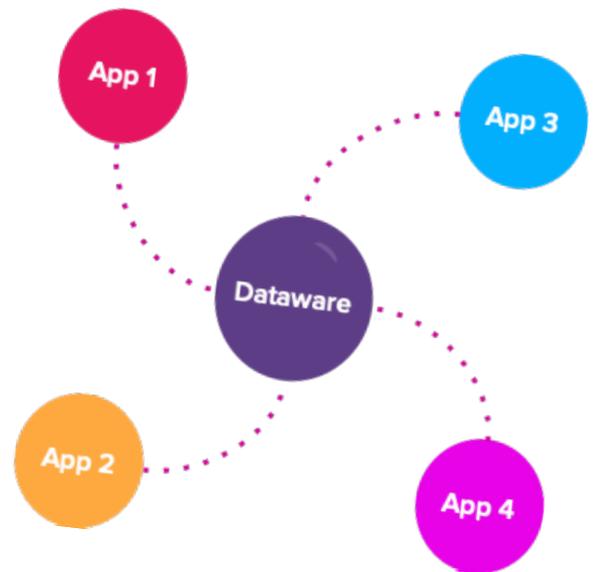




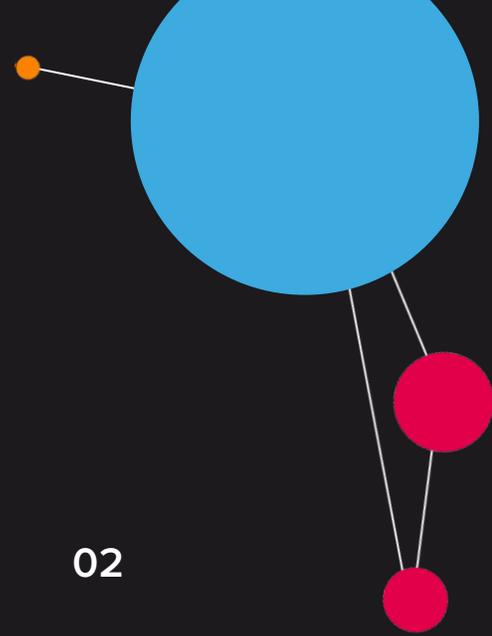
Dataware:

Eliminating Data Integration



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The Future of Applications and Data is Dataware

Although the landscape of data management and app development is continuously changing, our modern world is still heavily app-centric. Today, when developers build an application, they must first build around every app's own specific model for data. Each app requires building new data capabilities—and needs to save data, connect to a database, and commit a transaction. In building an app for business capabilities, developers must first complete repetitive “low-level” tasks that is the bulk of the IT build, which increases IT complexity.

The proliferation of apps has created a world of more data silos and more data copies, affecting business agility. But there's a better way. Fortunately, app development and data management are progressing and transforming towards a more efficient methodology and solution: data centrality with Dataware.

Data centrality is the idea that data—instead of apps—is the heart of your architecture. And Dataware is the platform that's leading that revolution and solving data complexity by decoupling data from apps.

The History of Data Architecture

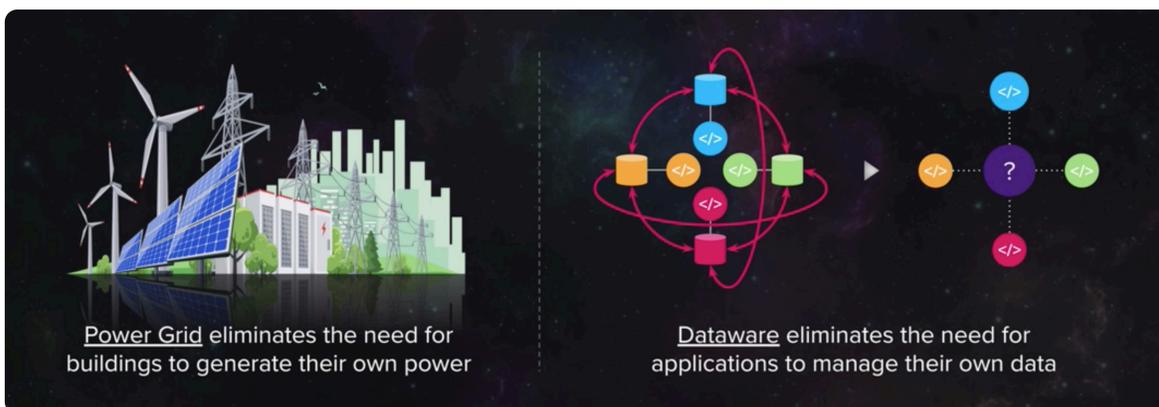
To understand where we're headed with the future of data, we must first look back at a helpful metaphor. In the past, each building had to generate its own power. Eventually, the concept of the power grid emerged. It was a novel idea that an interconnected network for transmission and distribution could be responsible for electricity delivery. The creation of the power grid transformed the world of electricity and eliminated the need for each individual building to build their own power plant and generate their own power.

Now, data is on a path to doing exactly the same thing. The idea of a data grid would completely change how apps today manage data.

“Data will acquire equal status when we begin speaking of hardware, software, and dataware.”

GORDON C. EVEREST
1986

Dataware does for apps what the power grid did for electricity. The power grid eliminated the need for users to generate their own power. Similarly, Dataware eliminates the need for applications to manage their own data.



In the early days of data management, new systems were created to replace manual processes. Developers took paper-based processes and digitized them, transforming operational efficiency. But each program had to digitally store data, and no one realized they were creating data silos.

Eventually, the world realized we could extract intelligence out of that data, extending its use and value beyond just a “memory” for code. It became clear that data had been endlessly siloed—and to leverage the value of data, we needed to break down those silos. That's when the idea of data warehousing and other analytics-centric solutions emerged.

The Evolution of Data

1

Data “as a Memory”

Data is perceived as just memory for a program.

2

Data “as a Truth”

Data becomes the source for official records or the master file.

3

Data “as a Resource”

Data is recognized as valuable—to be extracted, managed, and mined for intelligence.

4

Data “is the Application”

Data begins to transform to autonomous, with the rise of Dataware enabling data to exist outside of individual programs.

Why Other Solutions and Strategies Just Don’t Cut It

Data warehouses. Data marts. Data lakes. Data lakehouses. Many solutions and strategies for data seemed like the answer. But although each of these data strategies added value and solved individual problems, they didn’t foundationally change how apps were designed and how they managed data. They only solved one side of the problem, but never the whole problem. They didn’t change the fundamental assumption that data needs managing. The same problems persisted because the integration method of these applications wasn’t fixed.

The idea of data centricity is a growing movement with the vision that individual applications don’t manage their own data. Instead, they’ll pull from a central repository that provides data services on behalf of multiple applications. Finally, here was an idea that could solve the data problem in full, end to end. Data centricity could solve the whole problem, instead of data strategies solving just parts of it.

This is what makes Dataware different.

Dataware is a platform approach that makes it possible for apps and users to collaboratively manage data without creating new silos, copies, and integrations. It blends the benefits of all the other data strategies into a unified approach for building data-centric apps. Dataware solves all the pain points that make app-centricity a problem.

The rise of data that’s autonomous and independent from any individual application is a paradigm shift. New apps then become simplified and can delegate the data management and integration to the Dataware platform. In this platform, users can now interact directly with data instead of indirectly.

The Data-Centric Solution: Dataware

Data centrality, putting data at the heart of data architecture, solves multiple pain points. It breaks silos, eliminates integration work to make your business more agile, and lessens your business' security risk by using a single source of truth with links instead of multiple copies that become liabilities. Dataware progresses the idea of data centrality by decoupling data and making integration obsolete. And it changes the entire foundation of app-building.

When building an app with Dataware, the need to create app-specific datastores is eliminated. That means no more silos. The functionality and logic aren't constrained by the scope of the application. Consistency across all apps is guaranteed when controls are implemented in the data layer. The data-layer controls make it possible for users to interact directly with the data. There's no need to transmit, store, or reconcile copies of data with other apps and no need for upgrades, installs, or migrations. When you collaborate instead of integrate, everything is more efficient. And finally, if changes to the physical data model are ever necessary, it never breaks the application. Best of all, existing systems can connect directly into Dataware, ensuring past investments do not go to waste.

Companies who adopt a data-centric approach can improve their enterprise IT capacity by 50 to 80%.¹

<https://www.cinchy.com/all-content/484>

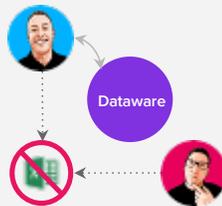
Data Collaboration Patterns

Before we begin to think about the different patterns in which Dataware is used, it's helpful to note the different data collaboration patterns in general.

1

Human to Human

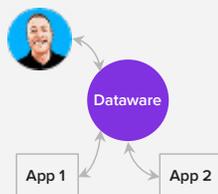
Dataware allows two humans to collaborate via the language of data. Humans can work together on one essential location for data and share access to that location. Data is not copied, and access is controlled.



2

Human to System

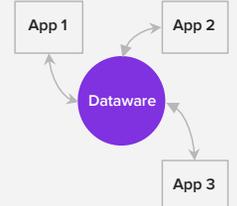
Humans can log into the application and change the data through the application's code. If the data was unlocked and constraints are lifted, humans can directly interact with the data where the only constant is the access. Dataware allows humans to collaborate on data with software.



3

System to System

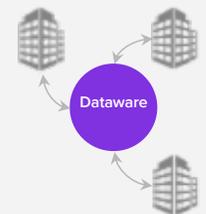
With access, systems can collaborate on data and make changes. Access becomes the only thing that is constraining.



4

Company to Company

The final collaboration is company to company, where two different companies can collaborate on data from one access point.



1. <https://cinchy.com/all-content/post-31>

4 Ways to Use Dataware

Dataware enables the patterns of data collaboration. This leads to how enterprises can utilize these patterns to solve real-world problems.

Use Case #1: User-Managed Data Collaboration Platform

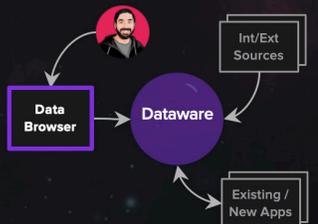
Consider a user that is directly collaborating on information inside of the dataware environment using a component called “the data browser.” This facilitates the management of information independent of an application—and is the ability to collaborate on data without needing an app. This usage pattern is most relevant within most mid- to large-sized organizations, where a lot of critical business processes are powered by end user computing-type solutions. These solutions include spreadsheets and databases.

In these applications, Dataware provides an alternative, where you can enable the same level of agility you’d see with those end user computing type tools, but with the added benefit of those enterprise-grade controls. This is because these applications are now in an enterprise platform rather than sitting locally on a desktop.

- Two usage categories of User-Managed Data Collaboration Platform:
1. As an alternative to end-user computing type solutions.
 2. To facilitate an outcome.

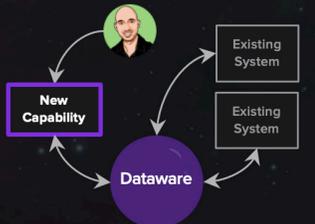
Dataware Solution Patterns

User-Managed Data Collaboration Platform



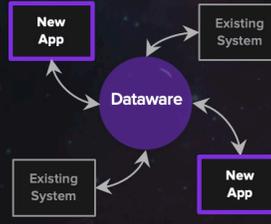
Enable spreadsheet agility w/ enterprise-grade controls

App Augmentation (e.g. CRM/ERP/HRMS)



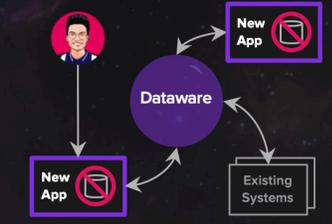
Build new capabilities that reuse and connect existing data

Digital Integration Hub / Data Fabric



Eliminate point-to-point & tightly-coupled integration

Cross-App Persistence & Controls as a Service



Save > 50% of IT effort when building new apps

Use Case #2: App Augmentation (e.g., CRM/ERP/HRMS)

Consider a user that is directly collaborating on information inside of the Dataware environment using a component called “the data browser.” This facilitates the management of information independent of an application—and is the ability to collaborate on data without needing an app. This usage pattern is most relevant within most mid- to large-sized organizations, where a lot of critical business processes are powered by end user computing-type solutions. These solutions include spreadsheets and databases.

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4 Ways to Use Dataware, Continued

Use Case #3: Digital Integration Hub/Data Fabric

The digital integration hub or data fabric is centered around how systems connect in an architecture of point-to-point integration. In this design, there's no reusability of an integration. If a connection is established from one database to another system, it has served its one purpose of enabling that connectivity, and there's nothing more that needs to be done. The alternative approach is the idea of a digital integration hub where systems don't connect directly to one another. Instead, they connect to the hub. And by connecting to the hub, you can reuse the connectivity that already exists, and all systems only have one place to go to source information, as well as to contribute information.

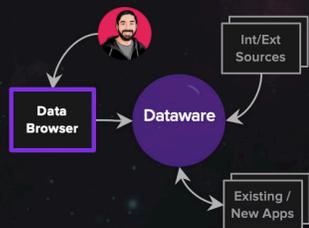
This comes back to the analogy of the power grid, where a network connects these endpoints that both contribute to the grid and consume from the grid.

Two patterns implemented with the idea of the digital integration hub:

1. Contribute to data.
2. Consume data.

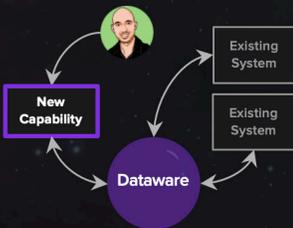
Dataware Solution Patterns

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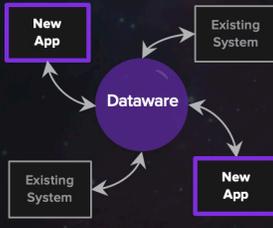
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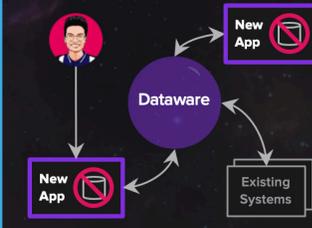
Build new capabilities that reuse and connect existing data

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Cross-App Persistence & Controls as a Service



Save > 50% of IT effort when building new apps

Use Case #4: Cross-App persistence and controls as a Service

Cross-App Persistence and Controls as a Service aligns with the implementation of a new application. When an organization is building a new application internally, they can deliver that outcome by writing significantly less code if they use Dataware. Cross-app persistence is like a cloud for your data. When service capabilities are provided, customers no longer have to deal with the complexity of managing these services.

Making the Case for Dataware: Concentra Bank

For a clearer picture on how a Dataware platform can transform the efficiency of an organization, consider the end results achieved by Canada's credit union provider of wholesale banking solutions, Concentra Bank.

For decades, Concentra Bank had helped organizations access funding. When the pandemic hit in early 2020, the government introduced a relief program covering short term operating expenses, payroll, and other expenses to help small businesses stay afloat.

Around \$200 million in COVID-19 relief loans were distributed to Concentra, and Concentra found itself needing to rapidly service these loans as efficiently as possible to more than 80-plus credit unions across Saskatchewan.

This brought a set of challenges to overcome:

Develop a digital solution for the intake of thousands of COVID-19 relief loan applications, all within a tight timeline of only five days.

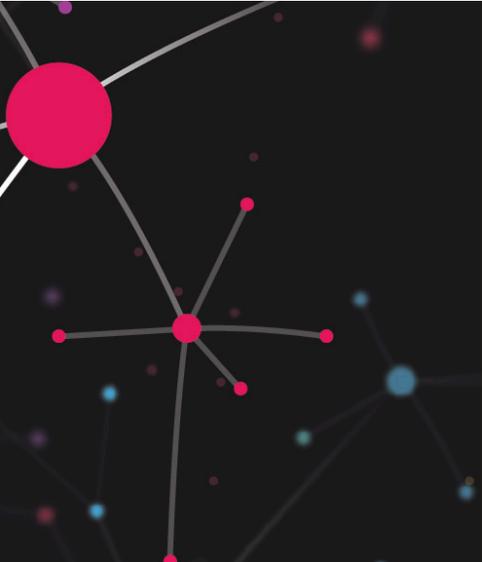
Develop a centralized yet fully customizable and secure loan platform for 80+ credit unions that protected member privacy and ensured that data governance was auditable.

Comply with the requirement to automate complex reporting outlined by the Canadian Federal Government.

Traditional approaches with slow, manual processes were not an option. The scope of this project was massive—and the requirements were complex. There was the potential for thousands of loan applicants, and the funds would require daily reports for 15 months with ongoing daily monitoring and inevitable scaling.

Concentra had to find a way to ensure its operations department could service the loans as efficiently as possible and automate much of this manual work. The solution needed to be customizable for each credit union so members felt they were being serviced by their own financial institution. The solution needed to be easy to use, highly secure, and capable of issuing timely reports.

Concentra used the Cinchy Dataware Platform to capture and report all applicant information. With the dataware platform taking in these various data feeds and making updates in real time, Concentra could track applications and have a more complete view of their applicants.



“We needed a rapid implementation of a new digital customer experience that could securely manage and protect member data.”

JIM VIBERT

Director of Special Projects, Concentra

Making the Case for Dataware: Concentra Bank, Continued

“The Cinchy platform lets us deliver a full solution, not just a window dressing. We needed a rapid implementation of a web portal system, and Cinchy thought about all the data streams up front and automated them. By using Cinchy’s Dataware platform, we were thrilled with how quickly we were able to provide a solution to our 35 credit union partners that exceeded everyone’s expectations.”

JIM VIBERT
Director of Special Projects, Concentra

With data being captured through a web form and automatically pushed to the Cinchy platform, Concentra had a seamless workflow of information between them and the credit union supporting their client. This made for a highly efficient process, allowing funds to be approved and distributed much faster to the businesses that needed them.

In partnering with Cinchy and choosing to embrace data centricity with a Dataware platform, Concentra has succeeded in responding to the pandemic’s challenges and delivering the much-needed relief funding loans to their customers.

Concentra’s Dataware results:

Loan processing became seamless for 80+ credit unions—allowing them to focus on their members’ needs.

Concentra enjoyed five times the savings with Cinchy’s solution versus similar solutions.

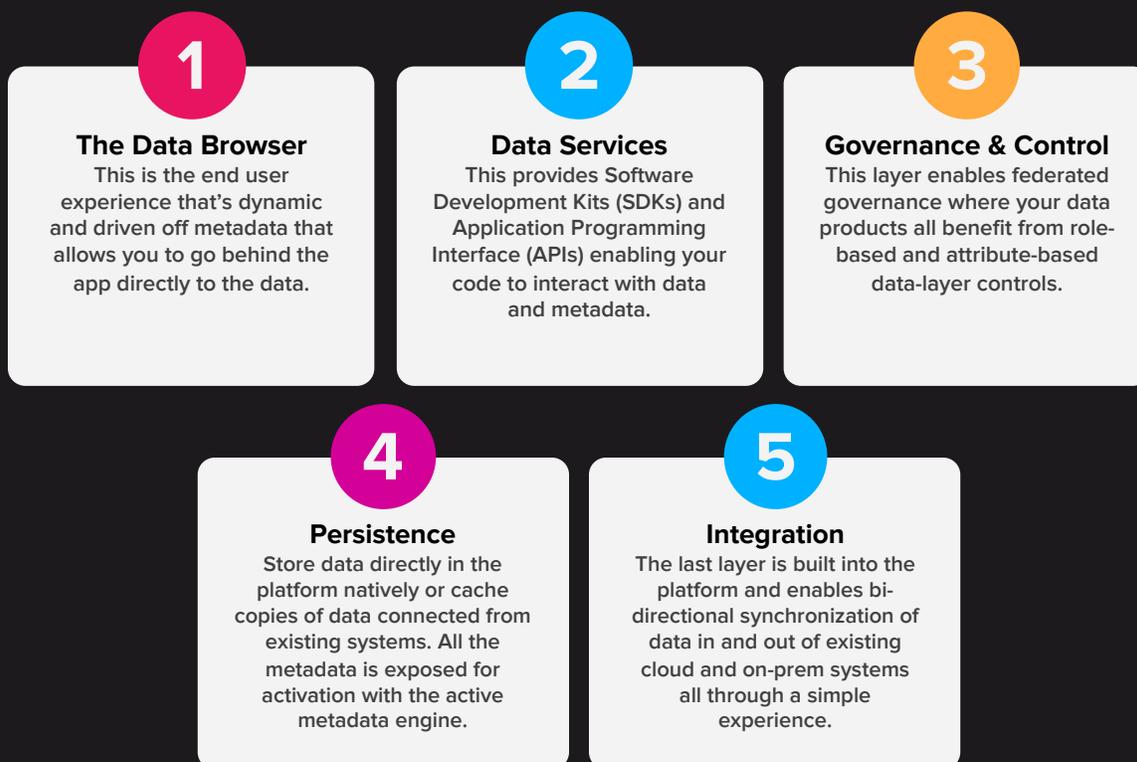
An end-to-end solution to get loans to members when they needed it most—all delivered in just five days.

Concentra Bank’s story is just one of many case studies:



The Dataware Platform

When you sync your data into a Dataware platform, it enables you to create and leverage a comprehensive view of your entire business' data. It starts with your users: the customers, partners, and employees that are using your applications and services, which can include customer applications, microservices, and low-code applications. Within that, there are five core layers of a Dataware platform.



With this comprehensive view, Dataware can be your single user interface to access, change, and originate data across apps. And because data has value, the future is inevitably one that has no integration.

Simplify Your Data, Simplify Your Problems

One of the most exciting aspects of data centrality is the ability to truly simplify, just by cleaning up extraneous and unusable data. An overabundance of data can cause enterprise paralysis. But once an enterprise decides to move towards data centrality with Dataware, they begin to clear their path from data that is redundant and outdated—and they can reduce the amount of metadata by as much as 100 to 1.

Transforming Your Business Towards Dataware

Dataware with the focus of data centricity is the most efficient way to manage data. It's the future for how enterprises should be managing data and what we should base app development around. Flipping the current app-centric philosophy on its head is the only way to build new capabilities faster, better, cheaper, and smarter. And Cinchy's Dataware is the platform that can take your business there.

INDUSTRY INSIGHTS

Leaders in the industry agree that Dataware is the way to go for the future of Data Management. Co-Founder and President of Semantic Arts, Dave McComb, has learned an important lesson:

“After 40+ years of having code at the center of enterprise architecture, this idea that, actually, data belongs at the center of everything is pretty much revolutionary.”¹

DAVE MCCOMB

President and Co-Founder, Semantic Arts

¹ <https://cinchy.com/all-content/675>

To learn more about how to get started with Cinchy's Dataware Platform, and to find out how it can work for your enterprise, click below.

SEE CINCHY IN ACTION

