

Case Study



Global Nuclear Operations Standardized by Zavanta



Our Client

Ultra Safe Nuclear Corporation

Ultra Safe Nuclear Corporation (USNC) is a global leader and strong vertical integrator of nuclear technologies and services, on Earth and in Space.

Ultra Safe Nuclear is committed to opening new markets around the world for safe, commercially competitive, power and heat from nuclear energy.

USNC's Fully Ceramic Microencapsulated (FCM®) Fuel is a new approach to inherent reactor safety, providing an ultimately safe fuel. This robust fuel is the basis for the Micro-Modular™ Reactor, or MMR® Energy System, the first "nuclear battery" in commercialization. FCM and TRISO coated particle fuels are also powering USNC's work with NASA and others to accelerate advanced nuclear technology applications. USNC breakthrough technologies are leading renewed efforts on advanced radioisotope power, nuclear thermal propulsion systems, and advanced materials using the same strict inherent and intrinsic safety principles and design philosophy.

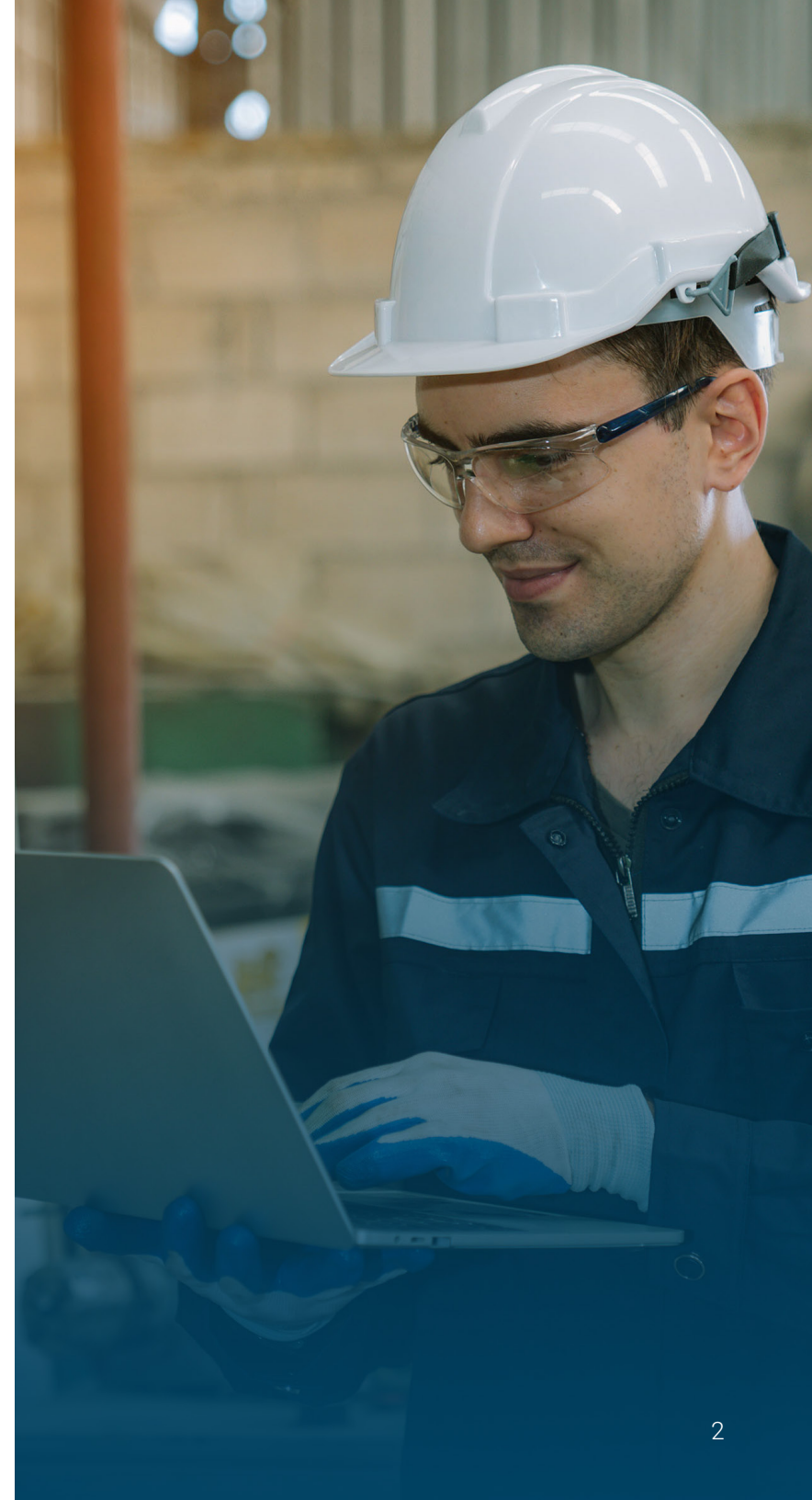
Business Challenge

As a start-up in a heavily regulated industry, USNC made it a priority to establish a standardized management system. The goal was to ensure that all worldwide employees could easily access the same accurate operations information.

In the nuclear energy and technology industry, Ultra Safe means cultivating a strong nuclear safety culture and relentless adherence to quality assurance, procedures, and continuous improvement.

It was critical that their team always accessed the most up-to-date documents for safety and compliance. Since they had offices in different countries, they also needed the ability to customize the employee experience by entity and location, along with the regulations specific to that location.

They started with a collection of PDFs stored in Dropbox, but as they grew, they quickly realized that this was not sustainable. USNC operates according to U.S. Nuclear Regulatory Commission and Canadian Nuclear Safety Commission nuclear design and plant regulations, amongst others, meaning strict safety, compliance, and quality assurance are of utmost importance. They recognized that the status quo was not going to scale. Senior Management drove the development of the initiative as a robust Nuclear-aligned Management System.





Why Zavanta?

The USNC team identified the necessity for a digital audit trail that would facilitate seamless collaboration among multiple authors and contributors within the Zavanta system. This approach enables effortless updates to be disseminated to the staff. Moreover, the team recognized that an online system would guarantee that everyone operates with the most up-to-date approved versions of documents, thereby enhancing compliance measures. The inclusion of an attestation feature emerged as a crucial aspect for monitoring training progress and verifying that employees have duly reviewed the requisite documents.

*"I find it easy to navigate.
I think it's a great system. I really do like
using Zavanta."*

- PAM APPS
USNC Chief of Staff

Training Campaigns

The campaign feature in Zavanta allows USNC administrators to include Read Verify on groups or categories of documents for specific situations. USNC has expanded the use of campaigns across the organization for a variety of scenarios specific to the employee's role, department, location, and/or entity.

Here are a few examples of how they use campaigns:

- An engineer may be required to read and understand the process documents developed based on NQA-1 / CSA N286-12 standards which define quality assurance program requirements for nuclear power plants.
- Each employee must access HR policies and the health and safety documentation for their location which reduces the distracting clutter of a traditional file sharing environment like Dropbox.
- New hires are automatically enrolled into campaigns that are specific to their role, entity, or location. This ensures compliance and streamlines onboarding.

Policies and regulations vary by country and location. As USNC creates or updates the documentation, they tag it with the appropriate category. These documents are added to the appropriate campaign, ensuring that employees access the most accurate information. The Zavanta system is efficient and effective, drives compliance, and offers a positive user experience.





Comprehensive System Based on ISO 15288

USNC follows a framework derived from the ISO 15288 standard for their policies and procedures in Zavanta. This includes four primary areas.

- Technical set around product design and product change management.
- Project management set that covers cost, risk, quality, and schedule management.
- Organizational set that includes human resources, financial and knowledge management.
- Commercial set that focuses on procurement and sales.

The robust system is regularly accessed by employees, clients, and auditors. USNC has utilized Zavanta to create a comprehensive system linking policies to procedures to work instructions to forms.

By directly linking these documents to each other, users can understand the whole picture, from the decision-making through the process, procedures, and other supporting documents that eventually loop back to communication and process improvement. This is the core purpose of Zavanta.

The Results

Zavanta has been rolled out to the entire company across five continents. USNC now has a single source of truth to scale from as they expand in the future. Everyone has access to the latest and greatest controlled version in one place.

- Each division has its own portal which ensures employees see relevant content.
- Workflows and campaigns drive compliance and transparency for leadership.
- The work the team put into the setup with the naming and numbering, utilizing structured content in early stages, along with Zavanta features like picklists and filters make the system very easy to search for users.

“The Manual Maker is my favorite when gathering a group of documents.”

- **NANCY HARTWICK**
USNC Quality Administrator





About Compose

About Compose We are dedicated to helping people thrive by gaining access to accurate, updated “how to” knowledge anytime, anyplace, in any language.

Everything we do – our method, our software, our advice – is focused on one thing: helping our clients achieve their strategic goals by getting procedural knowledge out of peoples’ heads and shareable.

We’re passionate about the power of good systems and clear standard operating procedures because of the tangible results we’ve seen our customers achieve: agility, reduced operating costs, faster training, predictability, and greater transparency.