



CASE STUDY

BUNDLE

DATA WAREHOUSE

2021

CLIENT - Bundle

INDUSTRY - Employee benefits & performance enhancement

MISSION - To help organizations empower employees to be their best in all aspects of their lives with unparalleled experiences-- improving employee engagement and retention.

<https://bundlebenefits.com/>

BUNDLE

ABOUT BUNDLE

Bundle is a company who recognizes that the way people live, work, and communicate is changing, and how this is impacting the way employers support their evolving workforce. Bundle delivers live, interactive 1-on-1 and private group digital sessions that improve employee wellbeing, connections, growth, and performance.

THREE SOLUTIONS FOR EMPLOYEES

Bundle's all-encompassing solution grows and transforms employees no matter where they need it or how they work, remote, hybrid, or inoffice. They offer three employee solution options:

- **Break Solution:** Everyday live digital sessions to help employees, their teams and family members.
- **Events Solution:** Companies host live events that their company needs with less work and higher employee satisfaction.
- **Customized Solution:** Customized events that take the stress out of planning and developing a virtual live or on-demand event that bring employees together.

**VIRTUAL + LIVE
I-ON-1 + GROUP
GLOBAL**

We deliver live, digital sessions to employees, their teams, and their family members, allowing employees to enhance wellbeing, improve performance, + connect with others.

Session topics include:

- Team Building
- Health & Wellness
- Personal growth
- Skill-building
- Professional Development
- Diversity + Inclusion
- World Languages + more

Services included:

- Personalized concierge support for bookings and requests
- Marketing advisor assistance with employee engagement
- Extended learning resources
- Complimentary events
- Mobile application + more

Bundle Employer Solutions

THE NEED FOR BETTER DATA MANAGEMENT

Bundle Benefits was looking for a solution that would enable its Customer Experience (CX) team to better manage data for booked sessions. The company was using a nonnormalized Content Management System (CMS) database which made it challenging for the CX team to gather and use customer and session-related data. This left Bundle's CX team with no choice but to follow a tedious process involving the exporting of all session data and later manually importing it into Excel spreadsheets.

To enable better data management and analytics, Bundle Benefits sought TrackIt's help to implement an Extract, Transform, and Load (ETL) pipeline, a three-step interdependent process used to pull data from one database and move it to another, and a data warehouse along with analytics dashboards to help visualize this data.

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The CX team was half the reason why we wanted the data warehouse. They were losing a tremendous amount of time by having to manually enter data into Excel spreadsheets. The other major reason for the implementation was to be able to capture live data and implement live analytics dashboards.

Tyler O'Connor, Data Analytics Lead, Bundle Benefits

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We wanted something that would allow different departments to see live analytics on their own and be able to track metrics that would enable better decision making. Basically, a solution that makes departments more independent and allows them to quickly pull data that they need when they need it

Tyler O'Connor, Data Analytics Lead, Bundle Benefits

SOLUTION - ETL PIPELINE AND DATA WAREHOUSE

The TrackIt team implemented an ETL pipeline:

1. **Extract:** Draw out structured and unstructured data from multiple sources. Raw data is injected into a staging environment.
2. **Transform:** Data is normalized and refined to meet business and technical needs. All the data is stored in a curated S3 bucket to enable further data processing if necessary.
3. **Load:** Loading data into the Data Warehouse built for Bundle's use case. Essential data required for business analytics is loaded into the data warehouse, and all other data remains stored in the curated S3 bucket.

TrackIt leveraged AWS Lambda and Amazon S3 to implement the ETL pipeline. The team created a Lambda function for each of the three steps. Data coming from the main application and other sources enters the pipeline and is stored in different S3 buckets to ensure cost-efficiency.

Once processed, the data is loaded into an Amazon Aurora MySQL data warehouse matching Bundle's needs for scalability and efficiency. TrackIt also implemented an Amazon CloudWatch event that triggers the Extract lambda function once every ten minutes to ensure automated extraction from the CMS database.

DASHBOARDS TO VISUALIZE DATA

Dashboards To Visualize Data TrackIt leveraged Tableau to implement three initial dashboards that would enable Bundle to visualize data collected from the ETL pipeline:

1 - CX Dashboard

The CX dashboard is the primary dashboard used by Bundle. It has a filterable table with columns that display information on booked sessions such as session dates, instructor details, participant information, etc.

The screenshot displays the 'CX Dashboard' in Tableau. The main view is a table of booked sessions. The table columns are: Instructor Name, Session Name, Booked Session Title, Booked Participants, Session Type, Sub-Category Name, Booked Session Time ET, Instructor Name, Session Link, Booked Price, Booked Session At ET, Price, and Event Date. The right sidebar contains several filters and controls: 'Event Date' (with a date range selector), 'Instructor Name' (a dropdown menu), 'Session Name' (a dropdown menu), 'Sub-Category Name' (a dropdown menu), 'Booked Price' (a range selector), and 'Booked Session At ET' (a range selector). The table is sorted by 'Event Date' in descending order.

CX Dashboard

2. Pivot Table Dashboard

The pivot table dashboard consolidates information from the data storage created by the ETL process and displays instructor and session information in sortable tables.

Topics				Instructors		Break Type	
Topic Name [XAP]				Instructor Name [JAE]		Instructor Name [XAP]	
Instructor Name	InstructorTopicBreak Type	Topic Name		Topic Name		Instructor Break Type	
John Higgins	Class, Lab, Team	Python	100	Learning and Inquiry	100	Class	100
		Introduction	100	History	100	Lab	100
		Network	100	Advanced High Language	100	Lab	100
		Cloud	100	Cloud	100	Lab	100
		Cloud	100	Security	100	Lab	100
		Security	100	Basic Skills	100	Lab	100
		Advanced Programming	100	Basic Concepts	100	Lab	100
		Python	100	Security	100	Lab	100
		Python	100	Cloud	100	Lab	100
		Python	100	Cloud	100	Lab	100
John Higgins	Class, Lab, Team	Learning and Inquiry	100	Cloud	100	Lab	100
		History	100	Cloud	100	Lab	100
		Advanced High Language	100	Cloud	100	Lab	100
		Cloud	100	Cloud	100	Lab	100
		Security	100	Cloud	100	Lab	100
		Basic Skills	100	Cloud	100	Lab	100
		Basic Concepts	100	Cloud	100	Lab	100
		Security	100	Cloud	100	Lab	100
		Cloud	100	Cloud	100	Lab	100
		Cloud	100	Cloud	100	Lab	100

Pivot Table Dashboard

3. Instructor Availability Dashboard

The Instructor Availability Dashboard displays Gantt charts that help visualize instructor schedules



Instructor Availability Dashboard

Our solutions deliver real results. We help elevate your people to fuel your organization's transformation and growth.



82%

OF EMPLOYEES EXPERIENCED INCREASES IN ENGAGEMENT, MOTIVATION, AND CONNECTEDNESS.



79%

OF EMPLOYEES ELEVATED ACUMEN AND DEVELOPED PROFESSIONAL SKILLS.



91%

OF EMPLOYEES HAD GREATER FOCUS AND IMPROVED PERFORMANCE.

RESULTS

The ETL pipeline and data warehouse implemented by TrackIt ensured that all the essential data was grouped in a single place and formatted in a consistent way to enable effective data analytics. The usage of CloudWatch also helped Bundle to realize time savings by automating the process of data extraction from the CMS database. The dashboards implemented using Tableau are now assisting Bundle in visualizing data to improve productivity and enhance decision making.

TRACKIT'S EXPERTISE

TrackIt's Expertise Tyler O'Connor, Data Analyst Lead at Bundle praised TrackIt's expertise, responsiveness, and commitment to Bundle. Tyler was particularly impressed with TrackIt's patience during interactions with non-technical staff during the implementation.

Ensuring a Seamless Flow of Information Throughout the Organization

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The cohesiveness within the organization has improved thanks to the implementation of the data lake. There are fewer back-and-forths involving asking someone to check if they have the same numbers in an Excel spreadsheet as someone else. And personally, for me, making dashboards for other departments has been made significantly easier by having a data lake.

Tyler O'Connor, Data Analytics Lead, Bundle Benefits

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Q. Qualities of the TrackIt team that stood out to you?

The TrackIt team was very responsive to the needs we had. They were also very patient. When you are implementing something like this, it can sometimes feel like there's a barrier when you're trying to explain technical concepts. A lot of the people we have on our team aren't data-centric and the TrackIt team was very patient in making sure we understood what was being done.

Q. Would you recommend TrackIt to other companies? Why?

Yes, I would. I think they did a very good job in terms of implementing this datawarehouse. They did an exceptional job in terms of being patient with non-technical people. This was a very complicated project and the data in our company is very difficult to manage but the TrackIt team made sure that everyone was comfortable at each step of the implementation.

Tyler O'Connor, Data Analytics Lead, Bundle Benefits

CHALLENGE(S) :

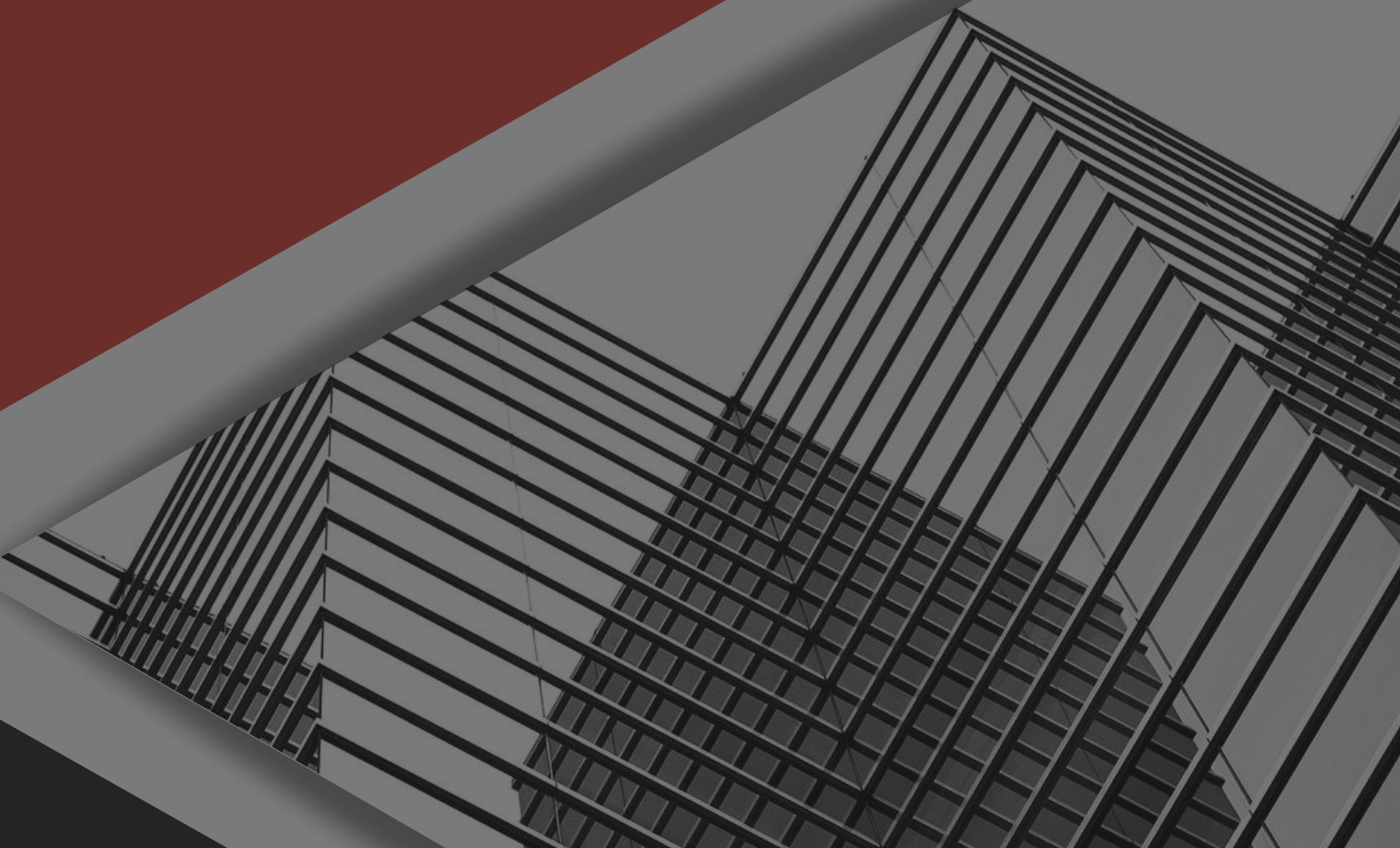
- Non-normalized CMS Database that made it difficult to gather and use customer data
- The need for dashboards to visualize data

SOLUTIONS(S) :

- ETL Pipeline and Data warehouse built using AWS Lambda, Amazon S3, and Amazon Aurora
- Dashboards implemented using Tableau

OUTCOME(S) :

- All essential data grouped in a single location
- Automated data extraction from CMS
- Data visualization enabling improved productivity and enhanced decision making



TrackIt, an **Amazon Web Services Advanced Consulting Partner** based in Marina del Rey, CA, offers a range of cloud management, consulting, and software development solutions. Their expertise includes Modern Software Development, DevOps, Infrastructure-As-Code, Serverless, CI/CD, and Containerization, with a focus on **Media & Entertainment workflows**, High-Performance Computing environments, and data storage.

TrackIt excels in cutting-edge software design, particularly in the areas of containerization, serverless architectures, and pipeline development. The company's team of experts can help you design and deploy a custom solution tailored to your specific needs.

In addition to **cloud management and modern software development services**, TrackIt also provides an open-source AWS cost management tool to help users optimize their costs and resources on the platform. With its innovative approach and expertise, **TrackIt is the ideal partner for organizations seeking to maximize the potential of their cloud infrastructure.**

