Montana
Office of Public Instruction
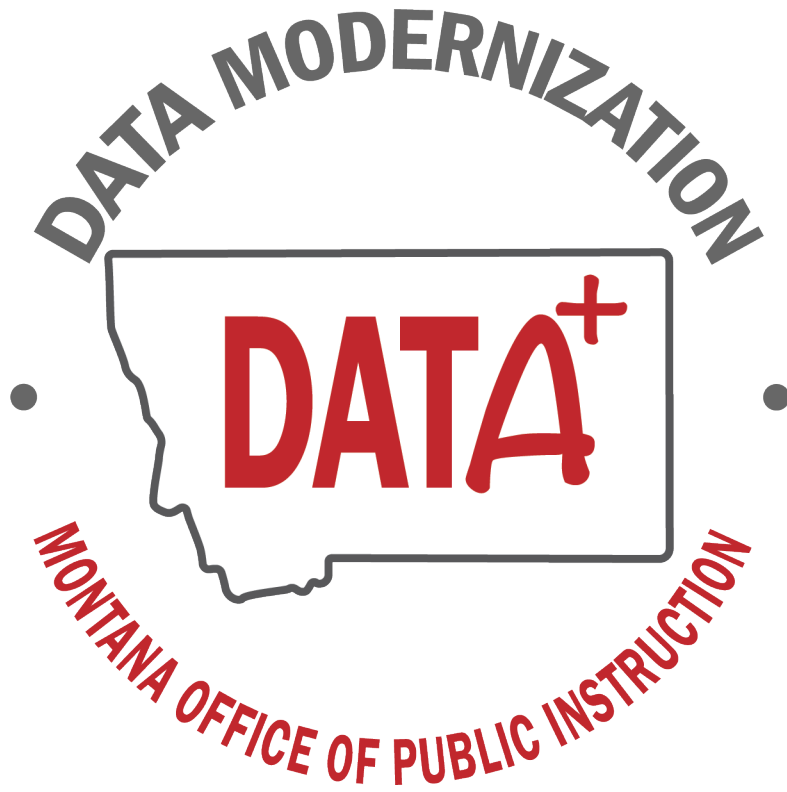opi.mt.gov **Elsie Arntzen, Superintendent**

DATA MODERNIZATION

DATA+

MONTANA OFFICE OF PUBLIC INSTRUCTION

Educational Data Integration

October 27, 2023

Office of Public Instruction

HB 367 OPI Data Modernization Status and Overview Report

Elsie Arntzen, Superintendent
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Superintendent Elsie Arntzen

To:

Legislative Finance Committee Education

Interim Committee

General Government Budget Committee Education

Budget Committee

Subject: Progress Update on Office of Public Instruction Educational Data Integration: Costs, Timeline, and Goals

I am writing to provide an updated and comprehensive overview of the Office of Public Instruction (OPI) Data Modernization project, highlighting the significant progress we have achieved to date. In addition to our achievements, this report includes the completion of the assessment and recommendations by our vendor for shaping the future state of our IT environment to effectively meet data modernization needs.

Our collaboration with the vendor has been instrumental in advancing our data modernization efforts. The vendor's recommendations encompass critical areas such as security, web infrastructure solutions and applications, the availability and delivery of databases, disaster recovery, OPI Active Directory architecture, visualization of performance data, acquiring a comprehensive identity and access management solution, privacy, data governance applications that integrate seamlessly with vendor applications, and audit software.

These recommendations will play a pivotal role in informing our post-implementation strategy once the application is delivered, underscoring our commitment to leveraging cutting-edge technologies to enhance educational processes throughout Montana.

OPI Information Technology (IT) is currently conducting collaborative discovery sessions with a variety of districts and schools to formulate a robust solution for connecting with Student Information Systems (SIS) and centralizing data. These sessions involve close engagement with key stakeholders to understand unique SIS needs and data structures given the distinct differences. The insights gathered will inform the architectural design necessary for the configuration phase of the vendor applications. Our aim is to ensure efficient data integration while upholding data integrity, legal requirements and security, ultimately empowering Montana's educational institutions with effective data-driven solutions.

This report will also provide a detailed breakdown of the financial aspects of our project, including costs incurred for assessments, technological evaluations, and stakeholder engagement. Our commitment to transparent financial planning and management ensures that this information is readily available to all stakeholders.

At the heart of our efforts are our overarching educational data integration goals, which this report comprehensively outlines. We emphasize how these initiatives aim to enhance data management systems and processes within the Office of Public Instruction.

Our commitment to transparency and collaboration remains unwavering. We will continue to foster ongoing dialogue and provide regular updates as we progress through this transformative journey.

As we move forward, subsequent reports will be generated by the Office of Public Instruction, aligning with our project roadmap. If you have any inquiries or require additional information, please do not hesitate to reach out to me or my team. We are here to provide the necessary insights to keep you informed about our progress.

Your continued support and interest in this initiative are greatly appreciated. Together, we are prioritizing Montana students by working toward a more efficient and effective educational landscape through educational data integration.

Thank you for your unwavering commitment to our shared goals.

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Data Modernization

Introduction Educational Data Integration

Amidst the ever-changing landscape of education, efficient data management has become pivotal in driving improvements across instruction, administration, and student outcomes. The Montana Office of Public Instruction (OPI) acknowledges the significance of modernizing data systems to enhance education quality statewide. With this goal in mind, OPI initiated a transformative journey to modernize its data management, a milestone that propels education into the future. Current activities for this reporting period include the delivery of a current state assessment, which identifies risk levels within OPI's business processes and technical environments, along with a recommended solution to mitigate these risks, leveraging Amazon Web Services products and professional services as part of the future state post-implementation of the educational data integration project. Additionally, efforts are underway for the development of the OPI organizational change management team, and meetings with the vendor lead have been conducted to document and discuss strategies for the stakeholder engagement and communication plan. These initiatives collectively reflect OPI's unwavering commitment to advancing education through modernized data systems and effective change management.

Data Modernization Vendor Partner Role

After an expedited selection process, PowerSchool emerged as OPI's chosen partner for the Data Modernization Project. PowerSchool will lead the application and implementation efforts supported by the OPI's core project team & subject matter experts from various business units and user groups. This selection follows a rigorous Request for Proposal, underscoring OPI's commitment to a seamless alignment of objectives aligned with House Bill 367 & 949.

Partnership Foundations

Collaborating with Snowflake and Amazon Web Services, a cloud computing leader, PowerSchool will leverage cutting-edge technologies for scalability, security, and reliability meeting OPI's goal and objectives. This partnership with Amazon enhances the project's potential to redefine OPI's data management.

Contractual Framework

OPI and its vendor established a Contract and Statement of Work to clarify responsibilities, expectations, and deliverables. This framework ensures coordinated efforts and resource allocation for project success.

Unified Direction

OPI and PowerSchool collaboratively defined program management deliverables and expectations, ensuring synchronized progress tracking and milestone achievement.
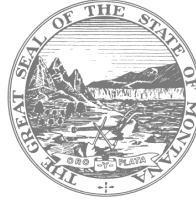
Preparation and Assessment

PowerSchool and Amazon Web Services (AWS) have actively engaged in the OPI Data Modernization initiative by conducting comprehensive OPI Readiness Assessment Workshops. During these workshops, they meticulously evaluated

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the existing data management infrastructure and identified areas that require improvement. Their expertise and assessments have provided valuable insights into the current gaps and potential risks within the OPI environment.

Through this collaborative effort, PowerSchool and AWS have delivered a thorough assessment of the state of OPI's data management systems. They have not only pinpointed areas that need immediate attention such as security, privacy, and disaster recovery but have also provided recommendations for further system and technical enhancements. These recommendations are based on a deep understanding of OPI's specific needs and goals, ensuring that any proposed improvements are aligned with the organization's objectives.

In summary, the vendor has delivered a assessment of OPI's data management environment, offering recommendations for enhancements. This proactive approach demonstrates OPI's dedication to data modernization through Educational Data Integration.

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Summary of Assessment and Recommendations

September 22, 2023 Final Delivery

OPI Current State Environment	Amazon Recommended Solutions
• Medium Risk: Limited technical documentation poses a challenge to systems maintenance, troubleshooting and scalability. • The majority of applications are deployed on a single server which poses risk in event of a single point of failure and security vulnerability in disaster or breaches • Lack of historical data capture and notifications for system/application downtime events requires the implementation of a robust monitoring and alerting solution. • Lack of a comprehensive Identity and Access Management(IAM) solution; currently using an internally developed Single Sign-On(SSO) solution limited to state-level applications, not extending to district-level applications. • Need for agile code modification in response to legislative changes and manual integration and deployment of code, features, and updates identified in OPI application assessment.	• Streamlining data collection and analysis processes, providing real-time access to student information, and fostering communication and collaboration among educators, students, and parents, thereby reducing the reliance on complex technical documentation, and improving overall data accessibility and usability. • Offering robust data encryption, redundancy, and backup solutions, enhancing the resilience of critical education data and ensuring quick recovery in the event of security breaches or disasters. • Providing seamless integration with identity management systems and Single Sign-On solutions, simplifying user access and authentication processes for educators, students, and parents while enhancing overall security and usability. • Offering a modular and extensible platform that allows for easy customization and integration through APIs, reducing the need for extensive code modifications and manual data synchronization efforts.

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Financial Outlook: Project Expenditures & Future Projections

3-Year PowerSchool Contract Cost by Milestones

Including Implementation, Hosting, Licensing, Professional Services, Maintenance & Operation

Note: Recurring cost encompasses the ongoing costs associated with software and technology solutions utilized in the Montana OPI data modernization project. These costs include software licensing, release management, infrastructure hosting and data integration. It also incorporates annual price increases, which may be influenced by factors like inflation and expanded usage.

Year 1 - By Milestone	One Time	Recurring	Total	Delivery Date	Completed
Milestone 1				9/8/2023	✓
PS Consulting Services	$73,728.00		$73,728.00		
AWS Consulting Services	$300,000.00		$300,000.00		
Subtotal			$373,728.00		
Milestone 2				9/15/2023	✓
PS Consulting Services	$2,304.00		$2,304.00		
AWS Consulting Services	$20,000.00		$20,000.00		
Subtotal			$22,304.00		
Milestone 3				9/22/2023	✓
PS Consulting Services	$3,456.00		$3,456.00		
AWS Consulting Services	$17,500.00		$17,500.00		
Subtotal			$20,956.00		
Milestone 4				June 2024	
PS Provisioning Services	$18,000.00		$18,000.00		
Subtotal			$18,000.00		
Milestone 5				June 2024	
PS Customization Services	$774,000.00		$774,000.00		
PS Provisioning Services	$230,956.00		$230,956.00		
Connected Intelligence - Annual Subscription		$1,351,498.81	$1,351,498.81		
Unified Insights - Annual Subscription		$1,231,331.42	$1,231,331.42		
Subtotal	$1,004,956.00	$2,498,795.25	$3,503,751.25		
Initial Year Discount		($1,000,000.00)	($1,000,000.00)		
Total (Contract Year 1)	**$1,489,944.00**	**$1,498,795.25**	**$2,988,739.25**	July 1, 2023	✓
Post-Deployment	One Time	Recurring	Total		
Year 2		$2,631,904.00	$2,631,904.00	July 2024	
Year 3		$2,731,916.36	$2,731,916.36	July 2025	
Contract Total (All 3 Years)	**$1,489,944.00**	**$6,862,615.61**	**$8,352,559.61**		

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Educational Data Integration Payment Schedule

The 3-year term fixed cost project entails creating a payment schedule table that incorporates several key columns to manage the Educational Data Integration project expenses effectively. The table includes:

1. **Subscription & Deployment Service Cost**: This column captures the initial fixed cost for the project, covering subscription fees and deployment services for each year of the project.

2. **Annual Increase %:** This column represents the annual percentage increase in costs, reflecting any anticipated inflation or adjustments over the three-year period.

3. **Annual Increase $:** This column calculates the dollar amount increase for each year based on the percentage specified in the previous column.

4. **Subtotal**: This column provides the total cost for each year, accounting for both the initial cost and any annual increases.

5. **Managed Services**: This column includes any additional costs associated with managed services or ongoing support throughout the project's duration.

6. **Subtotal**: Similar to the previous subtotal, this column sums up the costs for each year, including managed services.

7. **Invoice Total**: The final column computes the overall project cost by summing up all expenses over the three-year term, providing a comprehensive view of the project's fixed expenses.

	Subscription & Deployment Service Cost	Annual Increase %	Annual Increase $	Subtotal	Managed Services	Annual Increase %	Annual Increase $	Subtotal	Invoice Total
Initial 3 Yr Term 7/1/23 – 6/30/26									
7/1/2023	$2,929,556.31								$2,929,556.31
7/1/2024	$2,304,507.44	1.9%	$43,786.97	$2,348,364.41	$284,750.00			$284,750.00	$2,633,114.41
7/1/2025	$2,348,364.41	3.8%	$89,237.85	$2,437,602.26	$284,750.00	3.8%	$10,820.50	$295,570.50	$2,733,172.76
Total Contract Amount									**$8,295,843.48**
Optional Contract Term 7/1/26 – 6/30/28									
7/1/2026	$2,437,602.26	3.8%	$92,628.89	$2,530,231.14	$295,570.50	3.8%	$11,231.68	$306,802.18	$2,837,033.32
7/1/2027	$2,530,231.14	3.8%	$96,148.78	$2,626,379.93	$306,802.18	3.8%	$11,658.78	$318,460.66	$2,944,840.59

Paid Invoice

Looking Forward

OPI's collaboration with PowerSchool and Amazon underscores the commitment to advance education through technology and innovation. With a strong foundation in vendor selection, partnership alignment, and ongoing readiness assessment, the project is poised to revolutionize data management within the Montana Office of Public Instruction. The potential for positive change is substantial as the project unfolds.

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Core Features of the Vendor Products

PowerSchool Products

1. **Unified Insights** will assist Schools and OPI with data analytic tools:
   - Facilitate schools in making data driven decisions to enhance student outcomes.
   - Provides technical and data analytic tools.
   - Early warning system using artificial intelligence/predictive analytics to identify at risk students.

2. **Community Engagement** will enhance OPI's ability to publicly display:
   - Demographic information
   - Enrollment / Attendance
   - Statewide assessment data
   - Graduation and dropout
   - School expenditures data

3. **Connected Intelligence** will facilitate and enhance data sharing with:
   - Data lake technology
   - Data collection and integration tools
   - Data governance tools for data sharing

These applications for data modernization brings forth a range of compelling advantages, including centralized data lake construction for consolidated data storage, improved analytics and data visualization capabilities, and fortified data security measures.

Table of Milestone Delivery Schedule

Educational Data Integration

Milestone #	Deliverable	Delivery Date	Completed
1	Draft Assessment Document	September 8th, 2023	✔
2	Montana Review & Feedback of Assessment Output	September 15th, 2023	✔
3	Delivery of Assessment & Future Solution Document	September 22nd, 2023	✔
4	Connected Intelligence Application Deployed	June 2024	
5	Unified Insights Application Deployed	June 2024	
6	Post Deployment Assessment	November 2024	
7	Solution Acceptance & Final Project Sign-Off	February 2025	

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Project Timeline

DATE	ACTIVITY	STATUS
April 07, 2023	Request for Proposal Release	**Completed**
June 20, 2023	Vendor Tentative Award	**Completed**
June 30, 2023	Contract & Statement of Work Executed	**Completed**
July 20, 2023	Project Kick-off Meeting (PowerSchool & OPI)	**Completed**
July 24-27, 2023	Organizational Change Management Executive Interviews	**Completed**
August 9-10, 2023	Cloud Assessment Workshops	**Completed**
August 14-31, 2023	Application Assessment Workshops	**Completed**
August 24, 2023	Organizational Change Management Assessment Report	**Completed**
September 01, 2023	Maturity Assessment Report	**Completed since August 28, 2023**
September 22, 2023	Commercial off the Shelf Solution, Architecture & Deployment Strategy	**Completed since August 28, 2023**
September 2023 – June 2024	System Design, Configuration & Testing	In Progress
June 2024	Connected Intelligence & Unified Insights Deployed	Not Started
November 2024	Post Deployment Assessment	Not Started
February 2025	Solution Acceptance & Sign-Off	Not Started

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Current Activities as of October 26, 2023

Workstream	Activity Overview	Outcomes
Organizational Change Management (OCM)	• Three OCM (Organizational Change Management) sessions have been conducted in collaboration with the OPI OCM team, led by the vendor's OPI lead. These sessions were conducted to comprehensively collect essential details and document the current state, a crucial step in the process to finalize the stakeholder engagement plan, which is scheduled for completion by October 30 led by the vendor's OCM lead with multiple department leaders to gather their input. • Includes assessing staffing roles and responsibilities, developing communication documents (flyers) for OPI internal users.	Data collected and analyzed to be used qin the development of the **OCM** stakeholder engagement, communication plan and strategy. Draft flyers for OPI internal users provided to OPI OCM team for review and feedback.

Cloud Migration
 	
System Design
	• Connected Intelligence configuration.
	
	• Architectural design in order to collect data from Infinite campus adhering to house bill 349 & 949
	
	• Pilot school identified for test prior to OPI wide implementation of connected intelligence and unified insights data collection and analysis.
	
	• Objective:
	
	   o Identification of gaps and readiness
	
	   o Consensus on decision-interdependency
	
	   o Alignment with Infinite campus on connections and data access
	
	   o Alignment with PowerSchool on connections and data access
	
	   o Training sessions.
		Delivery of technical architecture and deployment of Connected Intelligence, Unified Insights and Community Engagement into all districts, schools and OPI:
		
		• Business Capability Focused
		
		• Business Value Realization
		
		• User Roles & Readiness
		
		   o Governance Prioritization & Control
		
		• Technical Capability Focused
		
		   o Platform Application & Infrastructure
		
		   o Security Risk & Compliance
		
		   o Operations Hybrid & Dynamic

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Current Activities Continued

Workstream	Activity Overview	Outcomes
Data Integration Needs Workgroup with OCHE and DLI	• DLI and OCHE provided needs related to data and connection (technical and business operations) in order for OPI to document requirements for vendor application design. • • First meeting with both DLI and OCHE participating. • Identify current gaps, risk, and action items/task required to meet house bill 349 & 949 requirements. • Meeting this reporting period: September 18, 2023 • Next Meeting: End of October/Early November, 2023 – coordinating with OCHE and DLI schedule	Regular monthly meetings have been established to inform the agency about the ongoing status of the OPI Data Modernization project and to facilitate the exchange of information concerning data requirements and accessibility. These meetings have been strategically designed to serve as a platform for effective communication, fostering collaboration, and ensuring transparency regarding the current project status and advancements. DLI provided one data request need in meeting (CTE Class Enrollment Data)

Education Data Integration through Data Modernization

Goals and Vision for Montana OPI

The Montana Office of Public Instruction (OPI) is dedicated to advancing its data management systems through the comprehensive Data Modernization Project, responding to the evolving educational landscape and technological advancements. This project is centered around six key goals that aim to enhance services, streamline operations, and ensure the security and effectiveness of data processes. The six goals are:

Goal 1: Improve Services
Goal 2: Improve IT/Data Workforce Interactions
Goal 3: Increase the Value of IT/Data for Operations and Business Impacted Audiences
Goal 4: Reduce IT/Data and other Operating Cost
Goal 5: Security Risk Management and Continuity of Operations
Goal 6: Increase Governance Maturity

Firstly, the project focuses on improving services by modernizing data management, enabling more efficient processes and data-driven decision-making for educators, students, and administrators. This transformation aims to translate data into actionable insights, fostering better educational outcomes.

Secondly, the OPI recognizes the significance of collaboration between technical teams and end-users, seeking to improve interactions and communication. This approach ensures that modernized data systems align with the diverse needs of the organization.

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The project also aims to increase the value of IT and data operations for the OPI, boosting efficiency, optimizing resource allocation, and accommodating the changing demands of the education sector.

Cost reduction is another priority, with the OPI aiming to identify inefficiencies, optimize resource allocation, and implement cost-effective solutions while maintaining service quality.

Given the importance of cybersecurity and operational continuity, the Data Modernization Project places a strong emphasis on enhancing security measures and risk management strategies. This includes robust security protocols and disaster recovery plans.

Lastly, the project seeks to enhance governance practices by defining roles, transparent decision-making processes, and adhering to industry standards. Effective governance is crucial for strategic planning, risk management, and resource utilization.

In summary, the OPI's Data Modernization Project is driven by ambitious goals to transform data management. It strives to improve services, workforce interactions, and operational value, while also reducing costs and enhancing security measures. Effective governance and continuity planning are emphasized to ensure the project's long-term success. The OPI's dedication to these goals reflects its commitment to creating an efficient, secure, and impactful educational environment for all stakeholders. Continuous monitoring and evaluation are key to the project's successful execution and its potential to revolutionize data management within the organization.

Addressing Statue Compliance for Educational Data Integration

The information in the following section has been previously detailed in the prior report, and there have been no changes or updates for this section.

Montana OPI's Approach in the Education Data Integration

- Montana's OPI is committed to legislative compliance via its Data Modernization Project, aligning with House Bill 367 and 949.
- The project aims to seamlessly integrate systems, enhance insights, provide academic support, ensure security, and facilitate secure data sharing across education.

Integration: Connected Intelligence

- The Data Modernization Project prioritizes Comprehensive Data Integration, in line with House Bills 367 and 949, to consolidate educational data from diverse sources.
- This approach improves data consolidation efficiency and accuracy, meeting legislative requirements effectively.

Holistic Student Insights: Unified Insights

- Unified Insights, in compliance with House Bill 367, offers educators a comprehensive view of student data, enabling a deep understanding of individual student performance and needs.
- This alignment with legislative intent empowers educators to meet compliance mandates and support students more effectively.

Individualized Academic Enhancement: Unified Insights/Risk Analysis

- Unified Insights and Risk Analysis tools, in line with House Bill 949 objectives, empower educators to utilize student data for personalized academic interventions.
- This approach, focused on identifying at-risk students and customizing interventions, directly supports the bill's intent to enhance student outcomes.

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Robust Data Security: Connected Intelligence/Unified Insights

- Montana OPI prioritizes data security in alignment with House Bills 367 and 949, leveraging Connected Intelligence and Unified Insights.

- Robust security measures, including encryption, role-based access controls, audits, and data protection standards, are rigorously enforced to safeguard sensitive student information and fulfill compliance obligations.

Secure Data Sharing: Connected Intelligence

- The Secure Data Sharing component of the Data Modernization Project aligns with the security provisions of House Bills 367 and 949, facilitating controlled and encrypted data sharing for confidentiality and authorized access.

- Montana OPI's Data Modernization Project not only ensures compliance with legislative mandates but also empowers educators with tools to improve student outcomes, all while maintaining high data security and privacy standards.

Enhancing the School Experience for Educational Data Integration

Bridging Legacy & Modernization

- Seamless connection between current software and emerging data modernization infrastructure is crucial.

- This requires uninterrupted compatibility and harmonization of legacy systems with the advanced framework, addressing disparities in data formats, communication protocols, and operational processes to ensure fluid connectivity. This synergy sustains operational continuity and optimizes functionality, facilitating a cohesive transition to the future of data modernization.

Elevating Performance

- Leveraging data modernization to streamline processes, optimize data management, and achieve a new level of operational effectiveness, resulting in improved productivity and resource allocation.

Data Integrity

- The data modernization project strengthens data accuracy and reliability, fostering trust in decision-making processes within educational institutions by ensuring data integrity and consistency, enabling confident, data-driven decisions that enhance educational outcomes and organizational effectiveness.
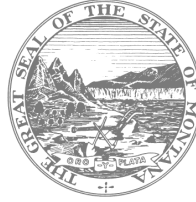
Reduced Downtime

- The data modernization project acts as a catalyst for streamlined operational processes, minimizing system downtime and disruptions, enhancing efficiency, and promoting a resilient educational environment that supports seamless learning experiences and administrative excellence.

Charting the Course Forward

Navigating the Next Steps in Educational Data Integration

In the ever-evolving landscape of technology and educational innovation, the Montana Office of Public Instruction (OPI) stands as a beacon of progress. As OPI embarks on its transformative journey towards data modernization, it has already taken significant steps that illuminate a promising path towards an educational ecosystem that is more efficient, transparent, and responsive to the needs of its stakeholders.

In close collaboration with our selected vendor and Amazon Web Services (AWS), OPI has successfully conducted a comprehensive environmental assessment. This assessment serves as a pivotal milestone, reinforcing the groundwork for a broader transformation. It lays the foundation for our Data Modernization Strategy and the blueprint for our future-

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state architecture.

Currently, our focus extends to the meticulous design and development of our architectural approach. This strategic endeavor involves close cooperation with Infinite Campus schools and centers on the configuration of the vendor's products to align seamlessly with OPI's unique requirements. This configuration ensures that our data modernization efforts are precisely tailored to enhance the technical and operational facets of our organization.

As we progress, the data modernization initiative is poised to usher in a new era of educational excellence in Montana, empowering educators, students, and administrators with enhanced capabilities and resources. This journey is not only about embracing advanced technologies but also about fostering collaboration, promoting transparency, and enriching the educational experience for all stakeholders.

The groundwork laid thus far, including the environmental assessment and ongoing architectural development, positions OPI at the forefront of educational innovation, reaffirming our commitment to delivering a brighter future for Montana's educational landscape through data modernization.

Realizing the Vision: Reflective Glimpse

The environmental assessment, conducted in partnership with AWS, offers an introspective snapshot of the current state of OPI's data management systems. By intricately documenting the existing landscape, this assessment has set the stage for aligning modernization with OPI's unique educational needs. This proactive approach identifies areas for enhancement, ensuring subsequent steps are tailored to OPI's requirements.

Data Modernization Strategy: A Comprehensive Blueprint

Central to OPI's journey is the Data Modernization Strategy, a blueprint guiding system evolution through these pivotal components:

1. *Assessment & Organization Change Management (OCM) Strategy*: Acknowledging the dual role of technology and human elements, OPI integrates an OCM strategy. This recognizes that technological change influences the workforce and culture. Through adaptability, open communication, and targeted training, the OCM strategy aims to engage stakeholders at all levels.

2. *Deployment and Migration Plan*: Detailing the transition from the current state to the modernized ecosystem, this plan minimizes disruptions while ensuring continuity, efficiency, and data integrity. It paves the way for benefits without interrupting vital functions.

3. *Maintenance and Operational Support*: A forward-looking provision for sustainability, this aspect ensures ongoing optimal function beyond the initial phase. Robust support mechanisms empower OPI to navigate data's ever-changing landscape.

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Next Steps: Pathway to Transformation

OPI's journey thrives on diligence, collaboration, and commitment. Environmental assessment and strategy formulation set the stage for action plan execution. Stakeholders, from educators to students, will reap the rewards of streamlined operations and data-driven decision-making through the data educational integration project.

Empowering Education through Transformation

In essence, OPI's data educational integration project isn't just about technology; it's a holistic education transformation. Leveraging the assessment and Data Modernization Strategy, OPI nurtures adaptability, efficiency, and excellence. With a well-defined path and commitment to refinement, OPI's journey enriches educational experiences, promising a brighter future for learners and educators.

Upcoming Activities and Efforts

- Solutioning for data collection and access from Student Information Systems (SIS)
- Discovery meetings with districts and school to document process, gaps, risk, and development of future state processes
- Finalize data collection, validation and access technical architecture documentation
- Data Lake Setup
- Secure Student Information System Connections to the Data Lake
- Data integrity and security data lake work
- Connected Intelligence Setup
- Unified Insights Setup

Next Report Period:

December 26th, 2023
February 26th, 2024
April 29th, 2024
June 24th, 2024
August 26th, 2024
October 21st, 2024
December 23rd, 2024