Irving Oil

Operator Shift Log Project

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Irving Oil Today

- Irving Oil is a privately-held regional refining and marketing company, headquartered in Saint John, New Brunswick
- Canada’s largest refinery, producing over 300,000 bpd of finished energy products
- 10 distribution terminals and a fleet of delivery trucks serving wholesale and commercial customers throughout Atlantic Canada, Quebec, Ontario and New England
**Communication – Key to Success**

- A key success factor for any organization is excellent verbal and written communications between working teams. At Irving Oil, we consider it to be a critical success factor for a safe and reliable workplace.

- One way to improve upon communications is to focus on a highly engaged workforce that is equipped with all the tools they require to be successful.
  - The shift turnover log is one of those tools.
  - The shift teams use the log verbally to discuss with their shift relief the current operation of the plant, optimization efforts and discuss any risks or incidents.
  - Without this conversation, we open ourselves up to potential risks and/or incidents.

- With cNotes, our turnover logs are directly tied to our operating plans. As a result our teams are better engaged in achieving plant and refinery optimization.

- All entries into cNotes record the users credentials which is raising personal and team accountabilities, and helping us to achieve our objective of a highly engaged workforce.

**Safety – Our Core Value**

- In general, poor shift turnover communications has been found to be a contributing factor in refinery incidents for other companies within the Refining Industry.

- Without communication, the log is just that, a log.
  - The ‘passing of the baton’ from one shift to the next (during the shift turnover meeting) using a well written log as a vehicle for conversation, will enable us to ensure all incidents are prevented.

- Safety is our core value, both at work and at home, we believe all incidents are preventable.
Shift Turnover Process - History

- Over the years, Operations shift turnover process has not been a structured one (mainly excel, MS word or hand written).
- In some cases, the data being recorded and communicated from one shift to the next was not current and/or relevant data.
- The overall objective was to simplify the process of Shift Handover with a consistent format across all areas, and enable operators to communicate what matters in a way that focused on accountability and accuracy while focusing on:
  - Safety Concerns
  - Environmental Concerns
  - Unit Operational Issues
  - Maintenance Activities
  - Daily Orders
  - Night Notes
  - Requests from Plant Technical Services

Selected Solution - cNotes

- The process to select a software provider for our Shift Log project was extensive.
- We began with an internal review of the build vs. buy options. It was decided that buy was the best option.
- We engaged with vendors through our RFP (request for proposal) process that lead us to CSoft Technologies and their cNotes product.
- cNotes provided not only the functionality we were looking for (easy to use, web based, customizable look and feel) – CSoft also offered a cost effective hosting model that would allow our stakeholders the ability to access Shift Connection from anywhere (work, home, mobile devices).
cNotes - Functionality

- cNotes is a software solution that is used by operators, management, engineers, planning teams.
- Our hosted environment allows for access by external resources (i.e. product inspectorates).
- Key functionality includes:
  - Web-based technology with a familiar Microsoft look and feel.
  - Security and administration within the application.
  - Provide connection to the plant historian data.
  - Provide safety notes, daily orders and night notes.
  - Ability to create expiring notes.
  - Ability to create targeted questions for user response.
  - Customized module creation capability.
  - Total Accountability at every level.
  - Every level of operational personnel has the visibility to all areas of the Operations team.
  - Advanced key word search capability..
  - Easy to use report creation and distribution.
  - Auto-save and archiving enabled.

Shift Connection

- There was a strong desire internally to have a meaningful name - ‘passing the baton’ was selected to symbolize the shift handover.
Overview

- The Shift Connection Home Page is the ‘go to’ page for overall safety stats, key messages and links to other internal applications.

- We also have the ability to send feedback and apply a frequently asked questions section.

Notes Module

- All user notes sections can be configured and be set to ‘rolling notes’ or ‘shift by shift’ notes.

  - Rolling Notes – will carry over from shift to shift until the user removes them.

  - Shift by Shift Notes – will clear at the beginning of the next shift (at a time you decide).

  - Auto save is also a key function of cNotes.
Targeted Questions

➢ User notes questions are targeted as reminders for the user.

➢ Questions can be set to have a flagged response that can be reported on easily.

Historian/Lab Connection

➢ Our plant historian data is compared to our daily plan targets.

➢ Operators have the opportunity to add corrective actions to deviations.

➢ Currently working with CSoft to develop a new module that will automate the population of our plan numbers into the logs.
**Expiring Notes**

- Expiring notes allow us to add orders and instructions that will automatically expire based on number of days or a specific date.

**Historical Search**

- Quick historical views allow for notes lookup for the past 6 shifts.
**Advanced Search Capabilities**

- Advanced search capabilities are available for specific key word, date or shift or specific log lookup capabilities.

**Custom Modules**

- Our Oil Movements and Marketing team required custom modules to allow drop down list capabilities.
- CSoft was responsive to our needs and able to deliver a tool that has been well received by the users.
Calendar
➢ The calendar module is used extensively by our off-shore team to schedule reminders for meetings and specific tasks.

Reports
➢ Users have the option to create a one time report or create reports to save for use later – or share with other users.
Email Reports

- Reports can also be sent to users via email at the days and time they select.
- Notes only can be sent as well at the moment they are saved – this is beneficial for notes that are attributed to Safety or the Environment.

Administration

- For the systems administrator, cNotes is an intuitive and easy to navigate tool.
- Security can be set by roles and users – you can set access at the page, portlet or site level.
- New modules are added easily in a ‘container’ look and feel.
Recap

➢ The CSoft team has been very responsive to our needs and timelines – they have been open to suggestions for custom modules, as well as our needs as a customer.

➢ We required custom built modules – which CSoft successfully created.

➢ Responsive to new requirements and open to suggestions for improvement.

➢ Change Management was an aspect of the project we knew would be a challenge internally – it was.
  ➢ Now that the benefits are understood – users have engaged in the tool and are using it as hoped.

➢ Many of our team members embrace the hosted solution - many sign-in to Shift Connection from home when they are returning to shift from days off.

➢ Irving Oil now has a scalable sustainable shift turnover solution, that is meeting the needs of operations, management and supporting teams.