

"Industrial" Business Intelligence (I-BI)

Three Types of Customer Investing in Industrial BI

- **NEED** Information
- Want Information
- Seek Information





5 Key Aspects of a Complete I-BI Solution

- Turn Raw Data into KPIs (Key performance Indicators)
- Place KPIs into Context Enabling User Action
- Generate Results Automatically Manage and Archive
- **Deliver to Stakeholders** Drive Continuous Improvement
- Ad-Hoc Access to Data Troubleshooting & Learning





Type 1 – NEED Information

Regulatory Compliance

- Direct Line of Business
- Fines if not delivered
- Designed for Regulations, not Operations

Critical to Operations

- High Visibility
- Installed as part of automation infrastructure
- End of Project, High Risk, Time and Money have Run Out















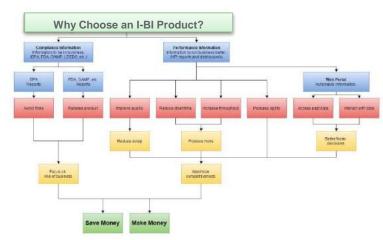




Type 2 – WANT Information

Continuous Improvement

- Key Performance Indicators (KPIs) You Know Your Measures Make Money, Save Money
- Context Compared to What Last Month, Last Year, Last Batch, Competition, Peers
- Routine Is Continuous Improvement Part of Your Routine?
 - Make it Routine Schedules
 - Bridge the Gap Collaboration and Interaction
- Records to Look Back Upon





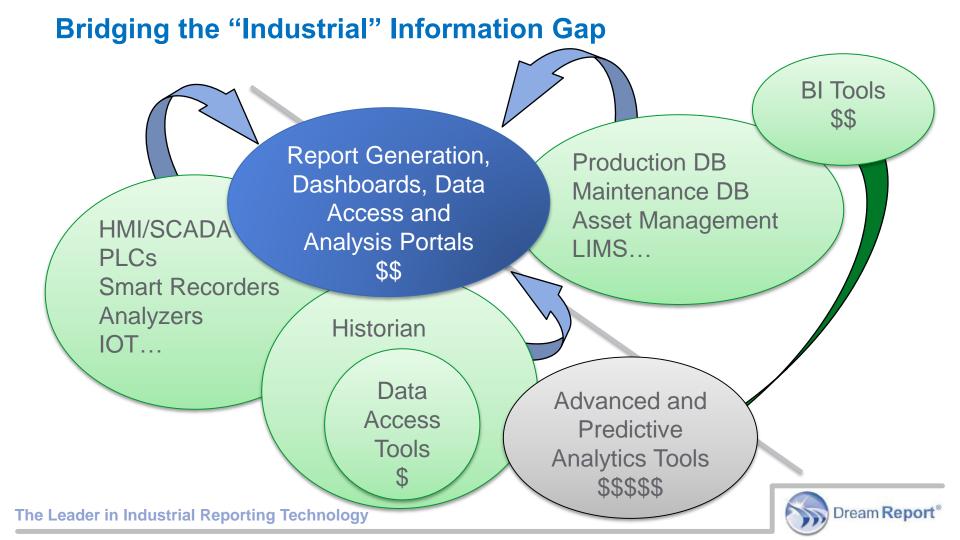
Type 3 – Access to Information – Analytics & Troubleshooting

Troubleshooting & Continuous Improvement

- Ad-hoc Analysis Select Tags Pan/Zoom, Search/Sort/Filter
- Export for Sharing and Further Analysis
- Store Information for Future Reference







Why is Dream Report Different from other BI Tools?

It's an "Industrial" Report/Dashboard Solution

- Connectivity to Over 80 Product and Industry Standards
- Understands "Industrial Data" and Sources
- Understands "Industrial" Calculations
- Designed for Process Engineers
- No Programming, No Scripting, Low Learning Curve
- All-In-One Solution, Download Install Operate
- World's Most Recommended "Industrial" Solution



Over 20 "Industrial" OEMs (Branded Resellers) and Partners



What Do You Get with Dream Report?

Taming Your Ocean of Data

- Turning Raw Data into Information
- Deliver PDF, Excel, CSV, HTML5 Web Pages
- Scheduled & Event Based Triggers
- HMI/SCADA Integration ActiveX, CMD Line, Web Services
- Email, FTP, Automatic File Management
- Data Collection, Data Logging and Manual Data Entry
- Browser Based User Portal PC and Mobile
- 10+ Year History, 20+ Releases, and 14 Languages







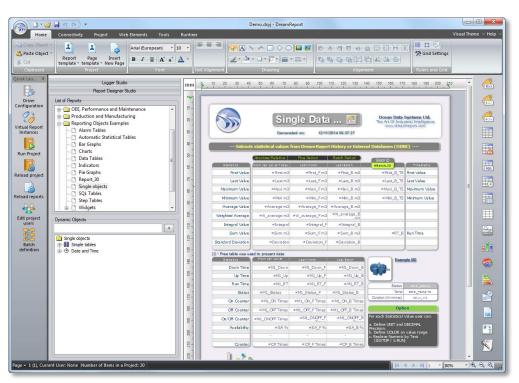




For Operators, Engineers and Managers...



- IT is welcome, but not necessary with Dream Report...









Browser Based Portal – Any User, Any Time



Report Review, Manual Data Entry, Ad Hoc Access



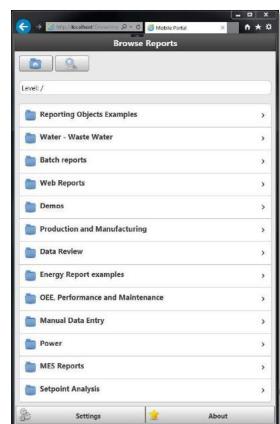


PC and Mobile Support - Automatically



Drill Down and Review Data – Export to Excel













The Leader in Industrial Reporting Technology

How it Works and What it Does







Success Stories – www.DreamReport.net

- 1. Ease of Use Bear Republic Brewing
- 2. Regulatory (Water and Waste Water DNR-EPA) Carollo
- 3. Regulatory (Food and Beverage FDA GAMP) **Lifeway**
- 4. Regulatory (Life Sciences FDA) **Finesse**
- 5. Regulatory (Hospitals JHACO) **ASCO**
- 6. Continuous Improvement (Cost Control) **Preferred Utilities**
- 7. Continuous Improvement (Quality) **Loparex**
- 8. Operations Billing **Howard Engineering City of Union**



Bear Republic – Success Story





Micro brewers are faced with many challenges, but if you're Bear Republic, there's another to add to the list - the availability of a key ingredient - water.

Bear Republic Brewing is located in Cloverdale, about an hour and a half north of San Francisco, and one of the hardest hit drought communities in California. In addition to working hard to make a great brew, they are challenged with a lack of water. Bear Republic is a significant brewing company having made the top 50 list of microbreweries in the USA. They have an annual production around 72,000 barrels.

As you can imagine, water makes up the majority of their product. In addition, a significant amount of water is required for the overall process, cleaning and the like. Industry averages highlight a ratio of 6 gallons of water use to one gallon of beer produced.

With city limits being applied to water use, it's clear that Bear Republic needed to pay close attention to their water consumption. Close attention also Cloverdale.

Bear Republic took significant steps to understand and reduce their water use. These steps included systems to recover water from waste streams, water that can be used in cleaning processes. These steps also included closely monitoring water use throughout the process, even from batch to batch, monitoring activities of operators to optimize water branded solution. Mike Liapitan, Wonderware availability for brewing. Every gallon of water saved NorCal product specialist, provided the initial can be another gallon used to make more beer.

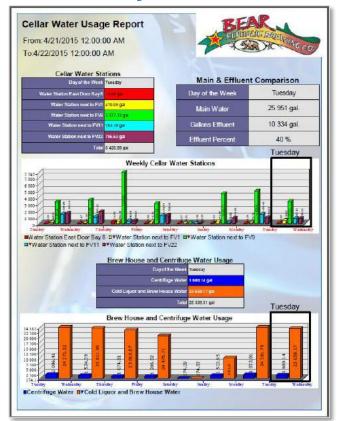
Current production is around 72,000 barrels a year. At 31 gallons per barrel and 3.5 gallons per gallon of beer, they are requiring 7.8 million gallons of water per year. The city has them capped at 8 million gallons annually. Clearly, water optimization is an



The process of monitoring and optimization required the installation of twenty-three water meters, a data acquisition system, historian and reporting / analysis software to generate and deliver the required results. Water meters feed their use data to a Siemens PLC. The Siemens PLC is monitored by a Wonderware Historian. The Wonderware Historian becomes the data repository for Dream Report, a solution by Ocean Data Systems and sold by our DEM (Wonderware). This included filling daily wastewater reports to the city of a combination of products delivers exactly what Bear Republic needed to meet the city reporting requirements and deliver the production analysis to make continuous process improvements.

> Much of the Bear Republic solution was specified and initially configured by the Wonderware NorCal (Northern California) office. Dream Report is also delivered through this channel as a Wonderware Historian and Dream Report installation and tag

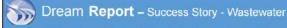
Dream Report by Ocean Data Systems www.DreamReport.net







SI - Carollo Engineers – Success Story



Carollo Engineers Deliver Their First Dream Report Project



As one of the leading water engineering companies in the USA with a nower 80 year history and 20 offices: across the USA, the ream at Carollo is always looking for the latest and generates to maxter and deliver to their customers. For one record client, The City of Chandler Arizona, that new solution was called Dream Report.

Every month, the City of Chandler generates a monthly operations report on their waste water treatment facility. This report is used both interesting and for EPA compliance. Their automation system is based on GE Intelligent Platform's — Proficy HMI/SCADA - CIGHIPLOTTY. It supervises the platfor operations, acquiring data from an array of Rockwell Automation. PLCs and then logs results into a Microsoft SOL Database.

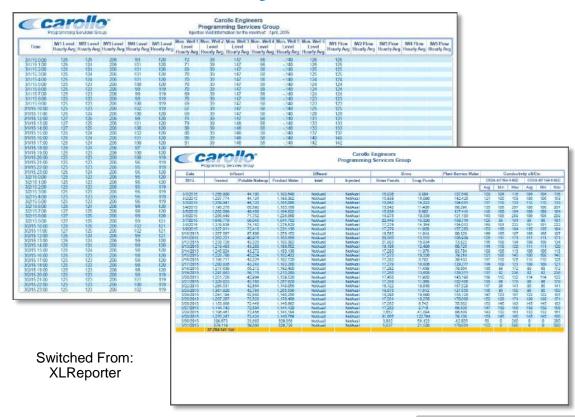
Every month, an Excels preadthest was used to query data, update calculations and generate the required reports. This was both time consuming and somewhat labor intensive. While this solution worked, it did require a particular knowledge set which was not always available and the solution did not offer any long term document management, which would be beneficial for the organization and retrieval of past mostls.

Carollo manages this solution and wanted to try something new. Report generation is nothing new to Carollo. With their focus and expertise in all things water, they've been managing reports with all manner of technology including Microsoft Excel (with automation plug-ins), SAP Crystal Reports and Microsoft. SQL. Server. Reporting. Services (SSRS). These solutions required a great deal of systems.

integration work and customization which meant more time was spent working with technology, than actually focusing on delivering end user value in terms of compliance or performance information. They were looking for a solution that delivered all the functionality they needed "Dut of the box", without the need for programming, scripting or technology integration. An ideal solution would interface with any automation system that they will encounter (in addition to this CIMPLICITY installation). It will be flexible enough to meet all of their compliance reporting requirements while also enabling the ability to deliver on additional uses like maintenance reporting, performance reporting, the display of KPI dashboards and the access of Information via a web browser or mobile devices. While these features weren't initially required in this application. Carollo knew that they would likely be requested and added in the future.

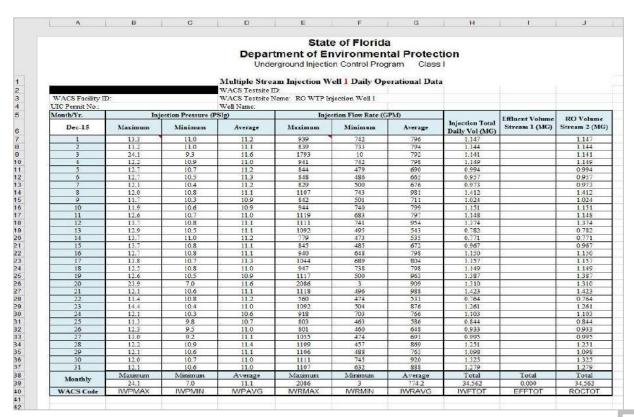
The engineers at Carollo had recently been exposed to a new solution called Dream Report, having heard about it in a news announcement. They arranged for a personalized weblinar, hosted by Ocean Data Systems and exposed their team to this new solution. Dream Report made perfect sense to them. It was purpose built for the world of automation, as opposed to repurposing business technology, it delivered the statistics that are common to water and wastewater applications without the need for any creative math and logic. and it delivered a great deal of flexibility in terms of report generation, report access and long term management. Dream Report also delivers a web portal with the ability to both display past reports and ad hoc interact with process data through the use of report templates, with user configurable dates, times and data queries.

Dream Report by Ocean Data Systems www.DreamReport.net





Florida – Water Utility



Switched From: XLReporter



Lifeway Foods – Success Story



Rathing had no be changed in our demo application. We just instable the new Jiesens and new news good to go.

Describe your experience in werking with Drazen Report.

When you first open the product, it can be a little overshelming. There are let so if litters to explore and some terminating to get up to expeed with . I remembered that there were a ket at "slades on the Drazen Report revolute and late dischard to check them out. That clerified a let. After posing the "Build to check them out. That clerified a let. After posing the "Build at Report in 5 "Multima" wicker. I understood have to comect. Drazen Report to finy data source and build a report. It resulty

Dream Report by Ocean Data Systems www.DreamReport.net

their Excel workbook. Other steps included double checking

calculations, tables and charts, printing a report and properly

archiving all applicable files. While no single step is difficult, the

combination of steps for all CIP operations becomes claunting

and is a distraction from the primary Lifeway goal, making kefir

with the highest quality and lowest cost possible.



Dream Report®

OEM - Finesse – Success Story



replacement cells, pharmaceuticals, antibodies, or vaccines. This production requires a tightly controlled combination of temperature, pH, dissolved oxigen and pressure. Creating the around the FDA 21 CFR Part 11 (Code of Federal Regulations ideal environment requires the right agitation to create a homogeneous growing medium. This environment is the ideal the validation of data accuracy and accountability. Meeting place for all growth, both desired and unwanted hence cleanliness is a key factor. Many bioreactors today offer single use components, sterile replaceable bag chambers and single signatures. use sensors - all of which are the forte of Finesse.



Finesse Bioreactor Controllers for Lab and Production Use

Bioreactors vary in size from small 1 liter laboratory models to production reactors up to 2000 liters in size. More typical are configurations in the 100 to 250 liter capacity. Depending on the life to be cultured, bioreaction times can range from days for bacterial growth to several weeks for more complex cell-

specific technology and Finesse-developed software, to deliver Emerson's DeltaY as the user interface and data management platform with Finesse remote UO to their specialized single use

good practice standards and regulations. These include GAMP (Good Automated Manufacturing Practice) and the regulations Book 21, Part 11). 21CFRPart11 covers the requirements for 21CFRPart11 requires a high quality of user authentication and security, version management, audit trail and electronic

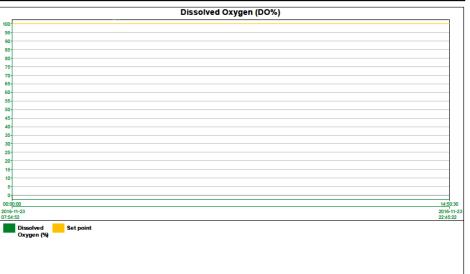
Finasse customers in both the laboratory and production environment, require a reporting solution that will be easy to learn and flexible enough to adapt to their varying needs and infrastructures. Finesse reviewed a number of solutions and selected Dream Report as their preferred offering, and have delivered over a dozen systems in the past few years.

Dream Report is uniquely qualified to meet all the equirements of this market. Connectivity is achieved through specially developed interfaces for both real-time and historical access to data, alarm and exent information in a DeltaV system. Dream Report also offers over 70 other interfaces to virtually every other environment that may have information valuable for use in reports. These may include Laboratory Information Management Systems (LIMS), Inventory Systems, Customer Databases, etc. Dream Report is also "purpose built" to address 21CFRPart11. Most other products will require a great. deal of customization and system integration to meet the

The Finesse bioreactor controllers are a combination of . One very unique aspect of the Finesse universal controller standard industrial solutions, combined with layered market requires the delivery of a reporting solution that can be quickly integrated with the customer environment, easily set up with an exact-fit solution. The automation system is based on a starter set of reports and dashboards, and ready for quick adoption by the end customer. Orean Report's logical

> Dream Report by Ocean Data Systems www.DreamReport.net



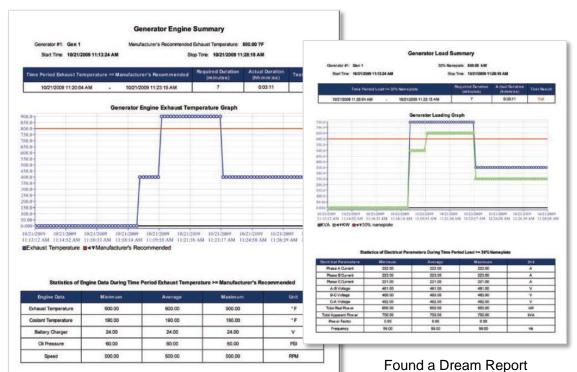


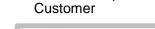
"Finesse is all about providing flexible solutions, so we like to recommend Dream Report to our end users so they can get the same flexibility in creating their custom reports."



ASCO – JCAHO Generator Tests









OEM - Preferred Utilities— Success Story



PREFERRED UTILITIES MFG CORPORATION

Preferred Utilities of Danbury, CT. is a leading source for expertise, products and services in the area boiler instrumentation and controls, high efficiency burners and fuel management systems across North America. Their markets include both small and large boilers, those twoically found in hospitals, schools & universities, manufacturing facilities and emergency power systems. Founded in 1920, Preferred Manufacturing has had lots of time to hone their expertise. As a supplier of combustion controls, operator interfaces and data management systems, they've worked hard to deliver quality, reliability and a solution that delivers accountability. The delivery of performance information has always been a high priority for them.

Their automation systems are a mix of both internally developed and third party combustion control systems. combined with an HMI/SCADA operator interface and data management system from various suppliers



The operator interface is designed for real-time management of the systems. Communications with field equipment is typically based on MODBUS. This offers the operator the ability to read and write setpoints, tuning parameters and interact with the system to manage and optimize performance.

Preferred Utilities customers expect their systems to deliver the best performance possible and Preferred has delivered a variety of performance reporting solutions over their history. Early on, reporting solutions were based on custom software. More recently, report generation was based on an automated

Microsoft Excel solution. Today, performance report. generation is based on Dream Report. Many lessons were learned and this success story is intended to highlight some of the issues and concerns that plagued earlier solutions.

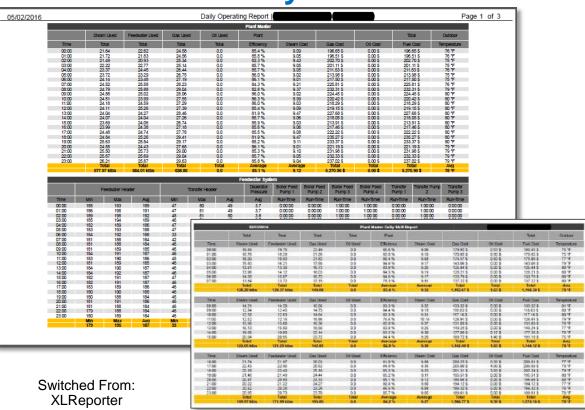
Custom Software - Every equipment OEM evaluates the tradeoff between creating and maintaining their own solution. potentially having a competitive advantage through a unique offering vs. leveraging third party tools that deliver the functionality they need. in early tachnology markets, the softwere tools you want may not exist or are too basic for the task. To an engineer, this looks like a development opportunity. Preferred developed and offered their own technology for reporting. While a good solution in the early days, a privately developed and dixtom solution doesn't benefit from the feedback and varying customer demands that comes from a broad market solution.

Lesson 1 - While custom developed talations may get the basic lob done, they are ultimately quite limiting and costly to support in the long term. You are better off identifying and sticking to your core competencies.

Over time, third party tools with a focus on the automation industry became available. One common solution introduced in the 1990s was based on Microsoft Excal. The concept is to leverage Microsoft automation interfaces to insert data into an Excel workbook. Most Excel solutions leverage the math and print functions of Microsoft Excel. While making use of Excel as a calculation engine would seem a pood fit for reporting this approach can be problematic for the following reasons:

- 1. This concept is not an "All in One" solution. The integration of multiple components from different wondors to craft a roportine solution will create a more fragile environment - reliability will be compromised. The solution may be easily and repetitively compromised by software or technology undates (Windows Service Pariss) Excel based solutions may be impacted if Excel is used for
- other purposes on the same computer. Your visibility to the reliable background operation of Excel automation may be limited and you only know of failure when a report. is lost, perhaps days after its intended generation
- While many users understand the fundamentals of Excelfor business purposes, the use of Excel for automation related reporting presents challenges in the areas of missing data, bad data quality, rollover data and the

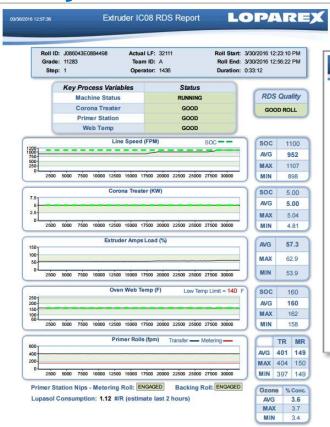
Dream Report by Ocean Data Systems www.DreamReport.net





LOPAREX – Success Story







Switched From: SSRS

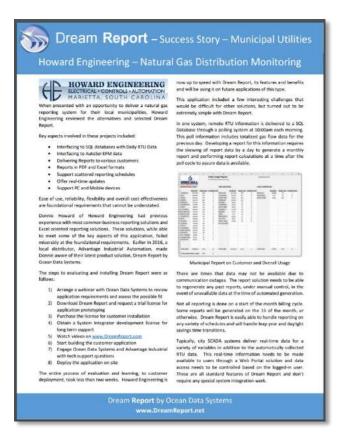


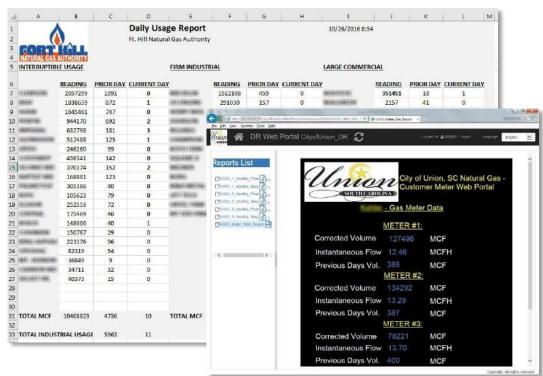
Dream Report by Ocean Data Systems

www.DreamReport.net

500 controllers connected to GF iEIX and GF Historian. These

SI - Howard Engineering – Natural Gas Distribution





Switched From: XLReporter





10 years ago Dream Report was the pioneer in the user friendly generation of industrial reports

Our near term focus is for Dream Report to pioneer new ways of working with that data and accessing it

