

Process Excellence in Action: **NOVA Chemicals**

**Business Process Innovation for
Enterprise Architecture – NOVA Chemicals
Builds a Culture Around Process Innovation**

"We have created an ARIS repository that drives our organizational infrastructure, including data, processes, function/applications, and products and services"

Bill Blinn

Director of Enterprise Architecture,
NOVA Chemicals

Organization

NOVA Chemicals

Industry

Commodity Chemicals Manufacturing

Challenge

Create a culture around process innovations and model processes to integrate with a comprehensive enterprise architecture.

The Solution

IDS Scheer Process Implementation
Consulting experts helped the company model its processes and develop a robust enterprise architecture.

Solutions Deployed

- ▶ ARIS Platform
- ▶ ARIS City Planner

Benefits

NOVA Chemicals now has a powerful enterprise architecture with a customized central meta-data repository to drive its organizational infrastructure.

NOVA Chemicals is a \$5 billion commodity chemical manufacturer that produces commodity plastics and chemicals with a focus on two product chains: ethylene and polyethylene – styrene and styrenic polymers. Its plastics are used to manufacture products that are essential to everyday life, including food packaging, construction insulation and shrink-wrap for industrial customers. With headquarters in Calgary, Alberta, Canada and an operating center in Pittsburgh, Pennsylvania, NOVA Chemicals' company shares are traded on the Toronto and New York stock exchanges as NCX. Its three Canadian manufacturing sites produce nearly 3.4 billion pounds of polyethylene resins per year, ranking it sixth in North America and 13th worldwide. Twelve manufacturing sites throughout Europe, North and South America produce 3.3 billion pounds of styrenic polymers annually.

The Business Challenge

NOVA Chemicals plays in a highly competitive commodity chemicals market where margins are tight and windows of opportunity are few and far between. In a business where every penny counts, it can be difficult to outthink and outspend the competition. However, NOVA is taking a different approach to out-execute the competition through a focus on business process innovation. Before the company created a culture built on process innovation, it needed to establish a change management initiative to promote process ownership that focused on continuous process improvement and would encourage the generation of new ideas.

Establish Business Process Discipline

The first step was establishing a business process discipline that started with a value maturity assessment for critical processes, which could lead to value chain models and high level business process models, would offer ongoing training process modelers and BPI innovators, and ultimately embed process modeling within the business planning process and project methodology.

Creation of an Enterprise Architecture

NOVA quickly determined that business process innovation was more than modeling the processes; it consisted of a three-legged stool that included people, processes and tools. The key facilitator and seat of this stool was enterprise architecture (EA), a solutions framework for organizing and managing components and relationships that made up NOVA's business services.

Process executives at NOVA determined that EA was important for three key reasons:

1. Architecture provides a holistic understanding of how the business works today.
2. By having an integrated view of the architecture landscape, the process of change can be managed to optimize benefits and control cost.
3. Architecture influences business planning and ensures technological and organizational alignment with business strategies.

The Need for an EA Framework and Choosing the Right Tool

NOVA established an EA framework that defines the concepts included in a model and the structure or relationships between them. The company took three alignment approaches:

1. Top-down – Process-centric strategy and planning focus
2. Bottom-up – Operations focus with emphasis on technology service
3. Change management – Project execution focus

After evaluating several EA frameworks, NOVA opted to create its own framework by taking a hybrid approach that covered business architecture, data architecture, application architecture and infrastructure architecture. However, creating this custom framework was contingent on selecting the right tool. NOVA reviewed many tools, but found the majority were too technical, not rich in modeling functionality and lacked flexibility in support for a custom EA methodology.

The Business Solution

NOVA finally decided on IDS Scheer's ARIS Platform to power its EA initiative. Prior to the EA project, NOVA had used the ARIS Toolset for its business process modeling. After conferring with the process experts at IDS Scheer, NOVA realized that ARIS offered:

- ▶ Support for multiple standard EA frameworks
- ▶ Configuration to any customized architecture framework
- ▶ High degree of integration between architecture areas
- ▶ Comprehensive meta-data repository
- ▶ Web publishing and updating capabilities

The Results

Configuring ARIS for NOVA's EA Framework

Over a short three-month implementation, IDS Scheer worked in tandem with NOVA Chemicals to:

- ▶ Create new model types and templates.
- ▶ Restructure existing model types and templates.
- ▶ Provide Meta Data repository changes to manage NOVA-specific EA data.
- ▶ Create reports and models reflective of NOVA's EA expressions.
- ▶ Build integration points for standards, policies and service level agreements.
- ▶ Set up Web publishing and administrative processes (extend existing BP administration processes).
- ▶ Develop integration with other tools (ERWin, SAP and BEA).

NOVA Chemicals' EA initiative has proved successful because:

- ▶ The framework fit the business culture.
- ▶ Customization was key.
- ▶ They started in one business area with a phased rollout to the rest of the organization.
- ▶ EA was driven based on the foundation of business processes.
- ▶ Integration between people, processes and technology was critical.
- ▶ The EA environment is adaptive and flexible.

The Future

Next steps for NOVA Chemicals include:

- ▶ Continue populating NOVA's ARIS EA repository.
- ▶ Extend ARIS to link in Service Level Agreements and Operating Level Agreements between processes and technology.
- ▶ Build a security architecture capability covering people, processes, data and technologies.
- ▶ Expand on the Organizational Architecture covering resources, skills and organizational structure for the support of business processes.
- ▶ Extend ARIS to integrate technology licensing and contract service management.

About IDS Scheer

IDS Scheer is the market leader in Business Process Management (BPM) software and services for corporations and public organizations worldwide. With its unrivaled ARIS Platform for Process Excellence, the company offers an integrated, comprehensive solution portfolio for the strategy, design, implementation and controlling of business processes. Utilizing the ARIS Value Engineering (AVE) approach, IDS Scheer consultants bridge the gap between corporate strategy, business processes, IT solutions and process controlling. Approximately 2,800 employees, in over 70 countries, serve the company's 6,000 customers. In 2006, IDS Scheer's revenues reached 354 million Euro / \$465 million USD. Established in 1984 by Prof. August-Wilhelm Scheer, IDS Scheer is listed in the TecDAX on the Frankfurt Stock Exchange (Germany).

For more information, please visit: <http://www.ids-scheer.com>.

IDS Scheer AG

Corporate Headquarters

Altenkesseler Straße 17

66115 Saarbrücken

GERMANY

Phone: +49 (0)681-210-0

Fax: +49 (0)681-210-1000

E-Mail: info@ids-scheer.de

www.ids-scheer.com

IDS Scheer Worldwide

Austria	Netherlands
Belgium	Poland
Brazil	Russia
Canada	Singapore
China	Slovakia
Croatia	Slovenia
Czech Republic	Sweden
Finland	Switzerland
France	Turkey
Hungary	UK
Japan	USA
Luxembourg	