

Ops on the Edge of Democracy

Chris Alfano
& Julia Schaumburg



CHRIS ALFANO

CTO

JARVUS INNOVATIONS

 **@themightychris**



JULES SCHAUMBURG

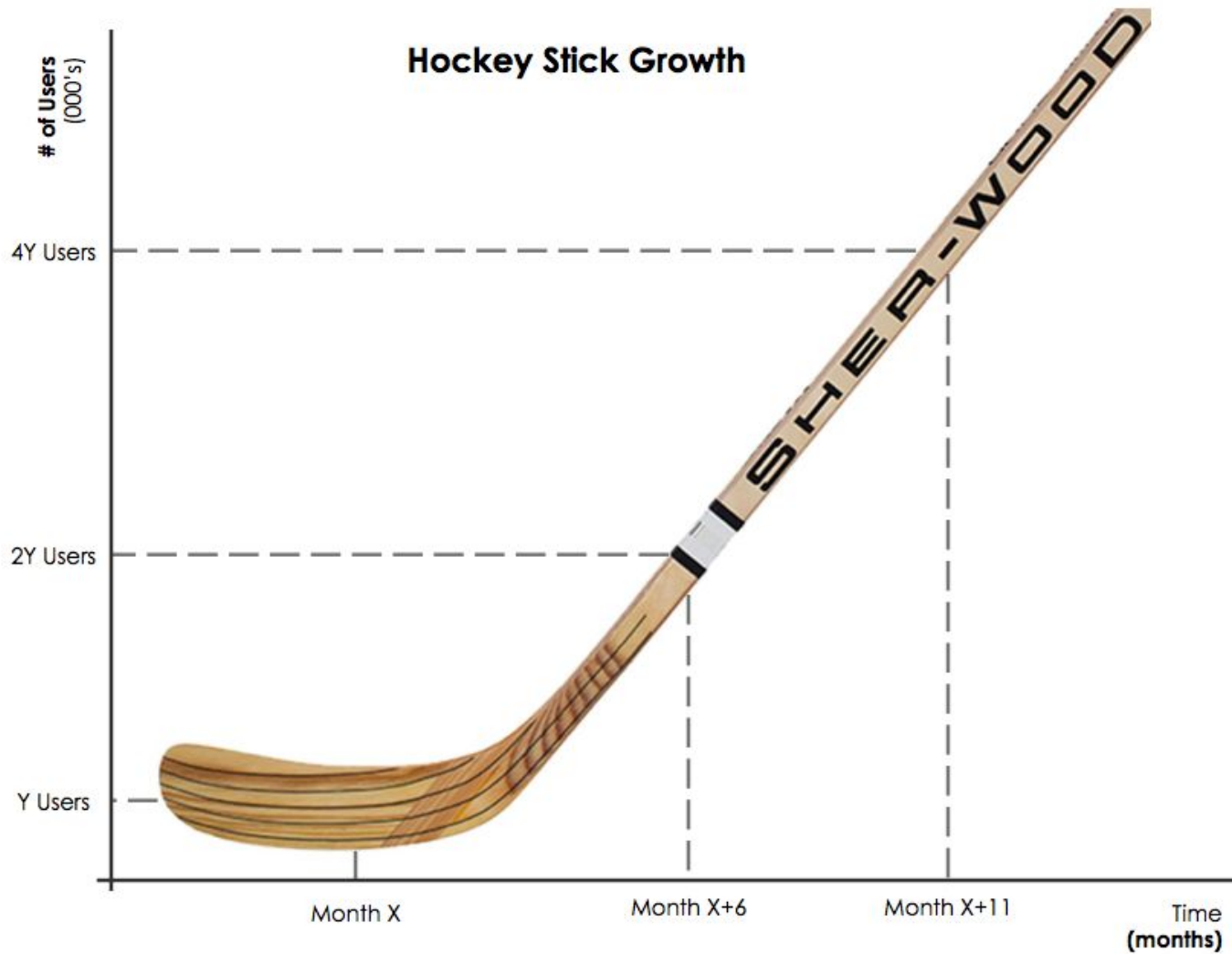
DIRECTOR OF R&D

JARVUS INNOVATIONS

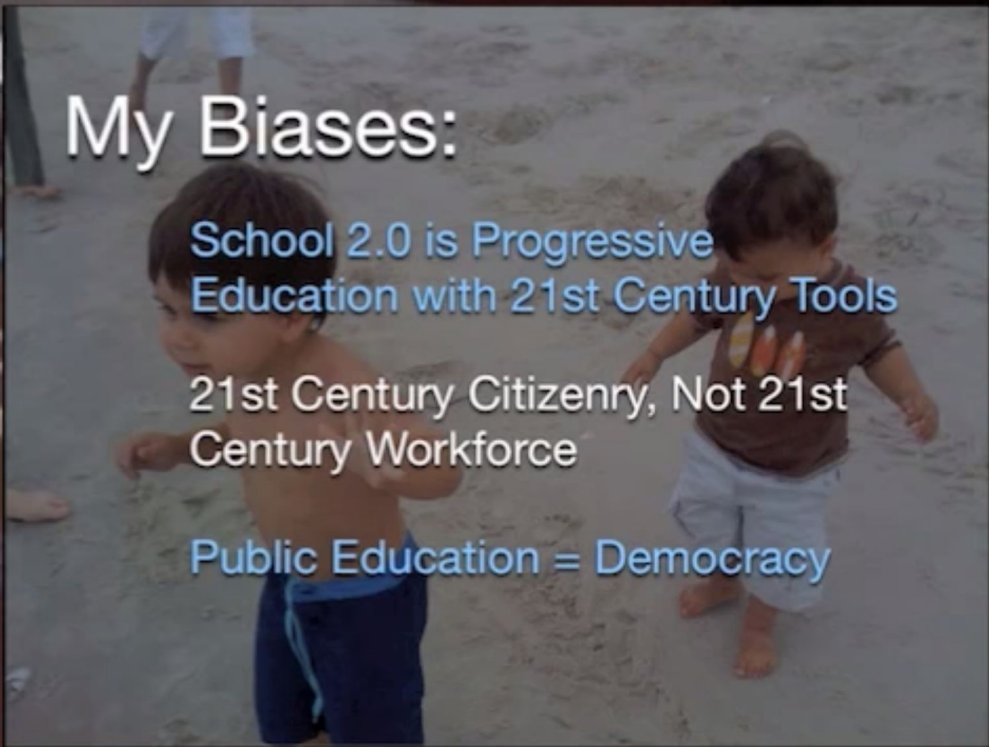
 **@JGSchaumburg**

**That Won't
Scale!**

Hockey Stick Growth





A photograph of two young children walking on a sandy beach. The child on the left is shirtless and wearing blue shorts, while the child on the right is wearing a brown t-shirt and white shorts. The text is overlaid on this image.

My Biases:

School 2.0 is Progressive
Education with 21st Century Tools

21st Century Citizenry, Not 21st
Century Workforce

Public Education = Democracy



Paraphrasing Neil Postman:

Certain Technologies
Are Not Additive,
They Are
Transformative



Technology Must
Be Like Oxygen

Ubiquitous,
Necessary and
Invisible



SLATE Dashboard

Search

Courses

Tools

Manage Slate

Chris

Science Leadership Academy @ Center City

Learn · Create · Lead

Students

Parents

Community

Calendar

Celebrating the SLA Track Team

Edit

Delete

Posted by Pearl Jonas on Thursday, May 2, 2019 at 12:18 pm

Congratulations to the SLA track team for a great season! A special shout-out goes to Krystal Cabrera who qualifies to complete in the 1600m event in the Public League Championship next week. Good luck, Krystal!

Calendar

TUESDAY, MAY 21

No School - PA Primary Election

All day

SATURDAY, MAY 25

State Championships - Ultimate

All day

SUNDAY, MAY 26

State Championships - Ultimate

All day

MONDAY, MAY 27

No School - Memorial Day

All day

FRIDAY, MAY 31

Graduation!

SLATE Dashboard

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Staff

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Contact Us

Important pages:

[SAP Referral](#)
[Counselor Meeting Request](#)
[Presentation of Learning](#)
[Summer Experiences](#)
[Exhibition Showcase](#)

Calendar

Dashboard

Search

My Courses

Manage Slate

Tools

Help

Report

Math 10

Learn and Practice

Conference

Apply

Assess

Priorities

Learn and Practice

David A. School

MATH-GA-04.4

David C. School

MATH-GA-04.4

David E. School

MATH-GA-04.4

David F. School

MATH-GA-04.4

David G. School

MATH-GA-04.4

David H. School

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David V. School

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David W. School

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David X. School

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David Y. School

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David Z. School

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SLATE Dashboard

Search

Courses

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Manage Slate

Chris

Students' Progress

RUBRIC

Problem Solving

STUDENTS

	Alysha Abernathy	Antoine Abernathy	Alfonso Albert	Bev Banta	Clara
Number and Quantity	75%	10.2	0%	0%	0%
Expressions and Equations	100%	8.8	0%	0%	0%
Functions	25%	17%	0%	0%	0%
Geometry	0%	20%	20%	30%	0%
Statistics and Probability	25%	38%	13%	0%	0%

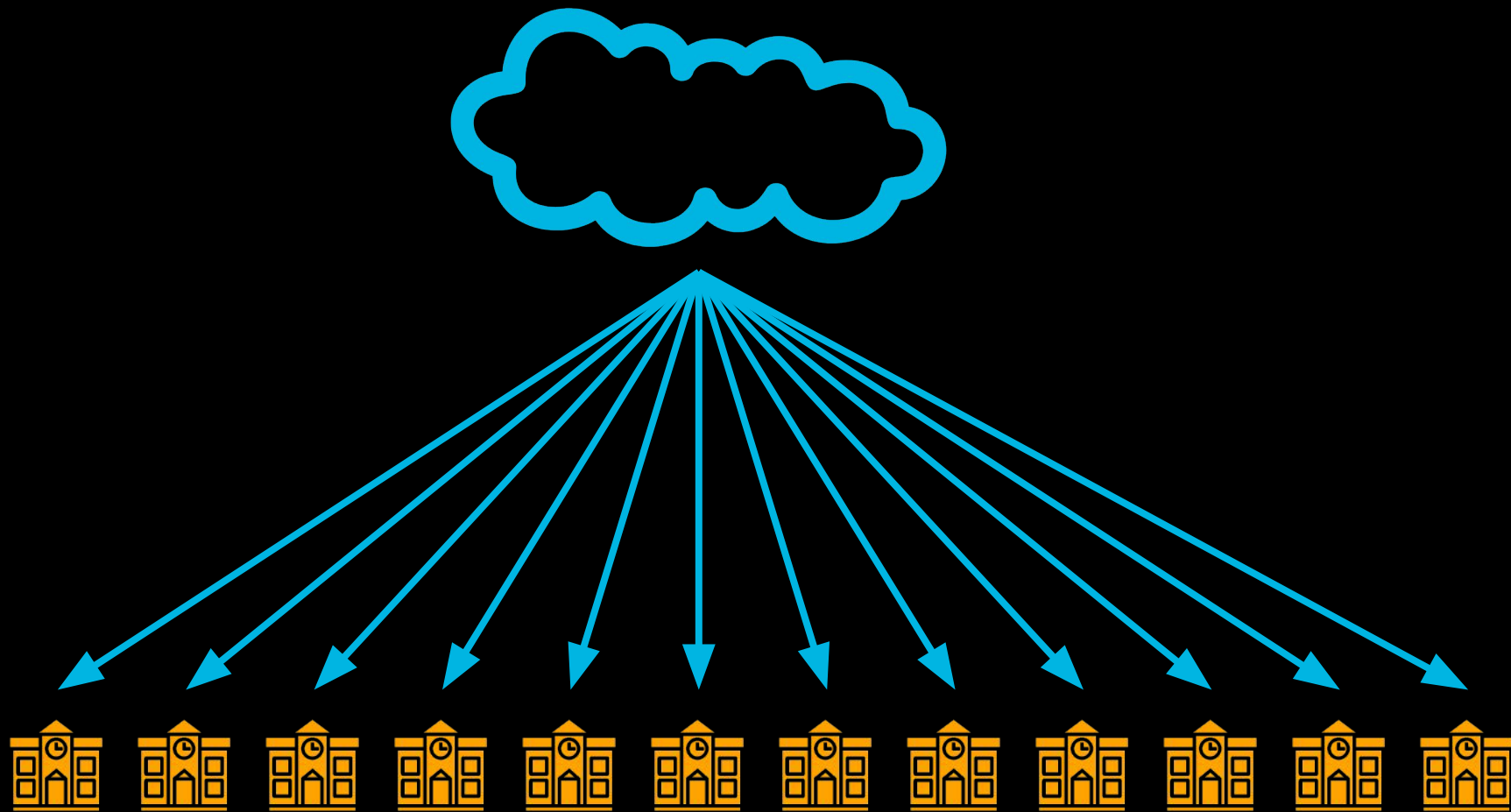
Portfolios:

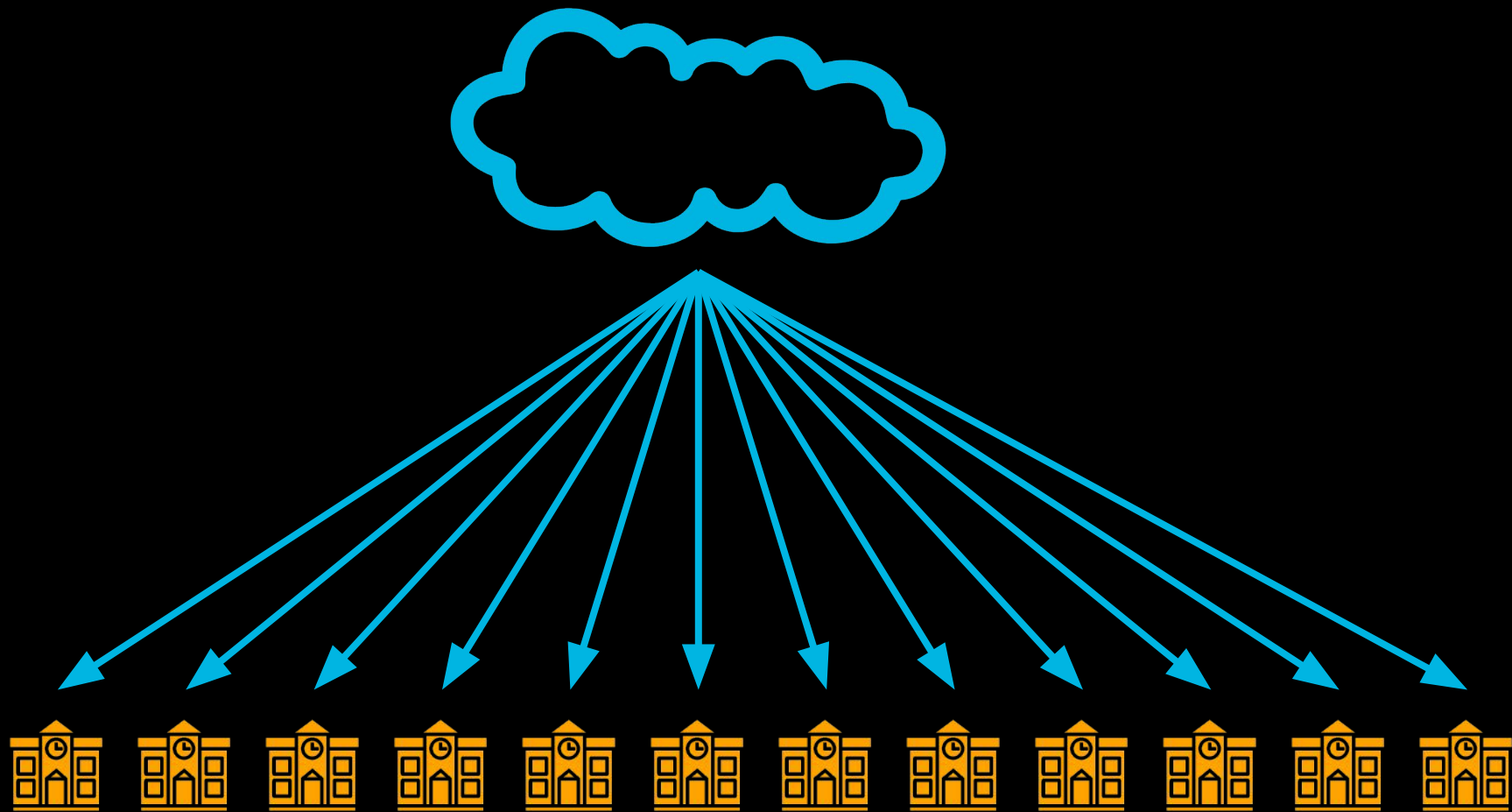
Y1

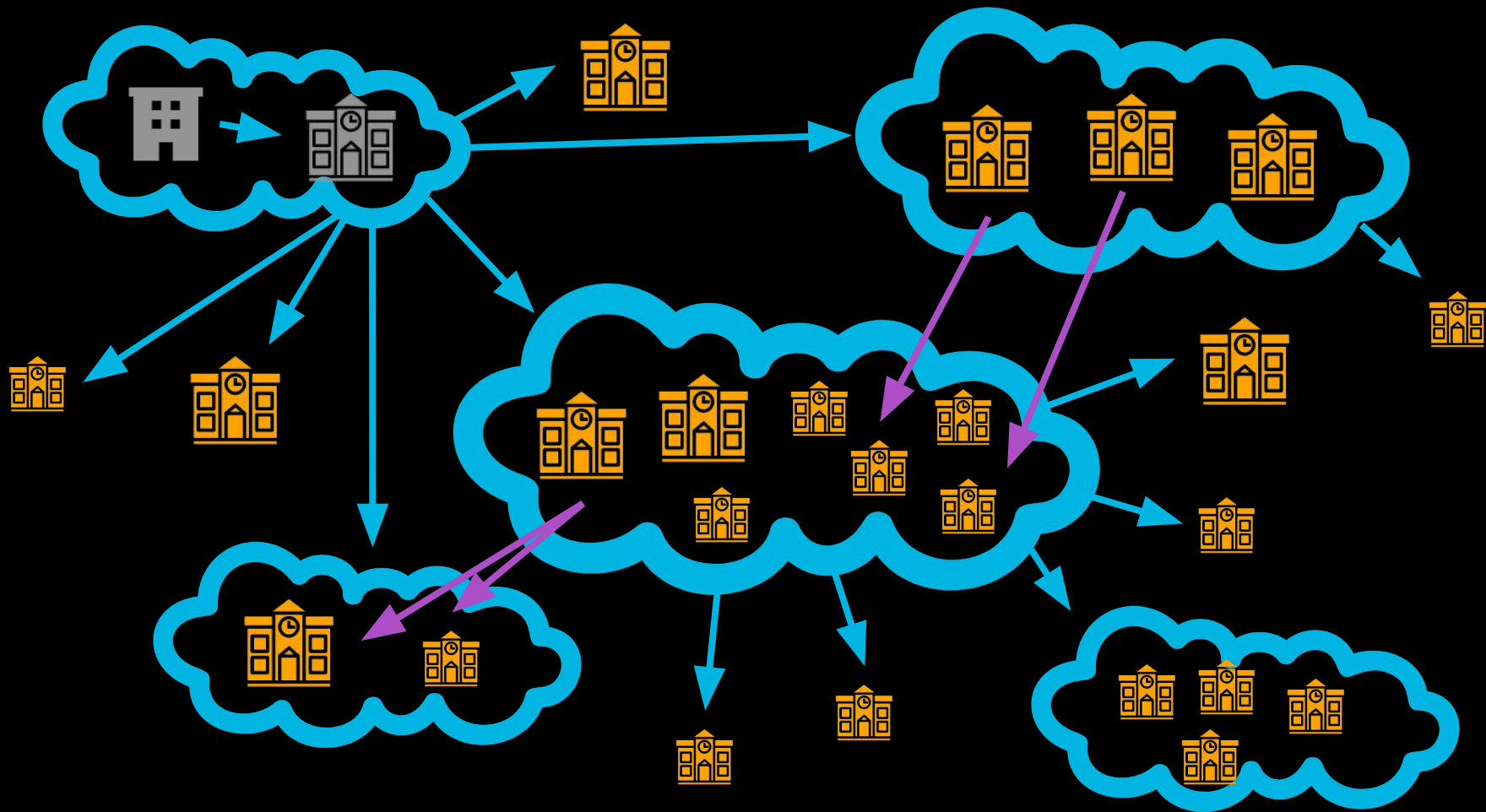
Y2

Y3

Y4







The Cloud

vs

The Ground

National/Global

vs

Local

Growth

vs

Evolution

Frictionless

(dehumanized)

VS

**Human interaction is the
whole point**

Build a moat

vs

Share foundations

Cogs

vs

Contributors

**Permissioned, symmetric
infrastructure**

VS

**Distributed, asymmetric
infrastructure**

Consistent deployment

VS

**Every deployment is a
free canvas**

Highly available

vs

Permanently available

It's not just schools

Municipal Services

Recreational Communities

Health and Fitness Programs

Learning & Interest Conveners

Arts & Culture Groups

Civic Hacking & Public Interest Technology

**Civic Hacking is the
Engine of Change**

**“Government can work for the
people, by the people, in the digital
age.”**

CODE *for*
AMERICA



OUR PARTNERS

Code for All is a collaborative network, made up of organisations from all over the world.



welcome to
PHILA.GOV



Find
trash day



Pay
a bill



Explore
City jobs



Search for a
property

Service updates



CITY

City buildings are open for regular business hours.



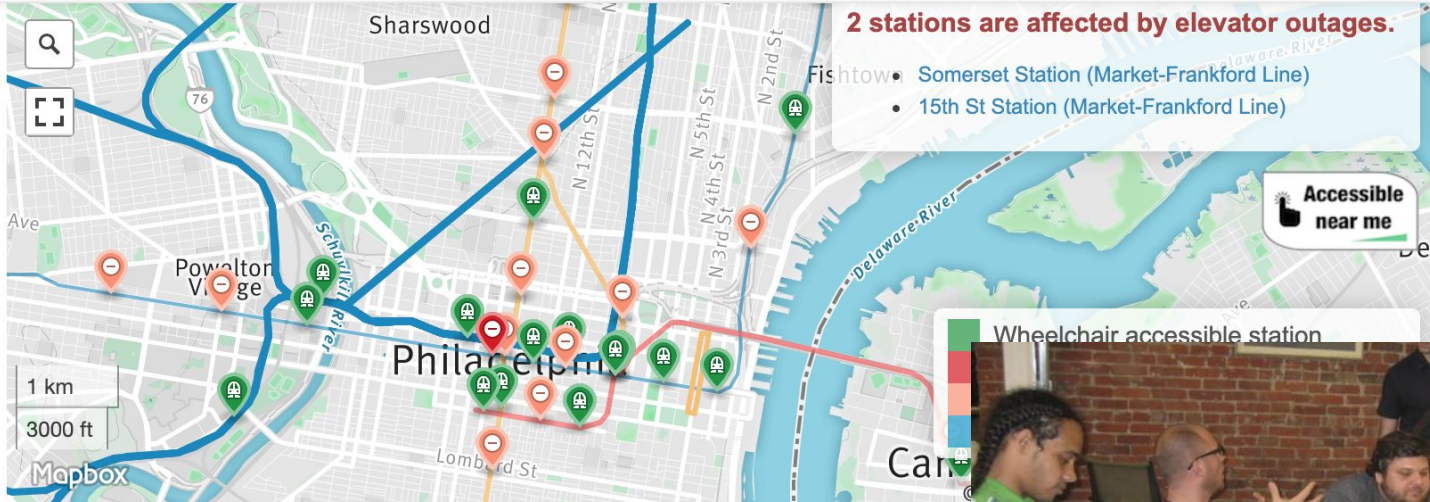
TRANSIT

Trains, buses, and trolleys are running on a regular schedule. [Visit SEPTA.org for information.](https://septa.org) 



TRASH

Trash and recycling is being picked up on a normal schedule.



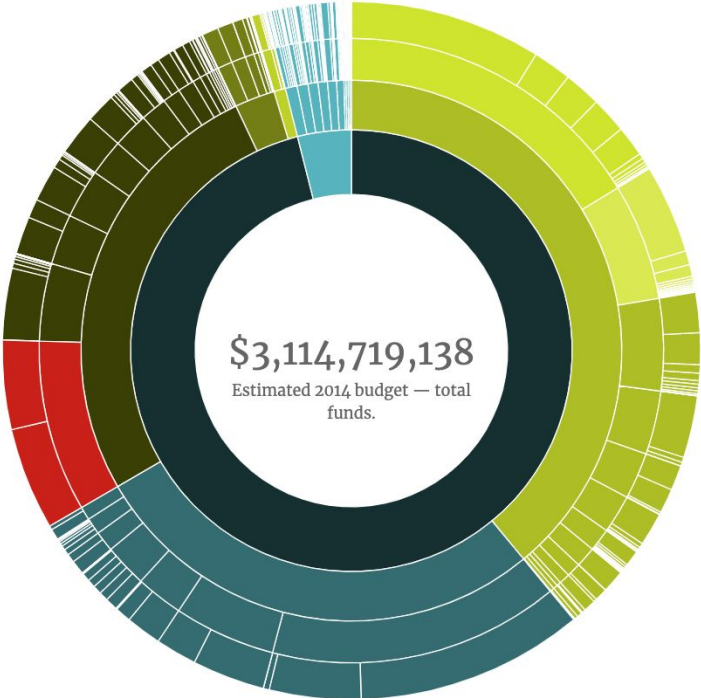
Recent elevator outages* at 15th St Station

1 day affected by elevator outages* so far this month. Last month 1 day affected.



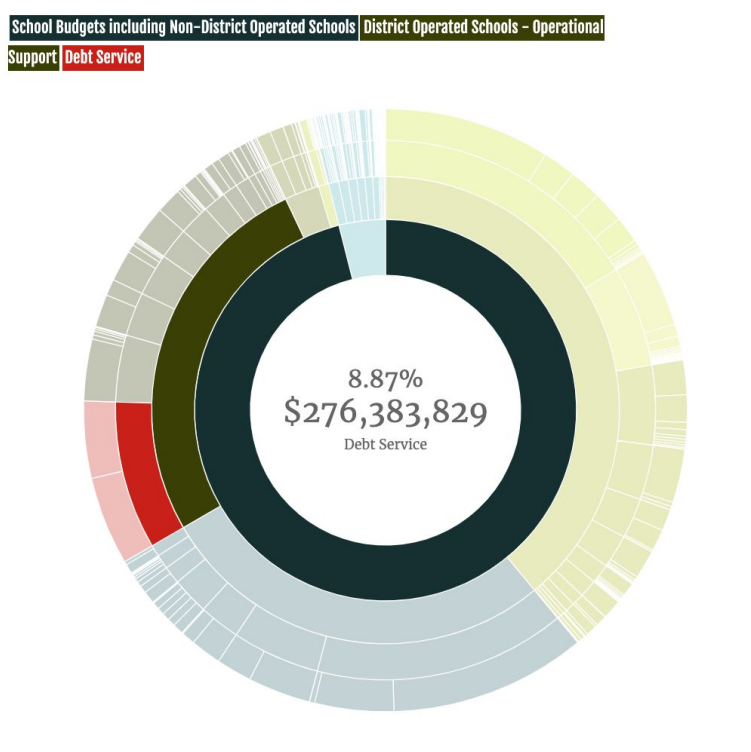
School District of Philadelphia Budget

Estimated 2014 budget: ● Total ● Operating ● Grant ● Capital ● Other
Proposed 2015 budget: ● Total ● Operating ● Grant ● Capital ● Other



- School Budgets including Non-District Operated Schools
- District Operated Schools - Instructional
 - Elementary - K-8 Education
 - Secondary Education
- District Operated Schools - Instructional Support
- District Operated Schools - Pupil - Family Support
- District Operated Schools - Operational Support
- Debt Service
- Non-District Operated Schools
- Administrative Support Operations

Note: Undistributed budgetary adjustments and gap closing reductions are distributed for the purposes of this chart.
Source: SDP Open Data Initiative





**We need to
build a new
toolkit**

**Replicating up a whole
env someone else built
needs to take 1 click**

**Everyone needs the tools
to contribute**

**Without learning the
whole stack first**

**Running on your own
machine is great**

**People need community
infra to plug into**

**We need more than
forking and configuring**

**Why is WordPress still our
best platform?**

**We need to be able to
build things without
proprietary dependencies
we have no rights to**

Idling must be free

**Sharing improvements
must be as effortless and
getting started**

The “Four Freedoms”

1. The freedom to run the program as you wish, for any purpose.
2. The freedom to study how the program works, and change it so it does your computing as you wish. Access to the source code is a precondition for this.
3. The freedom to redistribute copies so you can help your neighbor.
4. The freedom to distribute copies of your modified versions to others. By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.



WITH, NOT FOR

DEMOCRACY



OPERATIONS

OPERATIONS



DEMOCRACY



GO UPSTREAM



Working to end sexual and domestic violence

**EXPERTS HACK
THINGS**

**OUR PROCESS IS ABOUT
PROFIT**

**SO WHAT HAPPENS IN THE
PUBLIC SECTOR**

SAFe® for Lean Enterprises

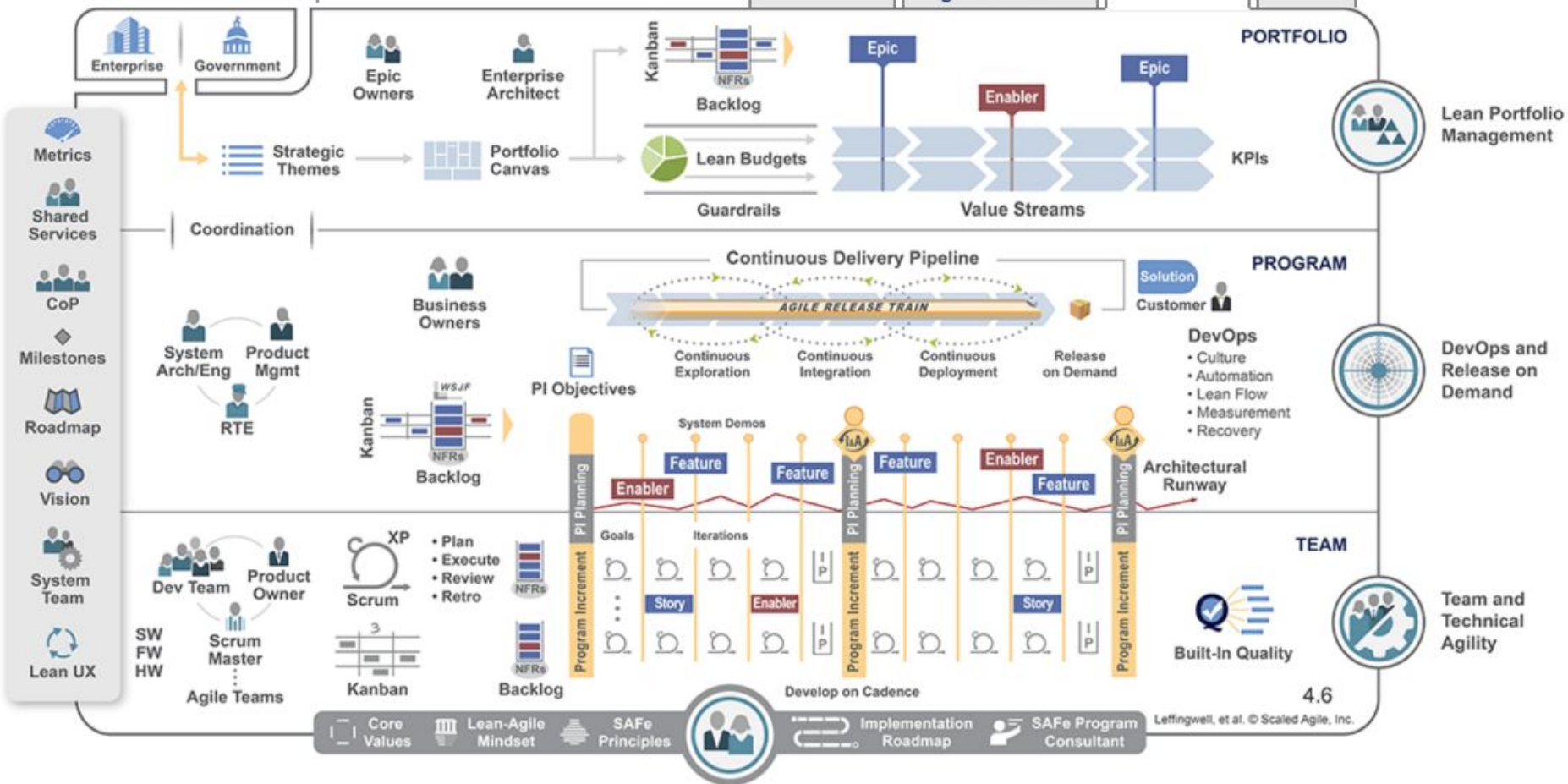
Essential SAFe

Large Solution SAFe

Portfolio SAFe

Full SAFe

Select Configuration



**FUCK THE
EASY WIN**

NURSES
EMERGENCY SERVICES
SOCIAL WORKERS
TEACHERS

CONWAY'S LAW

MISFIT & FRICTION

BROKEN RECORDS

One in five people surveyed this year by the Kaiser Family Foundation has found a mistake in their EHR. Of those, nearly half have incorrect medical histories.

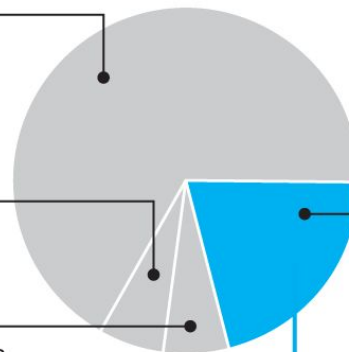
RELIABILITY OF EHR

67%
PATIENT DID NOT
NOTICE AN ERROR
IN HIS/HER EHR

6%
DON'T KNOW/
NO ANSWER

6%
DOCTOR DOESN'T USE EHR

21%
PATIENT DID
NOTICE AN
ERROR IN
HIS/HER EHR



TYPE OF ERROR NOTICED IN THE MEDICAL RECORD

INCORRECT MEDICAL HISTORY



INCORRECT PERSONAL INFORMATION



INCORRECT LAB RESULTS OR OTHER TEST RESULTS



INCORRECT MEDICATION/PRESCRIPTION INFORMATION



BILLING ERRORS/ISSUES



SOURCE: KAISER FAMILY FOUNDATION

JOIN A CODE FOR AMERICA BRIGADE

TEACHERS