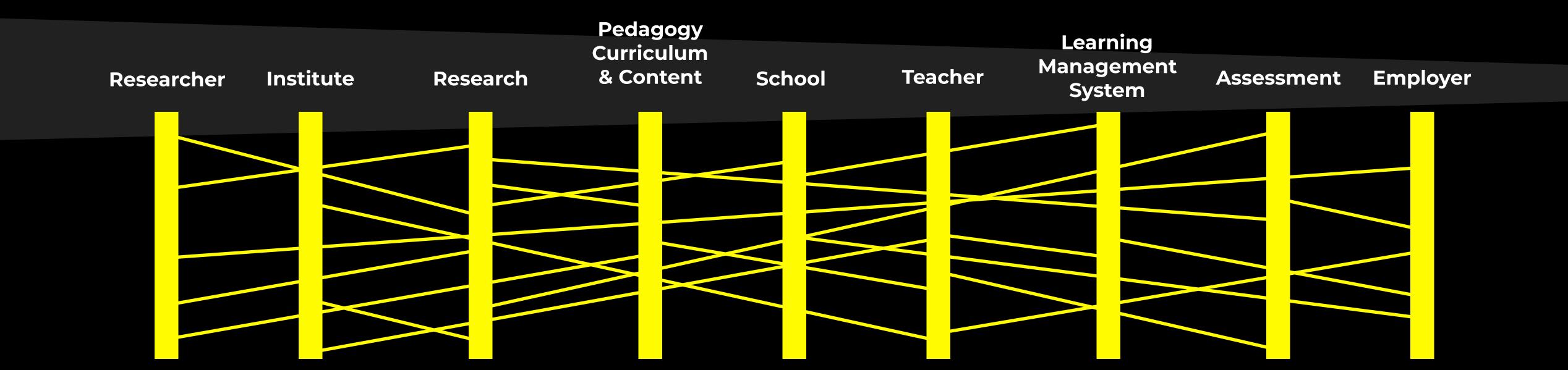
MAPPING—Only By Relationships

INFO TRANSFER—Email & Web Portal Uploads

CHALLENGES IN 2020



EXPONENTIAL TECHNOLOGIES ALLOW FOR A DECENTRALIZED BUT UNIFIED SUPPLY CHAIN.



A VALUE CHAIN



DATA—Decentralized & Unified

MAPPING—Neural Net Pathways

TRANSFER—Universal Infrastructure

EDUCATION IN 2030

Skills Gaps Are Solved Learning & Workplace Data is Interoperable

Students Own Their Universal Learner Portfolio

Benefits of a unified Value Chain.

Real Time Data Empowers Human Capital Investments Every Human Has Equitable Access to Education

Stakeholders
Share in a
Collaborative
Ecosystem

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UNIFY THE VALUE CHAIN OF EDUCATION & WORK



LEARNING LEDGER & SKILLS GRAPH

Identity

- Government ID Systems
- Open SSI Systems
- Closed SSI Systems
- Learner Record Systems
- Employer Record Systems

EMPLOYER

EMPLOYEE

ORG

INSTITUTE

Education

- Learning Management Systems
- Badging and Credential Systems
- Library Information Systems
- Research Information Systems

Workplace

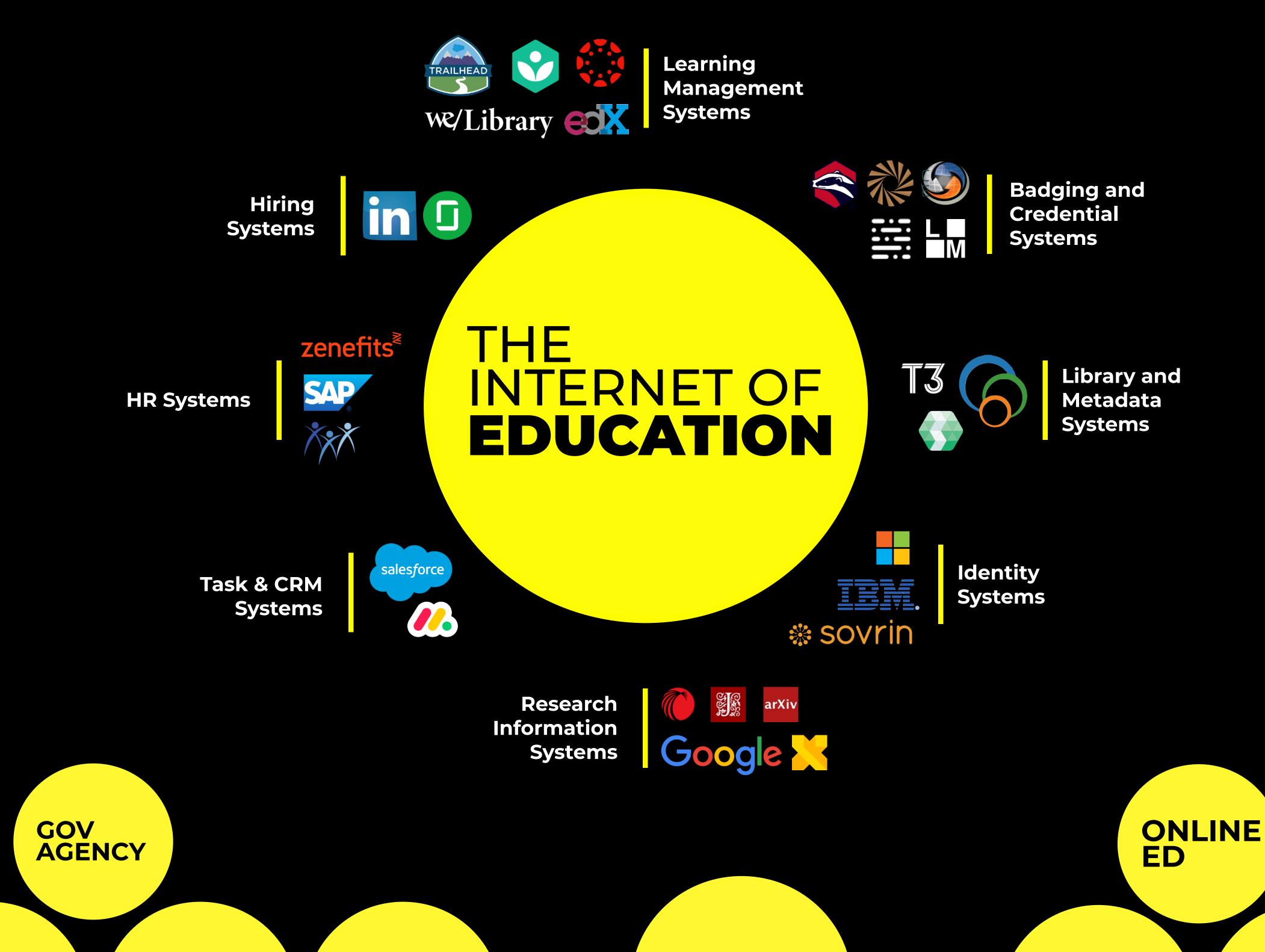
- Hiring Systems
- HR Systems
- Task & CRM Systems
- Compliance & Safety Systems
- Professional Development Systems

HIGHER

ED

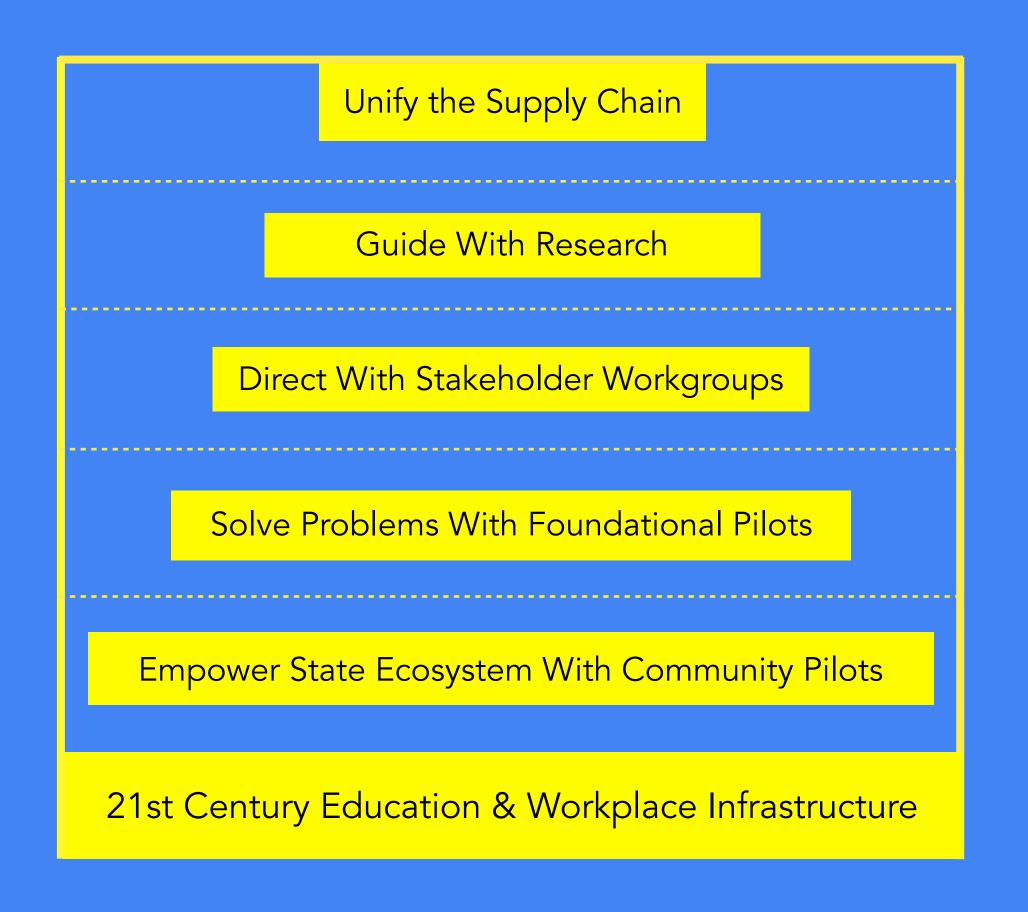
LIBRARY

K-12



STUDENT

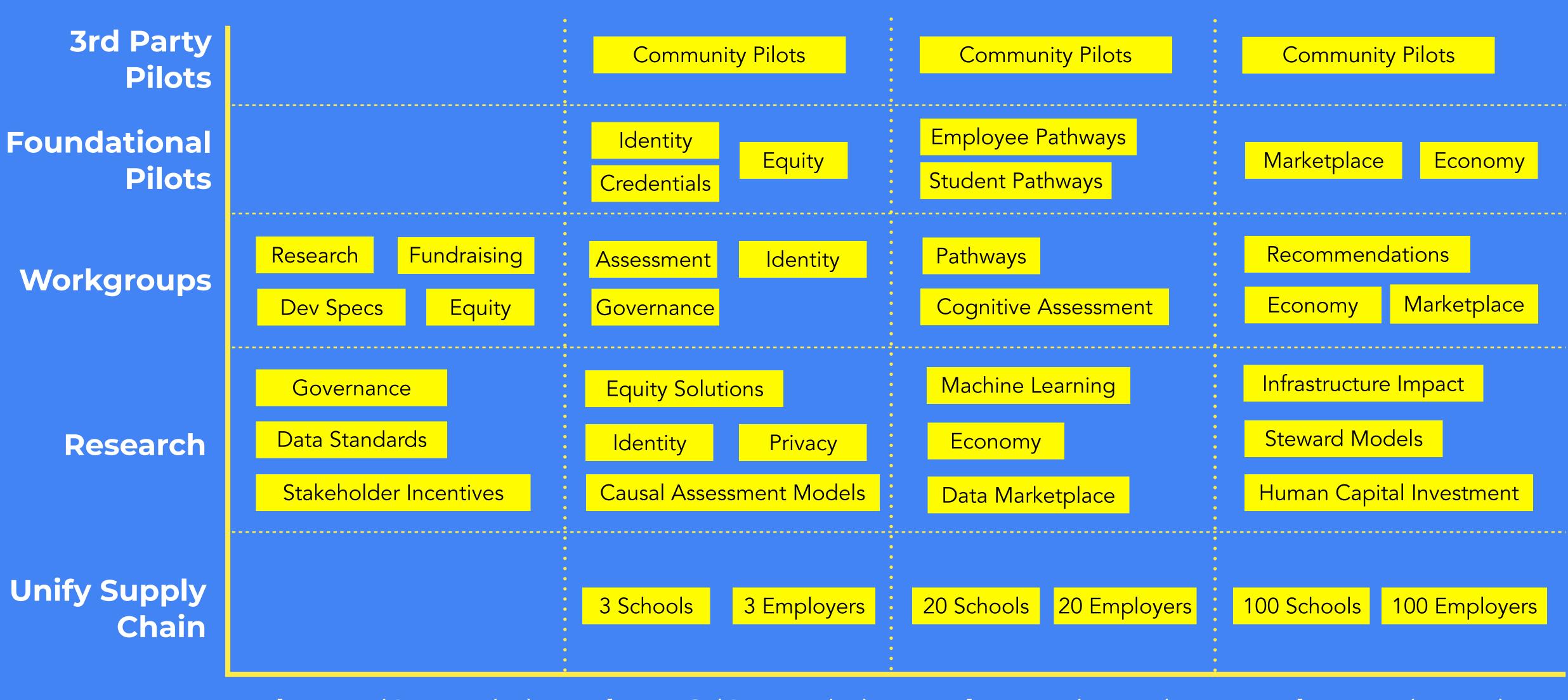




The **Colorado Education Work Lab** employs a 5 step methodology (see above) to align stakeholders around research driven 21st century education and workplace infrastructure. It accomplishes this goal through a variety of programs driven by stakeholder consensus.

Colorado Lab PROGRAMS





Phase 1 (6 Months)

Phase 2 (6 Months)

Phase 3 (1 Year)

Phase 4 (1 Year)





Proof Statements

- Innovation & Research Labs
- National & State Proofs
- National Implementation Reports

National Mandates

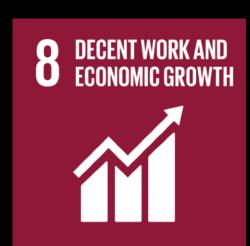
- Publish with UN & Group of Nations (G7/G20)
- Lobby for National & State Ledger Mandates
- Scale 21st Century Education & Work Infrastructures

2020-2023 2024 - 2029 2030

Solve UN SDG 4 & 8

In time for the 2030 UN Mandate

4 QUALITY EDUCATION



2020-2023 Generate proof studies and national roadmaps in U.S. State Labs and National Labs in

2024-2030 Publish implementation reports that empower governments to set national mandates.

countries with small populations and low legacy.

COLORADO PIONEERS*

First to give women the vote.

First to legalize cannabis.

First female democrat as Secretary of State.

First to pilot quadratic voting for legislation.

First to directly pay college athletes.

First to map statewide student pathways.

*(verb) to prepare the way for others to settle.



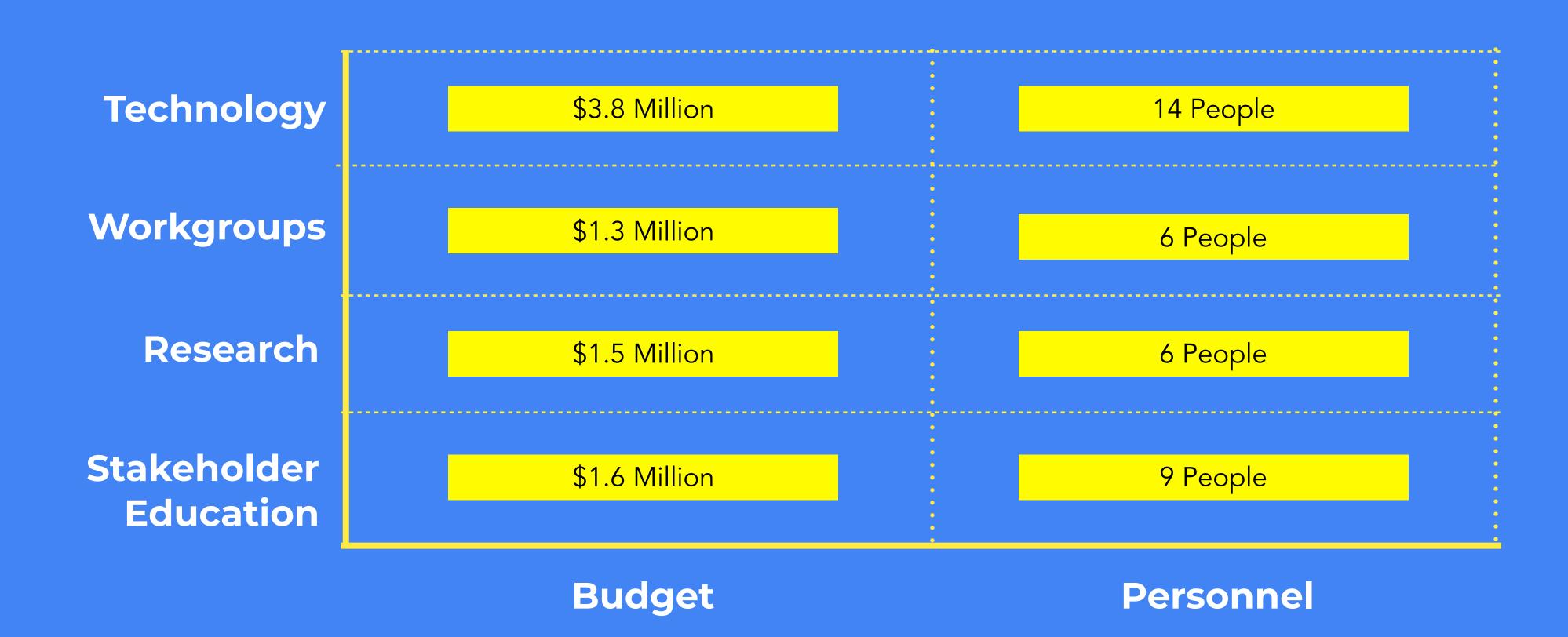
First decentralized education & work infrastructure.



36 MONTH BUDGET



Colorado Lab 3 YEAR BUDGET





January, 2020



