



WELCOME

2024 May Interim Committee Days

Embracing the Future: Transition to Digital Seed Labeling

Oregon Seed Association

The Oregon Seed Association (OSA) is dedicated to supporting the seed industry in Oregon by promoting and facilitating the production, handling, and marketing of seed products. It aims to foster communication and education among its members, which include growers, conditioners, and merchants, to enhance the quality and reliability of their products.



OSA Executive Director
Ryan Tribbett



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Seed Labeling: Key to Transparency & Quality Assurance

The Federal Seed Act requires specific labeling of crucial information on seed packaging, including the **seed type, variety, germination rate, purity, GMO content, and testing date**. Labels also feature lot numbers for traceability, and planting instructions. This process enhances transparency, helps users make informed decisions, and maintains industry standards.

FINE TEXTURED GRASSES	ORIGIN	GERMINATION
③ 30% 'Challenger'	Oregon	⑤ 85%
④ Kentucky bluegrass 37.20% 'Unique'	Oregon	87%
Kentucky bluegrass 31.75% 'Brittany'	Oregon	95%
creeping red fescue		
OTHER INGREDIENTS:	⑦ 0.00% Crop Seed	
	⑧ 0.05% Weed Seed	
	⑨ No Noxious Weeds	
	⑩ 1.00% Inert Matter	
⑥ Tested: 7-19-98		① Super Seed Co.
		② Lot: 231-1

Challenges of Traditional Paper Labels

Vulnerability to Damage

Paper labels can easily be damaged by environmental factors such as moisture, dirt, and handling, which can make the information unreadable and lead to errors in seed identification and usage.

Manual Updates

Once printed, paper labels cannot be updated. If regulatory information or seed characteristics change, new labels must be created and applied, which can be costly and time-consuming.

Inefficiency in Management

Tracking and managing inventory with paper labels can be less efficient than digital methods. Paper-based systems often require manual entry, leading to errors and inefficiencies in inventory control and creating a lack of transparency.

What is Digital Labeling?

Digital seed labeling uses electronic methods like QR codes and RFID tags to provide detailed seed information. This technology improves traceability, allows real-time data updates, and enhances transparency by making information readily accessible to all stakeholders in the seed supply chain.



Benefits of Digital Labeling

Accuracy & Clarity

By employing digital methods, errors typically associated with manual entry are minimized, ensuring data about seed origin, genetics, and compliance is both precise and reliable.

Environmental Impact

Digital seed labeling contributes to environmental sustainability by reducing paper waste and the need for resources linked to traditional printing. It enhances the efficiency of seed distribution, potentially lowering transportation emissions through better routing and inventory management.

Dynamic Updates

Additionally, digital labels provide clear and easily accessible information, which can be updated in real-time, allowing for immediate adjustments to labeling as needed. Enhanced post-purchase support extends the customer journey beyond the initial sale, creating a positive, lasting impression that benefits both the customer and the company.

Compliance & Traceability

Leveraging digital tools ensures that all seed-related information is standardized and easily accessible, facilitating adherence to regulatory requirements. This approach enables seamless tracking of seeds from origin to sale, allowing for quick responses to any compliance issues that may arise. Additionally, transparency and security are significantly enhanced

Future Trends

Digital Labeling Around the World

Digital packaging and labeling is estimated to grow at an annual rate of 14.91% between 2022 and 2027.

** According to a forecast analysis by Technavio*



Potential Challenges

Cost of Implementation: Initial investments in digital technology, including hardware like scanners and servers, as well as software for data management, can be significant. Smaller businesses or farms might find these costs prohibitive.

Training and Adaptation: Staff and stakeholders will need training to adapt to the new digital systems. This learning curve can lead to temporary reductions in productivity and efficiency.

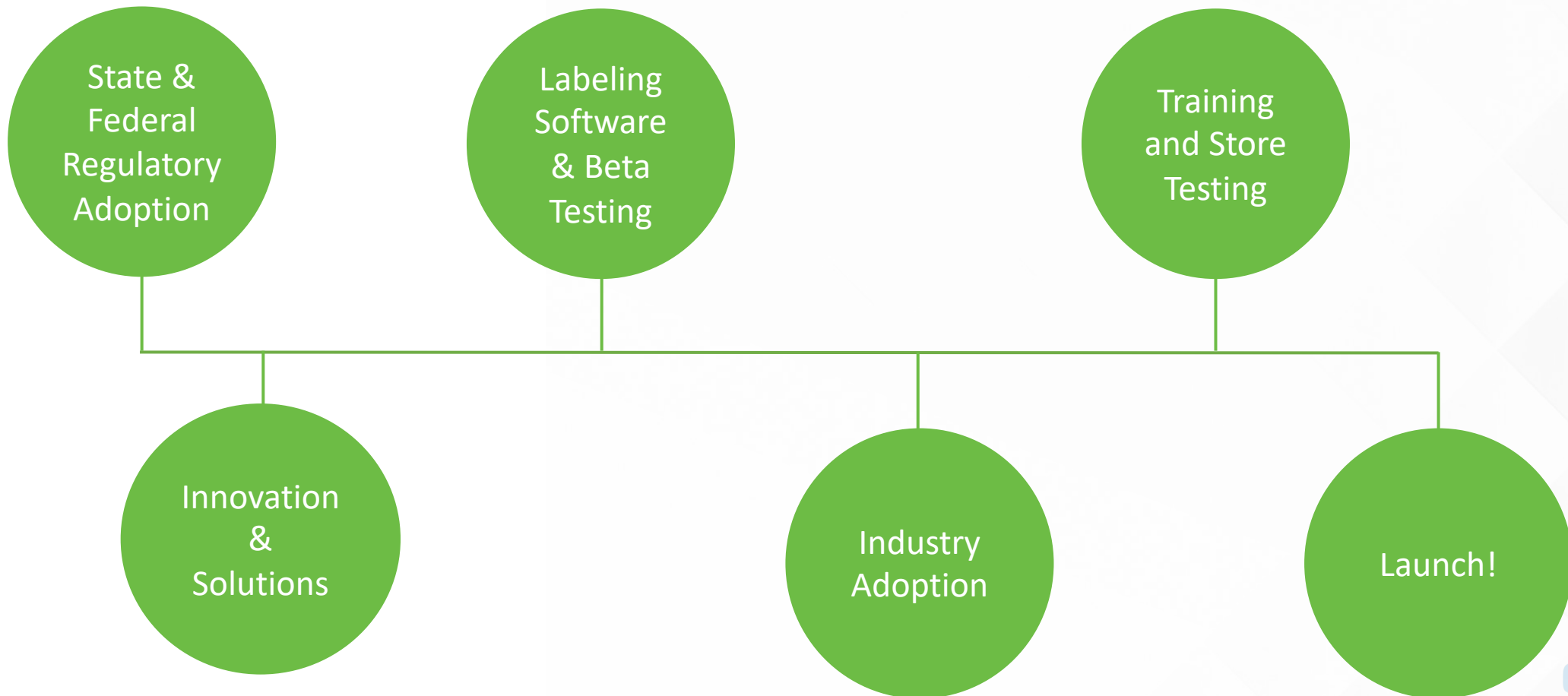
Technical Issues: Reliance on digital systems introduces risks like data breaches, system failures, and software bugs. Ensuring robust cybersecurity measures and system reliability is critical but can be complex and costly.

Regulatory Compliance: Digital labeling must comply with existing agricultural and labeling laws, which may need updates to accommodate digital formats. Navigating these changes can be time-consuming and require legal expertise.

Access to Technology: Rural areas might have limited access to reliable internet, which is necessary for the most effective use of digital labeling systems. Overcoming these technological disparities is essential for uniform adoption across the state.

Resistance to Change: Some stakeholders may resist transitioning from a familiar paper system to a digital one, preferring traditional methods over new technologies.

Roadmap to Implementation:



The Future of Agriculture Labeling

Oregon Ag can lead the way in innovation!

In Oregon and across the U.S., digital labeling in agriculture can drive significant improvements in compliance, operational efficiency, cost management, environmental sustainability, and consumer relations. As such, it's poised to be a crucial element in the evolution of modern, sustainable agriculture.

- *Achieve over 50% savings in the store service industry.*
- *Eliminating millions of unnecessary transportation miles.*





Questions?

Contact: info@OregonSeed.org

