

Advancing agriculture communication network in Virginia through a secure web platform “Ag Corp”



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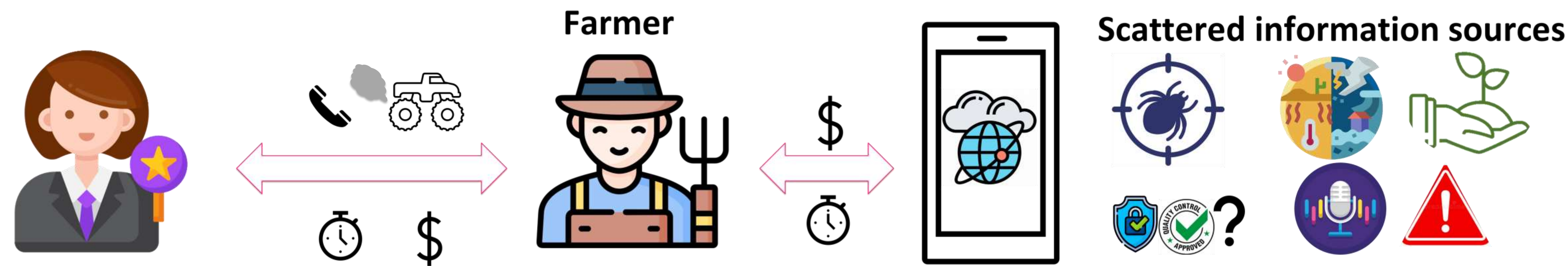
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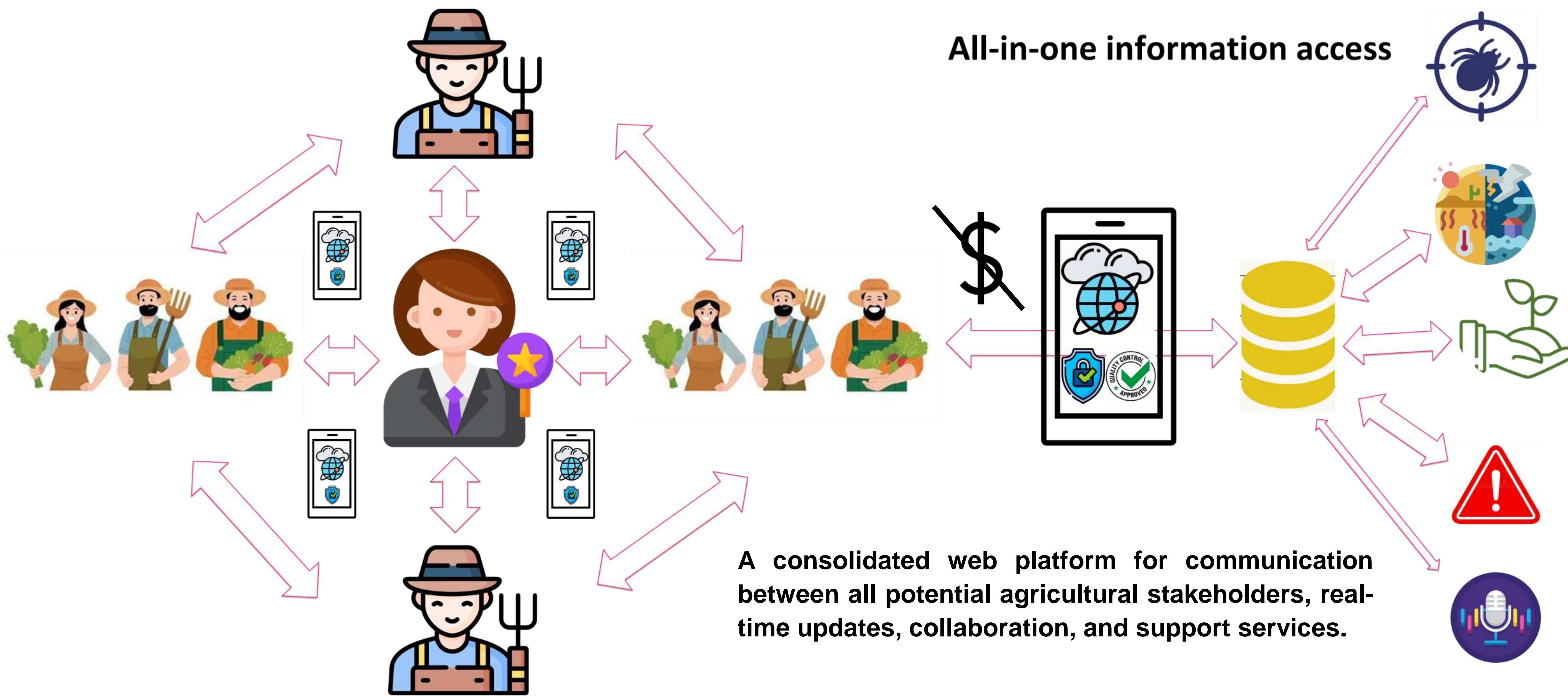
Background

Conventional communication channel



- **One-is-to-one communication:** limited communication among stakeholders
- **Current modes:** mostly in-person, time consuming, expensive (travel), limited reach i.e., low efficiency
- **Fragmented information sources** hinder quick access to producers for taking rapid remedial actions in field
- **Producers are unable to keep up with latest technological advancements** disseminated through podcasts or other soft-materials

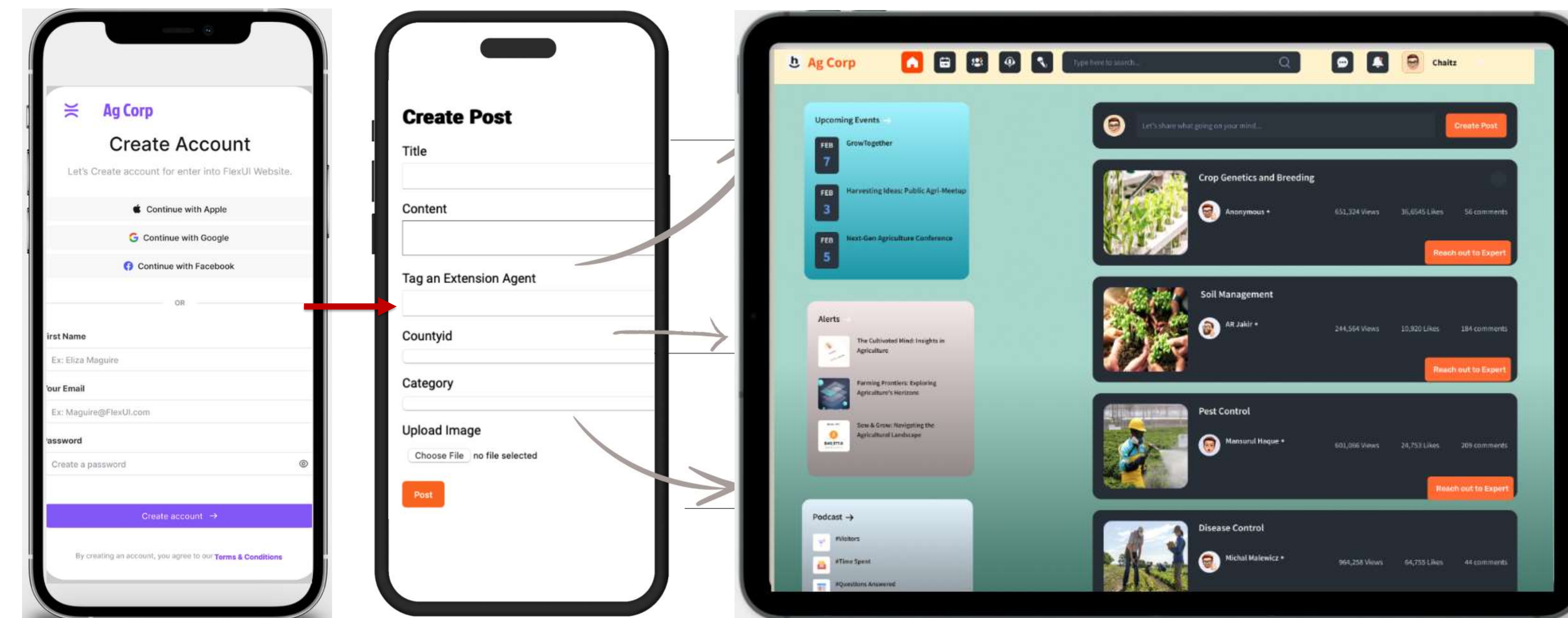
Proposed solution



Features of “Ag Corp” App

- **Centralized Information:** Producers can access all essential information such as alerts, advisories, blogs, and articles, among others from a single, centralized platform, unlike various dispersed sources.
- **Real-Time Updates and Alerts:** On weather, upcoming events, and podcasts, enabling farmers to stay informed and make timely decisions.
- **Expert Support:** Producers can post their issues anonymously, privately, or publicly, and tag experts for tailored solutions for their specific problems, even remotely.
- **Community Engagement:** Allowing producers to participate in discussions, share knowledge, and collaborate with peers, researchers, and agricultural experts.
- **Image Uploads:** The ability to upload images with the posts will help farmers visually share problems, achievements, and observations, facilitating better communication and problem-solving.
- **Enhanced Security:** Two-factor authentication to ensure **producers** of their personal information being secured on the platform.

“Ag Corp” App design



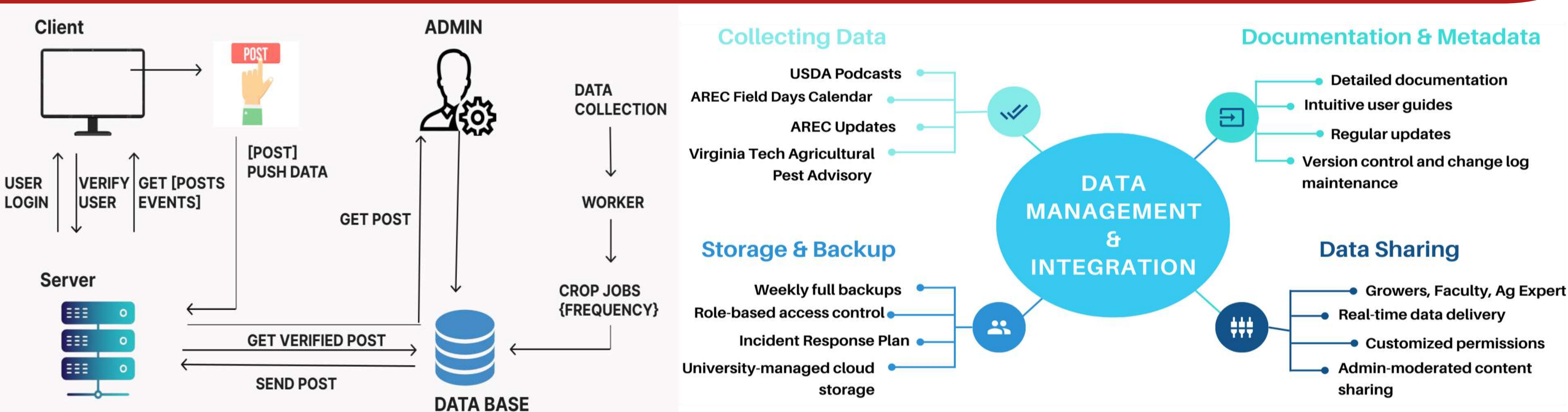
Ongoing and future efforts

- Building databases from various certified sources through application programming interfaces
- Initial testing and deployment for functionality
- Large Language Models and Generative AI for advanced data analysis and generating personalized recommendations through appropriate modes (texts, images, audio, videos, emails, and others)
- Implement AI-powered voice-to-text capabilities for easier interaction during work as well as for differently-abled stakeholders.
- Continuously refine the platform based on user feedback.
- Stakeholder trainings and workshops

References

- U.S. DEPARTMENT OF AGRICULTURE - Podcasts
- Virginia Ag Pest and Crop Advisory
- Virginia Agriculture Research and Extension Centers.
- Virginia Cooperative Extension

The “Ag Corp” app architecture



Acknowledgements



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