For Covanta, a key player in the growing waste-to-energy sector, migrating to an all-cloud environment brings the flexibility needed to expand or contract its IT infrastructure at a moment’s notice as business needs change.

Global warming has turned up the heat on the need to find innovative ways to meet the public’s energy needs. Generating electricity from burnt waste plays an increasingly important role. Waste-to-energy (WTE) producers work with local communities and companies to find sustainable solutions to their waste management challenges.

Covanta, a $1.7 billion global WTE leader, burns about 22 million tons of waste from municipalities and businesses each year, while generating enough electricity to power about one million homes. Covanta partners closely with organizations large and small, so its IT infrastructure needs to be flexible enough to shrink or expand depending on what the business needs.

At a glance
Global waste-to-energy producer Covanta’s limited cloud environment hampered its ability to grow or shrink depending on what the business needed. We helped the company migrate from the Oracle PeopleSoft 9.2 suite to the all-cloud Oracle Cloud Infrastructure (OCI), enabling greater business agility.

Outcomes
- Twenty percent reduction in annual IT infrastructure costs.
- Faster development, with a reduction in the time needed to build a new PeopleSoft environment from eight weeks to two days.
- A 15% to 20% improvement in batch-processing performance.
its in-the-moment needs. As such, Covanta was interested in migrating its IT infrastructure to the cloud to maximize operational agility and scalability.

Covanta isn’t a cloud newbie, but its initial partial foray left many benefits unrealized. We partnered with Covanta to move to a pure cloud environment that cut IT infrastructure costs by 20% annually while dramatically increasing agility.

Need for flexibility

A long-time PeopleSoft ERP user, Covanta began its cloud journey in 2015 with a move to PeopleSoft in the cloud. Covanta’s PeopleSoft financials and supply chain application suite were hosted by Oracle Managed Cloud Services (OMCS) on a physical server platform.

But this environment was less than advantageous from a cost standpoint and was inflexible, as well. For example, it could take months to spin up a test environment for a new application – these delays were seriously hampering Covanta’s ability to engage with new customers.

Pure cloud advantages

From the beginning, Covanta was sold on Oracle’s cloud platform. “We did an analysis and we looked at a couple of different options for the PeopleSoft application, including [Amazon Web Services], and we spent countless hours with the Oracle team. Everyone at Oracle stepped up to the plate and we’re now in the Oracle Cloud Infrastructure environment,” says Ben Cabrera, Vice President and CIO Covanta.

Covanta sought help migrating its 14 modules of PeopleSoft 9.2 to Oracle Cloud Infrastructure (OCI) and needed ongoing managed application support. We were chosen thanks to our relationship with the key client stakeholders, our proven cloud credentials and our framework and execution approach that aligned with Covanta’s cloud roadmap.

We developed a target deployment architecture on OCI that features high-availability configuration, disaster recovery and multi-virtual cloud network design. The proposed architecture also included the use of Web Application Firewall (WAF) and Oracle Management Cloud for security and log monitoring.

Covanta deployed the infrastructure using Terraform, a popular third-party “infrastructure as code” software program that enables users to efficiently build, change and assign versions to the environment as needed.

We used our 1ClickMigration Accelerator toolsets to aid in the migration. 1Click Migration toolset provides rapid, automated provisioning that accelerates migration. This was key in achieving rapid, seamless migration to OCI. The migration was accomplished on a brisk timeline of 16 weeks, and positive outcomes followed quickly.

A wide range of benefits

Important business outcomes and user benefits of Covanta’s OCI migration include:

- Quicker time to repair outages with the help of the integrated Covanta and Cognizant team.
- Improved security controls and governance.
- Standardized end-to-end support by Cognizant gives Covanta users one point of contact.
- Faster changes to the environment – previously, changes would take two months. Now, they take an average of seven days.
- Improved user experience due to faster platform performance.
“We looked at different options for the PeopleSoft application, and we spent countless hours with the Oracle team. Everyone at Oracle stepped up to the plate and we’re now in the Oracle Cloud Infrastructure environment.”

– Ben Cabrera, Vice President and CIO Covanta
I **Batch-processing performance improvement of 15% to 20%**. PeopleSoft processes that used to take nearly an hour now take 35 minutes.

I **Quicker time to repair outages**. The mean time to repair (MTTR) for the PeopleSoft infrastructure and database environment has improved by 45% as we are maintaining the OCI cloud environment.

I **Improved security controls and governance** to meet auditing requirements for SoX. Now, all policies and software are set up according to Covanta’s policies, which are more stringent than in the previous environment. Also, Oracle Dyn Web Application Security provides a higher level of security.

I **Standardized support** from infrastructure to application under one service level with greater coverage than before. Users have a single Cognizant point of contact for all support needs.

I **Faster changes**. The OCI implementation gave the team greater control and ability to scale the application, so it is much easier to make a change that goes through development, QA and production – months or weeks dropped to an average of seven days.

I **Better user experience** from improved performance.

Now, with its pure cloud environment, Covanta is ready to handle the ups and downs of life in a fast-changing industry. Costs are contained,

**Looking ahead**

Going forward, Covanta plans to add file services and move to the fluidized version of PeopleSoft. Users will be able to access the application or do approvals while on the go, and built-in analytics will aid in sales leadership decision-making. The new user interfaces are expected to be more user friendly, which will reduce data entry errors. The team is also considering going live with Oracle procurement solutions in its cloud environment.
About Cognizant’s Digital Systems & Technology

Cognizant Digital Systems & Technology works with clients to simplify, modernize and secure IT infrastructure and applications, unlocking the power trapped in their technology environments. We help clients create and evolve systems that meet the needs of the modern enterprise by delivering industry-leading standards of performance, cost savings and flexibility. To learn more, contact us at simplify@cognizant.

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world’s leading professional services companies, transforming clients’ business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 195 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.