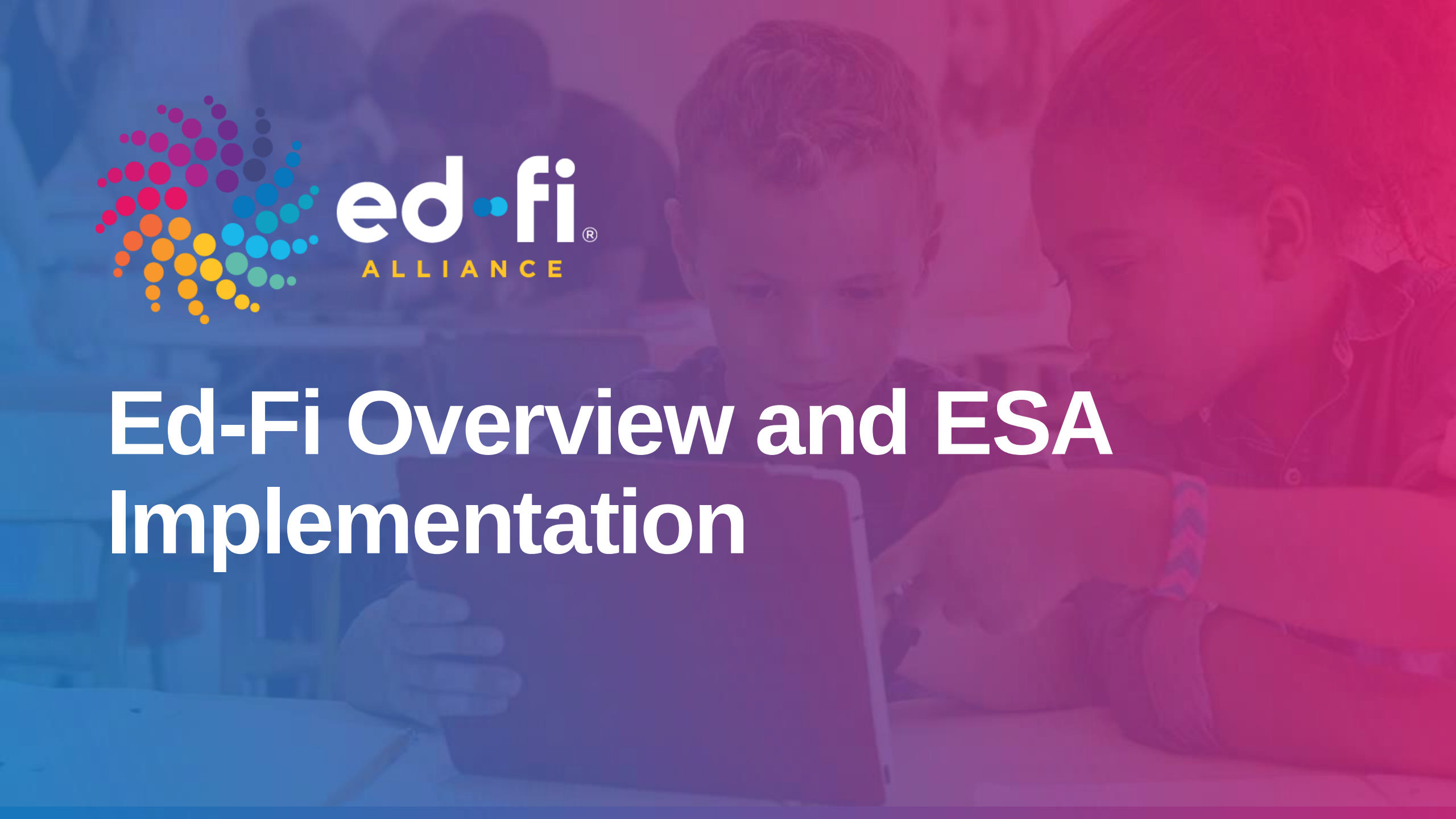


Ed-Fi Overview and ESA Implementation

States and districts have many pain points. They need data. ESAs connect everyone

State Education Agencies

Timeliness. Can take weeks and even months to respond to legislative data requests

Data quality. Data received from districts is often in different formats and missing info

Costly collection. Avg SEA has 10-15 head count ($1.1M+) processing and cleaning district data

Education Service Agencies

Change Agents. Asked to cover LEA staffing and data management gaps

Visibility. Responsible for helping districts without data processes

Costs. Cost is a problem for everyone involved.

Local Districts

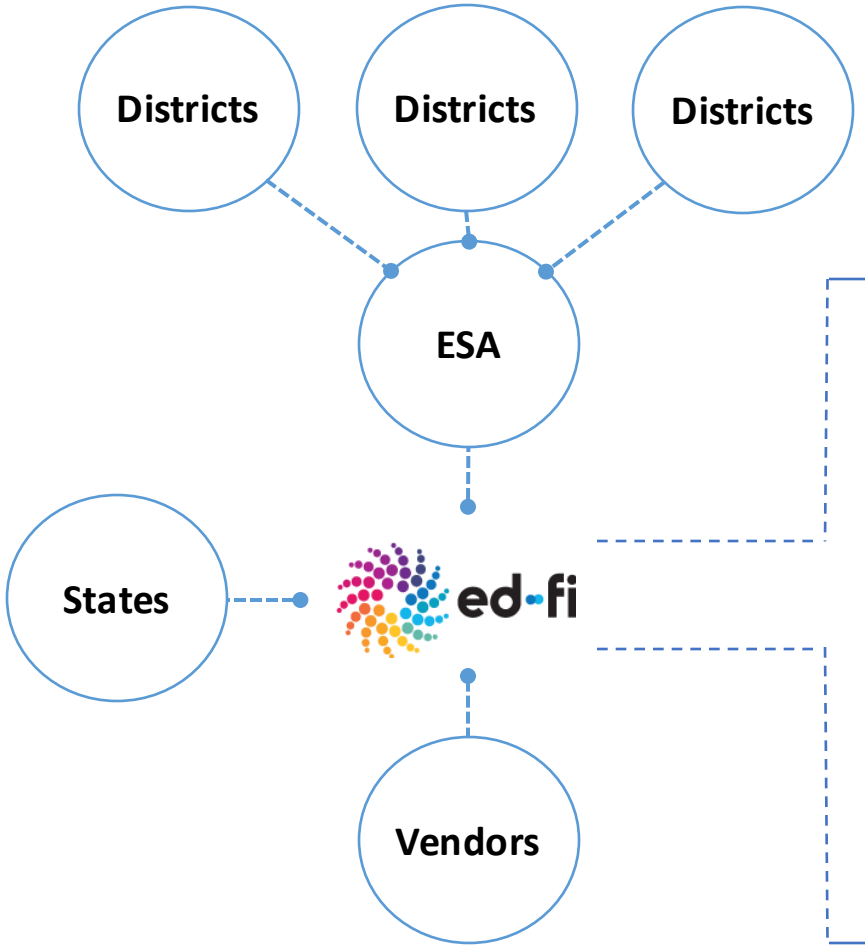
Reporting. Avg of 6 head count ($0.5M) per district to collect and format data

Absenteeism. Need earlier alerts of potential chronic absenteeism – vs months later

Assessments. Don't have access to a consolidated student level view of assessment results

College Career Readiness. Limited visibility into how performing against state targets

Ed-Fi's mission is to enable data interoperability across K12

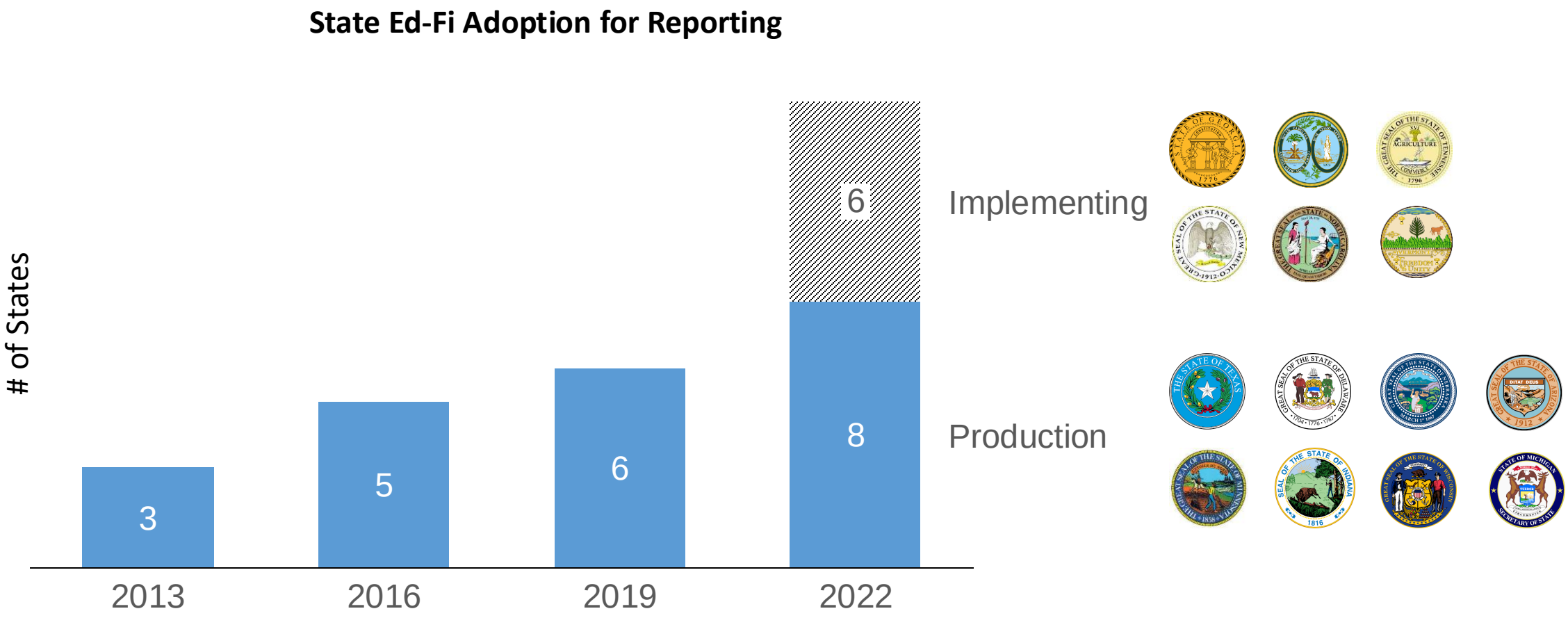


Data standard. Common taxonomy for data elements related to student performance

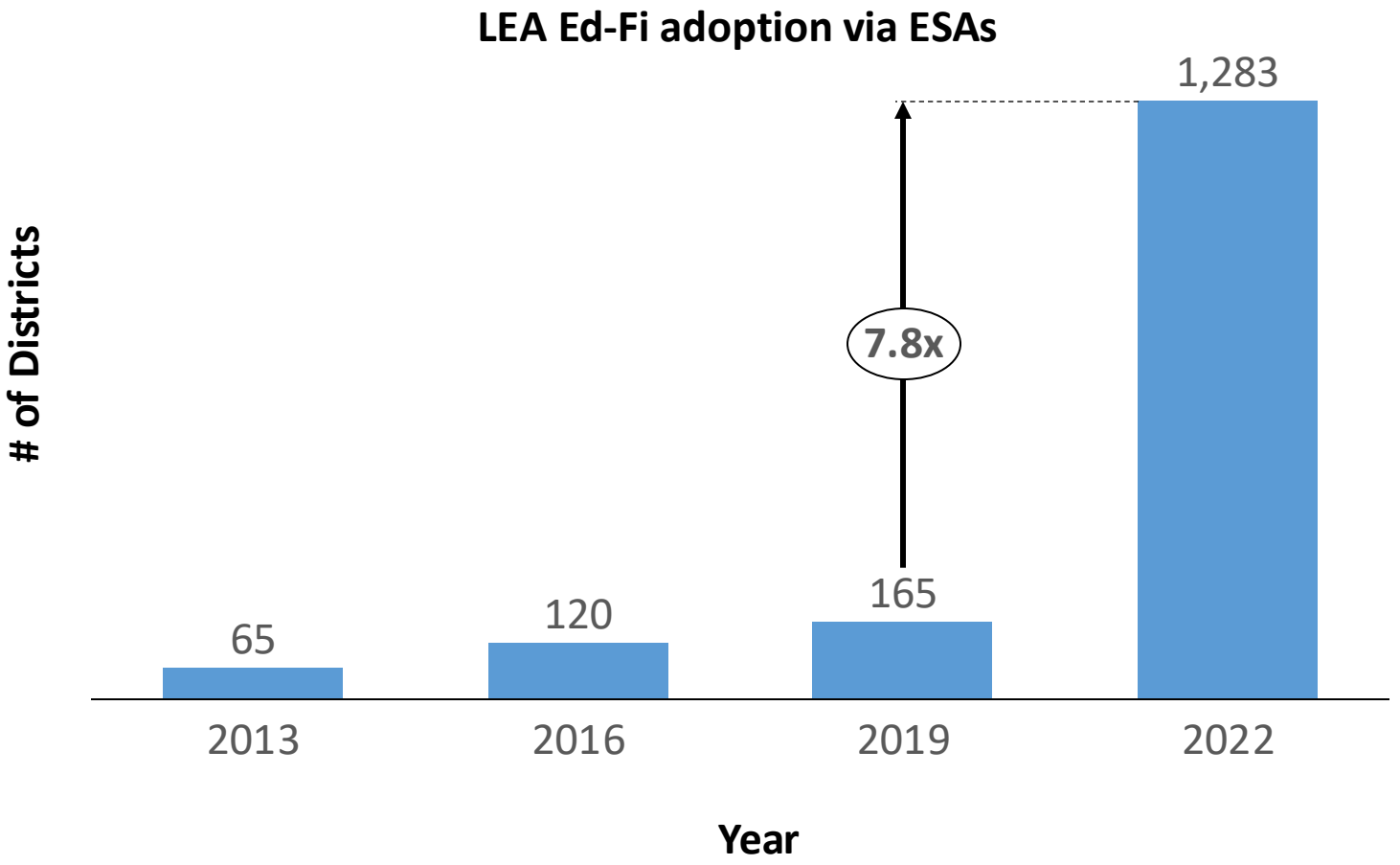
Open-source APIs. API specs that vendors use to send real-time standardized data, securely without human intervention

Community. Knowledge base of technical info, vendor directory, support ticketing system, and national / regional events with peers

State adoption of the Ed-Fi standard has accelerated …



… As has district adoption of Ed-Fi; enabled by Educational Service Agencies



In the last 3 years we have seen an ~8x increase in LEA's adopting Ed-Fi to address local use cases (e.g., CCR, absenteeism)

This is separate from the 1.9k districts in states that use Ed-Fi for state reporting

Ed-Fi is used to address key local use cases in Michigan

Michigan example

	Description of impact
New analytics	• MiRead; identifies students struggling to read at grade level • Digital Equity Data Collection; identifies gaps in equity of internet access
New tools	• MiStrategyBank; evidence-based strategies for addressing student needs • MiEWIMS; creates plans to target the attendance and behavior issues
Vendor integrations	• LEAs don't need to implement and manage vendor integrations; via Ed-Fi now have 10 integrations per school

"The ability to obtain **immediate information on newly enrolled students** has improved our ability to provide timely services.

Before we would have to wait for the previous school to send student status related to special education, English language, homelessness, etc., **which caused a delay in needed services**"

- Sarah Mohler, Madison District

Common Local Use Cases driven by Education Service Agencies

Assessment. Connecting student assessments with academic programs, grades, and attendance can drive better outcomes

College, Career, and Military Readiness (CCMR). CCMR is a leading driver of funding models and evaluation of district success.

Attendance. Chronic absenteeism is a leading indicator of student success and is comprised of attendance, behavior, and discipline data.

Educator Prep. Staff preparedness and availability drive student outcomes in the classroom

Transcript/Student Transfer. Fast and comprehensive transfer of student data allows for faster student access to educational services.

Data Warehousing. Many districts need a data warehouse to drive their downstream analytics and reporting processes

Rostering. Sourcing data for rostering applications like using OneRoster

ESAs are uniquely positioned to provide data services

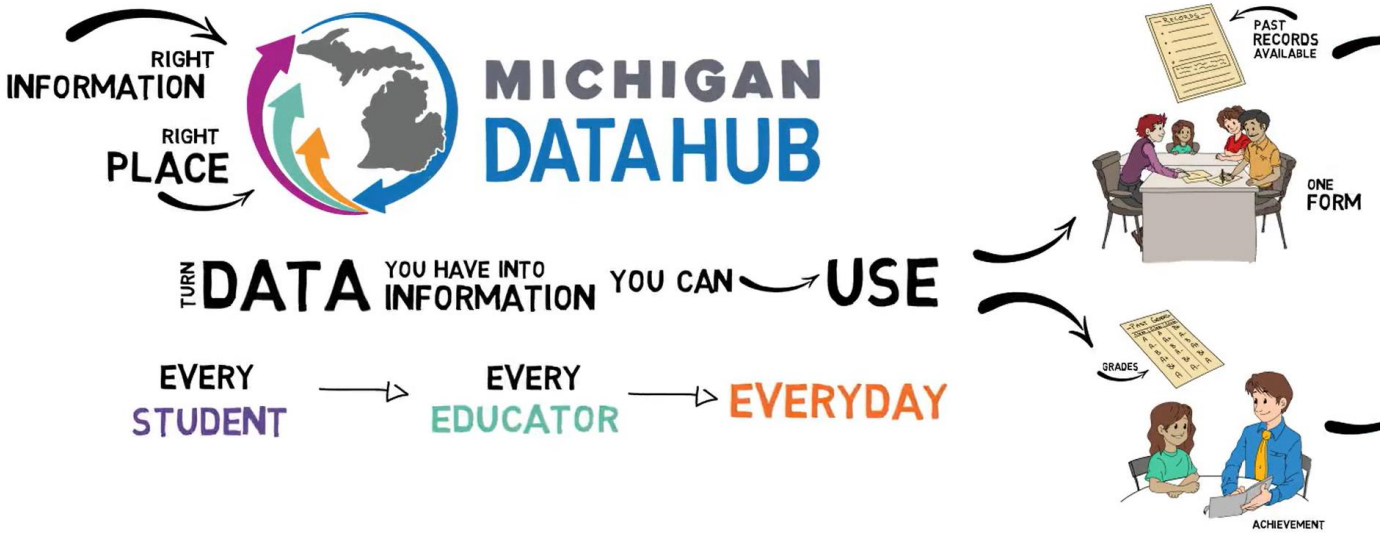
	Description of impact
Existing Market	• You are involved in Contract and Service provisions. • Districts are struggling with data access and interoperability
Your Opportunity	• You can offer a tech stack that will help them today and allow you to layer ESA services on top of an expanded offering. • Better when you work with others and share resources
Ecosystem	• You can't determine what your state is doing but you can enable what your districts need. • You can include the state to drive vendor requirements and support you through policy and potential funding. • You can increase value/impact and decrease burdens for your districts.

TODO: FLCODE or Region 4 quote to describe use case value for ESA

Sounds difficult but South Carolina and Michigan are examples of it working today

South Carolina
DISTRICT DATA GOVERNANCE

Texas Education Exchange



There are 3 primary approaches to implementing Ed-Fi

Best practice

	Do It Alone	Do It Together with standards	Do it Together + State Vendor Support
Description	Build Data Warehouse, reporting, and interoperability solutions in-house for your district members.	Leverage community implemented solutions and technical partners to deliver core services to your districts and provide layered support and use case driven services in addition	Building warehousing, reporting, and interoperability with implementation partners and state involvement to drive vendor expectations.
Benefits	• Tailored to your priority use cases • Easily include State legislative priority requirements	• Shortest (1.5-2 yr) **time to impact** • Address local **district use cases** • **Lowest cost** / limited SEA role • Clear sustainability model • National vendor support	• **Greatest impact**; $30M + local use cases • Shortens (1.5-2 yr) **time to impact** • Addressing local use cases with state legislative consideration
Tradeoffs	• Expensive with custom development • Expensive maintenance and support • Hard to get vendor participation • Challenging sustainability plan	• Lack of state legislative extension community support in your region • Additional expenses and services for offering a core platform	• States focus is on legislative use cases and not local use cases • Some **SEA/ ESA coordination** required
When adopt	Unique legislative requirements and use cases unique to your region	State reporting modernization is not a priority but ESA's can deliver use cases on a common platform	ESA model drives local use cases and want to de-risk reporting modernization effort

ed-fi ALLIANCE

Challenges districts face when trying to use data

Challenges

Low Staff capacity. Most districts don't have the staff necessary to run the required infrastructure for data projects

Complexity. There is a different expertise needed to run data infrastructure than provide data analysis.

Expensive Walled Gardens. Vendor "walled gardens" create challenges for districts to use their own data across systems and to choose best of breed tools.

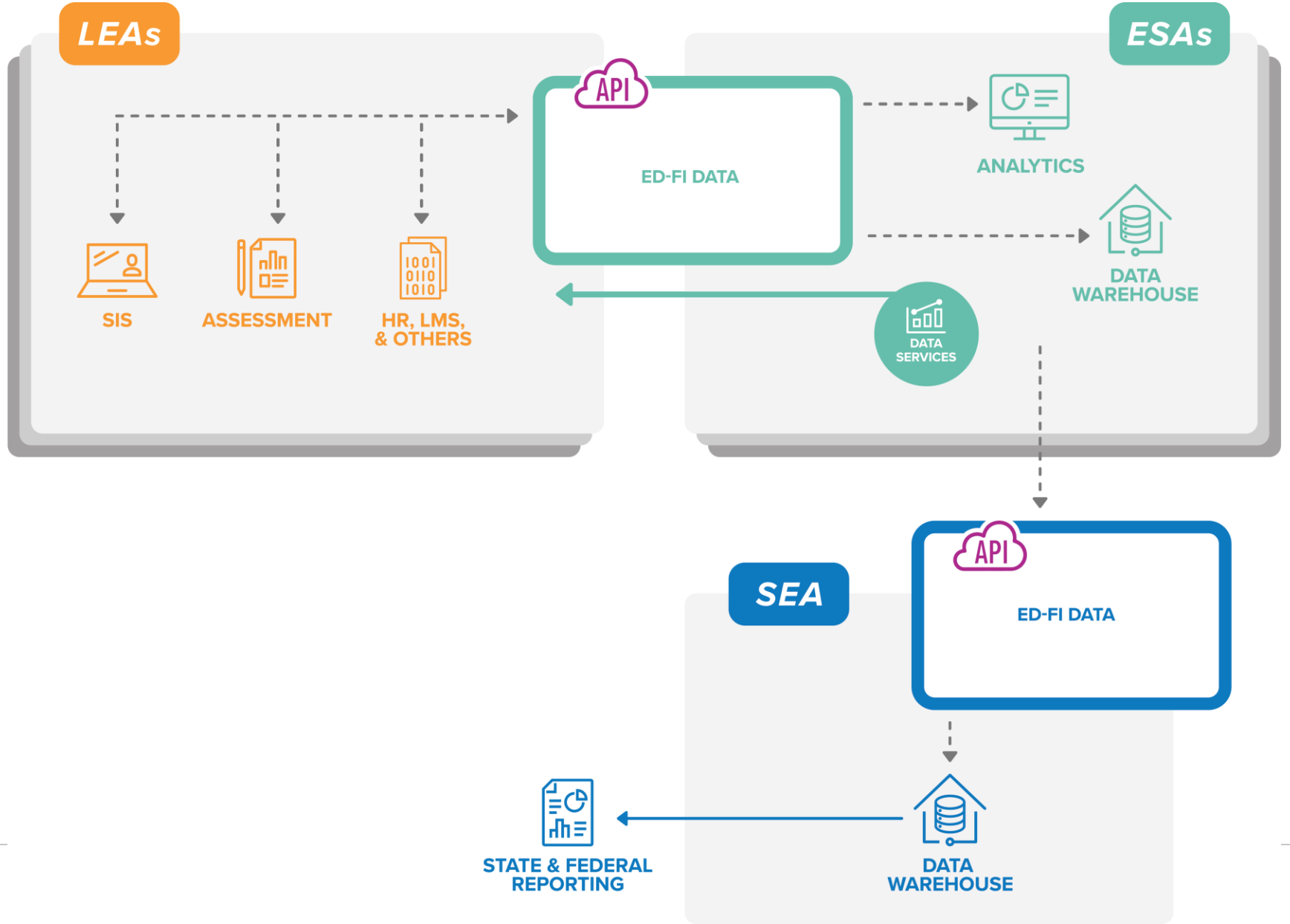
Timeliness. Data visibility can be too slow and too disconnected to be useful.

Your district buys SaaS tools

This does **NOT** compete with those SaaS tools.

You can help them extract value across those tools **AND** wrap your own programs/services around that.

“Reporting + data hub” approach has a common architecture



Other Questions?

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Implementation*

Organizational Roles

SEA

- Plan the project
- Assemble internal and external expertise
- Launch key communications with LEAs and vendors

LEAs

- Understand the goals and impacts of the state modernization project
- Initiate communications with their vendors

Vendors

- Understand the goals and impacts of the state modernization project
- Initiate communications with LEAs

ESAs (Data Hub)

- Build business plans collaboratively with their members
- Explore candidates for initial data services with their members

The Four Phases

Time	ESA Activities
1-3m	Define your value proposition and discover key product support
1-2m	Building Timeline, Business Plan, and seek funding
3-6m	LEA governance, MSP contracts, Integration testing with LEAs
∞	Execute go-to-market plan, coordinate across state, drive toward sustainability

Key to Success

Best practice is to be in production in a year and align with the school calendar. A faster timeline helps with project sustainability and clear connection between the project and LEA valuable use cases.

With vendor awareness, use of MSPs and access to well-known best practice, the timeline to production has become much more rapid than in years past.

Market Research Phase - ESA Tasks

Define your value proposition (What is your product?)

Talk to your districts. What are the pressing data needs are your districts facing?

Talk to your stakeholders. Who are your stakeholders and what are their data priorities?

Investigate expansion of existing service. Which data services do you already provide that could benefit from a consistent data platform?

Identify market fit and competitive edge. Where can you grow through new services and what partners are in your region that can help you get there?

Identify key product support for standards in your region (Ed-Fi can help!)

- Are your SIS vendors Ed-Fi certified?
- Are there state initiatives that may be a blocker?
- Which implementation partners and managed service providers can help?

Note: Ed-fi maintains a badging and certification registry of vendors that can be a useful place to start

Engage Ed-Fi Expertise

Hire a badged Ed-Fi Managed Service Provider (MSP) or Consultant

- MSPs dramatically accelerate progress
- It is tempting to do take a DIY approach, but a managed provider will have done this work many times over and understand the gotchas
- An MSP will understand best practice with regards to hosting options, maintaining current Ed-Fi products and tools, debugging integrations, providing vendor support and many other processes.
- If you have an existing consultant or a preferred vendor list, ESAs have successfully asked those providers to sub-contract with an experienced Ed-Fi MSP

How?

- Ed-Fi maintains a list of badged MSPs
- Get references from other Ed-Fi ESAs. The Ed-Fi Alliance can provide contacts for these states (see Solution Architect contact information below) and help review RFP language

Data Mapping & Specifications Development

Recommended

- Use your MSP to do mappings and create the initial data specifications: it takes time to learn the Ed-Fi Data Standard. MSPs can help you avoid mistakes and maintain project momentum.
- Follow Ed-Fi Descriptor Guidance for code sets in your specifications.
- Train your staff on the Ed-Fi Data Standard language using your MSP and by having them participate in the process.

Not Recommended

- Doing the Ed-Fi mappings on your own with staff new to Ed-Fi standards.
- Using default Ed-Fi Descriptor values for data elements critical to your collections.
- Allowing this process to take more than 2 months – you have time to refine during the Pilot phase.

Planning Phase - ESA Tasks

Build Timeline

- 1-3 months for market research
- Align with Academic Year and/or standard procurement timeframe
- Identify Minimal Viable Product to get started
  - The Texas Exchange started with 4 apps
  - Indiana INSite started with a dashboard
  - Michigan DataHub started with 3rd grade reading intervention (MIRead)

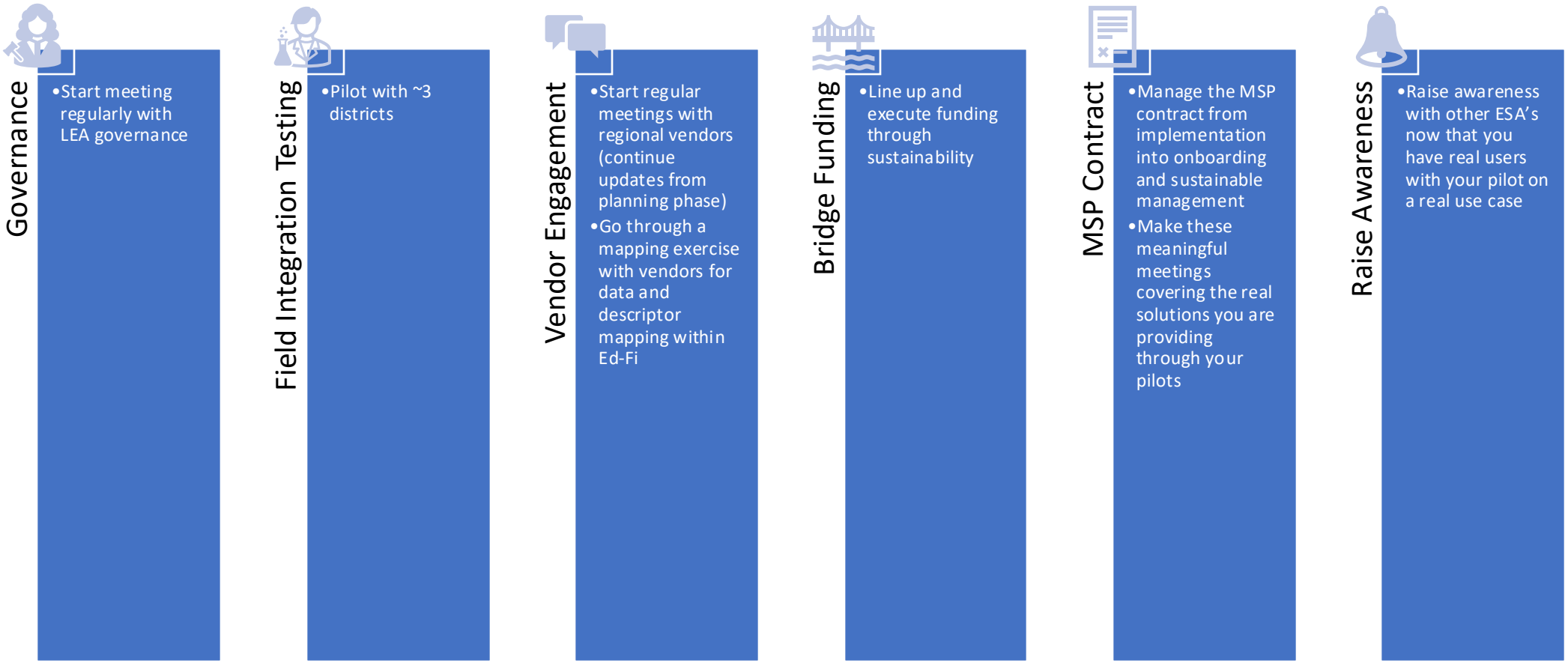
Build Business Plan

- Identify a Managed Service Provider (MSP) and implementation partners which match the expertise you need to be successful
- Identify build costs
- Identify marketing costs
- Identify sustainability costs

Seek Funding

- Common sources of funding through early project stages
  - State Grants (e.g. Texas, Michigan)
  - Philanthropic Grants (e.g. South Carolina)
  - Self-Funded (e.g. Riverside, CA)
- Business plans frequently include a mix of funding sources

Pilot Phase - ESA Tasks



This phase should last 3-6 months. It is important to align with academic calendar. Districts tend to set budget in February and put solutions into the district catalog. Be careful to not let the first 3 phases run long because it greatly impacts project sustainability and success. Stakeholders will start to lose interest and possibly see the time as being unable to execute. You will also want to start executing your go-to-market plan.

Growth and Expansion Phase

- Identify pre-sustainability funding
- Execute your go-to-market plan to reach sustainability

- Work with other ESAs to provide services across the state
- Work with the state for statewide vendor and data governance help

Growth and Expansion should take place for the school year following the pilot. Longer periods of time affect sustainability, word of mouth, and bridge funding requirements.

Do this, Not that!

Recommended

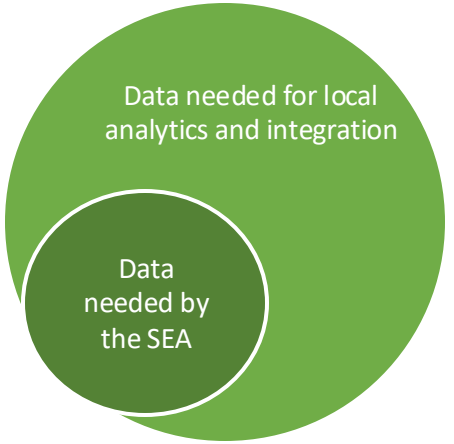
- Go to market with focused core use cases. Feather in additional use cases over time.
- Continue to grow districts.
- Identify use cases that could also be interesting to the state.
- Establish a statewide ecosystem by engaging multiple ESAs.

Not Recommended

- Boiling the ocean. Too many vendor dependencies, too many use cases, and too many “drill downs” will stall projects.
- Doing the project in isolation. You will need vendors, MSPs, and districts to support the initiative.
- Targeting LEA subgroups that can’t scale. You need more than a couple willing LEAs. You need LEAs that will create a path for more LEAs to use your services.

What if my state is already doing Ed-Fi for state reporting?

- If your state education agency is already using Ed-Fi for state reporting, this means vendors in your state have some ability to use Ed-Fi standards already – that's a big advantage.
- However, be aware that SEA specifications are often a subset of the data that LEAs need and also that state specifications have different goals in using data than you do (see the diagram to the right).



Key Actions

Action	Example
Align your data specifications with existing state specifications to avoid confusing vendors or causing more work for vendors.	If the state has an existing integration of attendance data, start with their definitions and usage in your planning.
Communicate with vendors on the additional needs you have and what those needs will enable – you must have your own vendor engagement team.	For example, the state may not collect student transcript information, but you may need that information. Open conversations with your vendors about adding that data.
Open a conversation with the SEA about collaboration and how you can work with them to design specifications that meet	Meet with the person who manages the state data specifications and talk with them about your effort. Setup a regular cadence of meeting to explore opportunities for collaboration.