



The Complete CRIS, Cayuse - a True Advancement in CRIS Software



Introductions



Taylor Mudd

Senior Software Engineer /
Product Owner
Cayuse

Our Mission:

Empower organizations to conduct globally connected research and sponsored projects, advancing their impact on science, discovery and society



The Cayuse Research Suite

Enabled by our Connected Research Cloud Platform



Pre-Award

Fund Finder • Competitions • Proposals



Post-Award

Fund Manager • Project Effort



Risk Management

Outside Interests • Animal Oversight
Human Ethics • Hazard Safety



Resource Management

Vivarium Operations
Schedules • Vet Care



Researcher Success

Graduate Education Manager



Research Outcomes

Repository • Inventions



Sponsored Projects

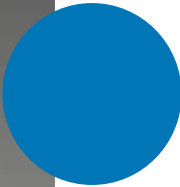
Central admin (w/SSO)
Connectors for virtually any system



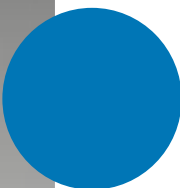
cayuse
Platform

User-centric analytics
Training records management

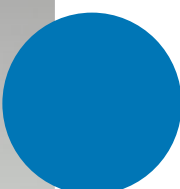
Merger & Acquisition in Software



Expand into new areas

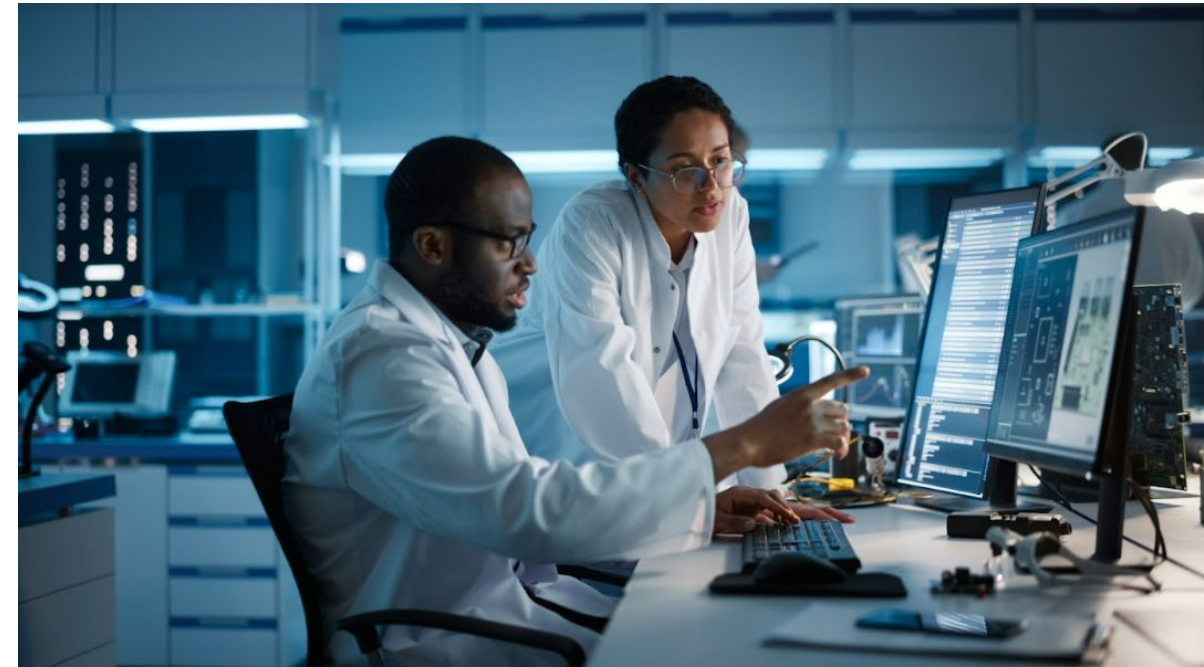
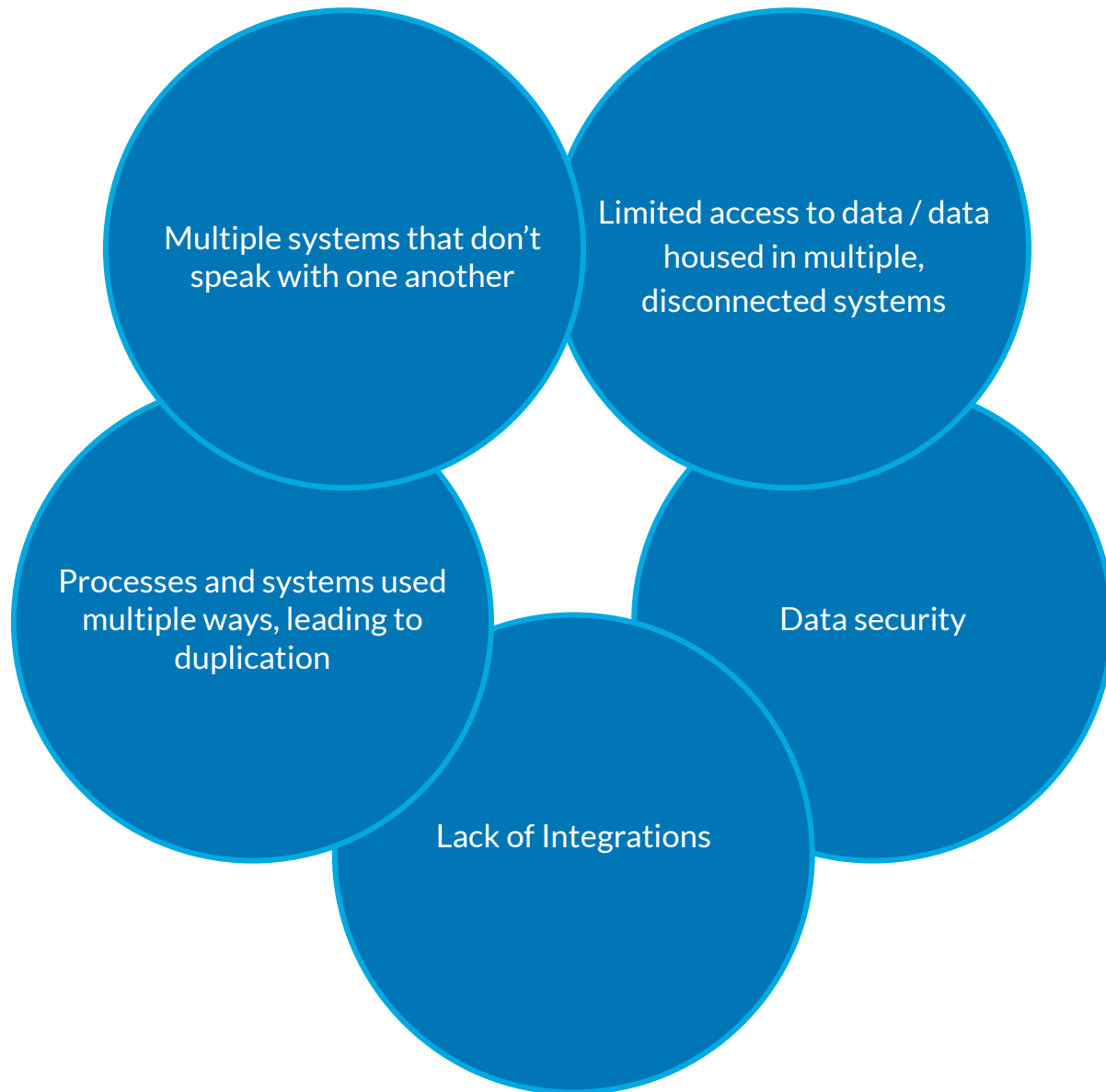


Improve offering in current areas

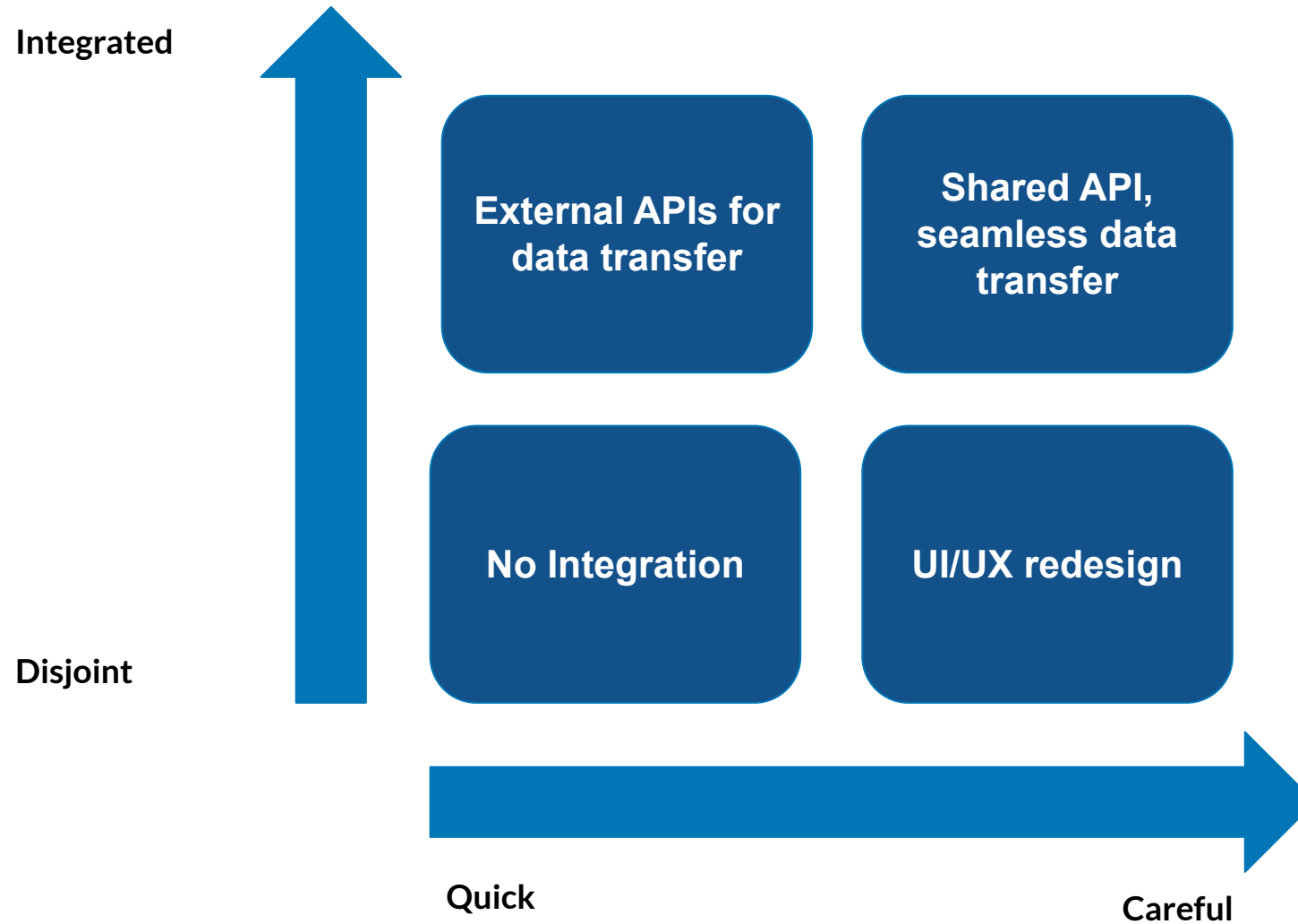


Gaining access to resources

Common Challenges within Research Management



Careful design is the Key



What does careful design look like?



Centralise

Put the researcher in control with centralised hub for all research activities



Security

Address security needs and increased accountability



Interoperability

Systems should work together, providing a seamless workflow

Addressing the entire hierarchy of research challenges

From



To

Lack of Data and System Connectedness

52% no clear strategy on using data analytics³

Enabling a World Class, Data-Driven Research Org

In-Platform Analytics

Connecting data: to BI tools, in-house systems, other key backend systems

Inability to Plan/Manage Funded Projects

61% no dedicated role/team to analyze and optimize sponsored activity²

Optimising Planning

Sponsored Projects: effectively managing all projects, spending projections

Fund Manager: real-time insights

Inefficiencies and Paperwork

44% research admin burden today¹

Maximising Efficiency

Proposals: finding, creating, submitting, enabling internal competitions

Animal operations: procurement, inventory, service charges, billing, vet care

Connecting critical business systems: Peoplesoft, Banner, Workday, etc.

¹ [2018 FDP Faculty Workload Study](#)

² [SRA published research 12/11/19](#)

³ [SRA published research 2/13/20](#)

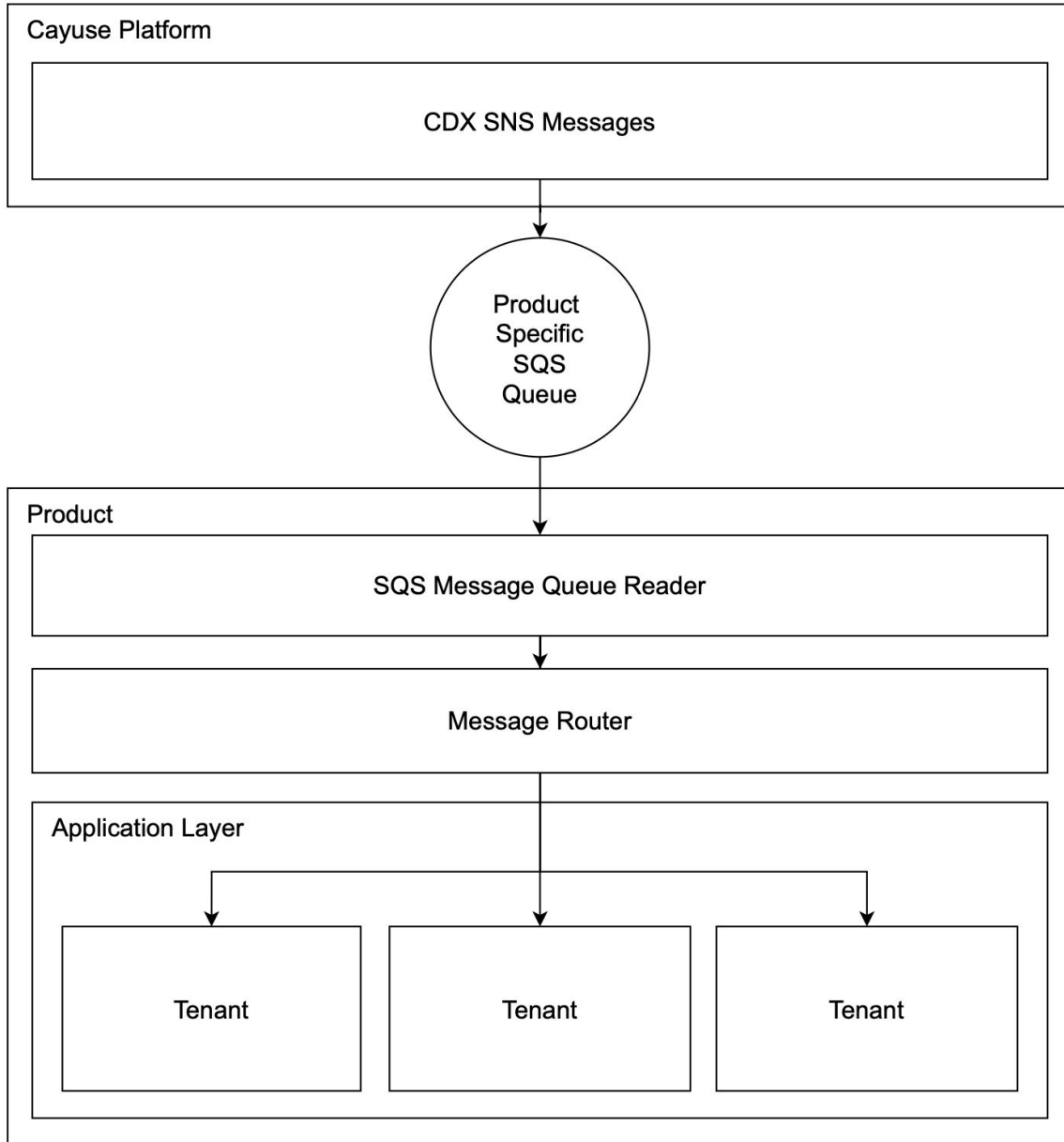
جامعة نيويورك أبوظبي



“When you have a very fragmented system you automatically create inefficiencies because you rely on humans. We missed a request for a no-cost extension, and at one point we missed a submission. It wasn’t anybody’s fault—we just had dozens upon dozens of emails coming in on the same day.”

- Nada Messaikeh, Associate Provost for Research Administration

Cayuse Platform Architecture



Platform-to-Product

The platform has an admin module which is used to control:

- User data and their profile
- Organisational hierarchy
- Permissions
- Associations, both internal and external

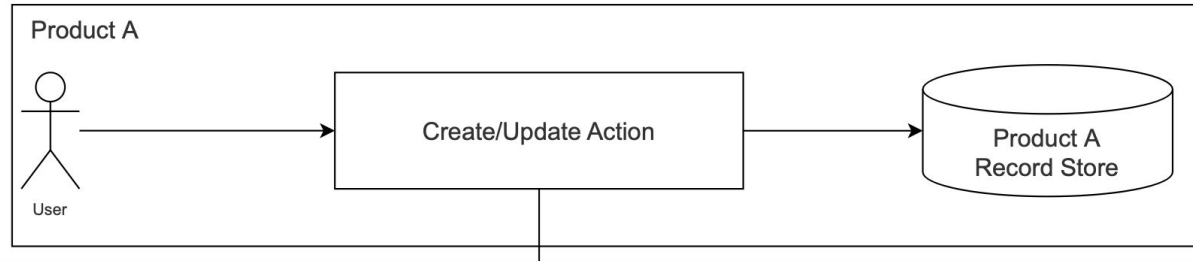
Updates

- The platform then notifies each solutions with the same, centrally maintained record of data.

Cayuse Platform Architecture

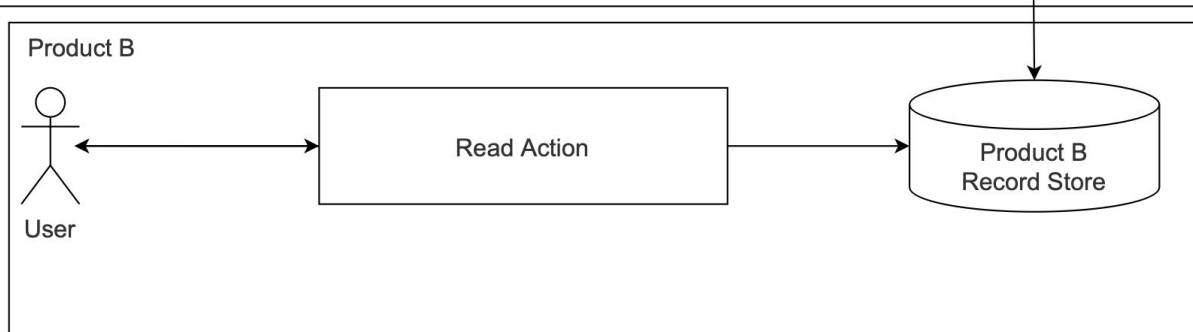


1. User creates or updates a record within Product A, this change is stored and then sent to Product B through the API.



Cayuse Platform

Shared API



2. User is able to read and interact with the same data, without re-entry, in Product B.

Product-to-Product

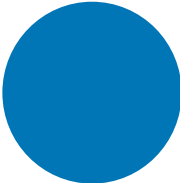
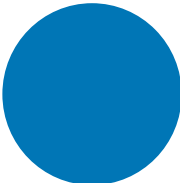
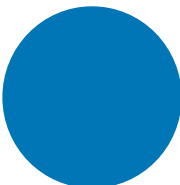
There's a few routes for this to occur

- Polling product
- Broadcast
- Data warehousing

Example

- The user updates a record in Product A which while saving the record the system also pushes the update through to Product B which has a good use case for it.

Challenges and mitigations

-  Cache invalidation
-  Time to integrate
-  Blending schema

Thank you!



Taylor Mudd

Senior Software Engineer &
Product Owner

taylor.mudd@cayuse.com



