



## International Mining Company Preserves its Workforce's Knowledge and Rebrands Itself



**Customer:** Cliffs Natural Resources  
**Web Site:** [www.cliffsnaturalresources.com](http://www.cliffsnaturalresources.com)  
**Customer Size:** 5,700 employees  
**Country or Region:** United States  
**Industry:** Steel & Iron  
**Partner:** ProSource Solutions

### Customer Profile

Cleveland, Ohio-based Cliffs Natural Resources Inc., founded in 1847, is an international mining and natural resources company that is the largest producer of iron ore pellets in North America, a major supplier of direct-shipping iron ore, and a significant producer of metallurgical coal.

### Software and Services

- Software
  - SharePoint Services
  - Enterprise Portal and Collaboration Technology Planning
- Technologies
  - Microsoft .NET Framework

### Microsoft Services

As the consulting, technical support, and customer service arm of the world's leading software company, Microsoft Services enables the successful adoption, deployment, and use of Microsoft solutions and technologies for all customers.

For more information about Microsoft Services, go to:  
[www.prosource-corp.com](http://www.prosource-corp.com)

### Business Needs

Cliffs Natural Resources (Cliffs) is a 172-year-old company, A member of the S&P 500 Index, an industry leader in the mining and distribution of iron ore from around the world and the largest producer of iron ore pellets in North America. Cliffs is a major supplier of direct-shipping lump and fines iron ore out of Australia and a significant producer of metallurgical coal. Today's Cliffs is a vital and growing mining company with a solid North American franchise and expanding global assets. Of the 11 iron ore mines in North America, Cliffs manage six. The company conducts business with virtually all of the integrated steel producers in North America. Cliffs' mines now account for approximately 46 percent of North American pellet production—28 percent for its own account—earning Cliffs the number one market-share position in North America. Internationally, the Company's presence extends to Australia, Latin America, and Asia..

While Cliffs had been performing its core business well, a daunting problem was approaching. Cliffs leadership had to address a significant problem with the mining industry – the “retiring” workforce. Much of the workforce was approaching retirement age, and the intangible information they held was critical to the operation of its business.

If this information was lost through the slow retirement of the workforce, Cliffs would lose its competitive advantage in the marketplace, and would have to invest significant resources into training the incoming workers.

A knowledge-management effort was needed, but Cliffs recognized that capturing the knowledge from the current workers was only the first step towards the true solution. A system would be needed to house and maintain this information, and to enable easy search and retrieval of knowledge items by incoming workers.

In addition, Cliffs wanted to renew its external presence by the creation of a new Internet-facing site with dynamic content and a fresh new look incorporating rotating banners and live stock information.

### Solution

The best approach for Cliffs was to utilize SharePoint as the repository for housing this knowledge base. The powerful editing and content-management capabilities of combined with its flexible search would enable the new, younger workers to find the information they required quickly and easily.

With the Enterprise Portal and Collaboration Technology Planning service, Cliffs IT staff received expert technical support from Microsoft Services and ProSource Solutions. The IT staff was provided with the necessary details for the implementation, including the following:

- Architectural overview of the design
- Server infrastructure analysis and recommendations
- User load and activity estimation
- Review of existing document management and workflow processes
- Taxonomy design and information architecture
- Workstation infrastructure analysis and recommendation
- Security requirements analysis for enterprise portal and collaboration
- Capacity planning
- A fresh set of design and branding elements for the public web site

The offering provided Cliffs with an engagement manager from Microsoft Services, who ensured quality delivery. To structure the work and provide implementation talent, Microsoft Gold Certified Partner **ProSource Solutions** provided a Solution Architect and an experienced development team. The team designed the site structure, implemented SharePoint, and created a customized branding for the Internet site.

Microsoft Services and **ProSource** were integrally involved in every step of planning and implementing SharePoint at Cliffs. The quality of the final public web site, which was featured by Microsoft as an example of dynamic content in SharePoint, speaks for itself.

## Benefits

For Cliffs, the Enterprise Portal and Collaboration Technology Planning service was critical to the successful implementation of SharePoint.

### A Powerful Knowledge Capture Solution

The resulting internal SharePoint knowledge base site enabled Cliffs to begin a systematic knowledge capture process. This process led to the documentation of hundreds of key ideas to keep large-scale mining operations running successfully. Processes such as the easiest way to clear a piece of jammed machinery were documented after having been learned and re-learned by previous generations of workers.

### Mitigated Risks

The ongoing access to Microsoft Services and **ProSource Solutions** meant that Timken could benefit from Microsoft and ProSource's own industry knowledge from several similar customer engagements. The Microsoft/**ProSource** team was always present to help the Cliff's IT team resolve any questions during the implementation process. In addition, the company's IT staff augmented its skills by engaging with the experts from Microsoft Services and the architects and developers from **ProSource Solutions**.

### Maximized Value on IT Investment

Cliff's internal IT team augmented its development knowledge of Office SharePoint through the Enterprise Portal and Collaboration Technology Planning service. With the service, the Cliff's IT staff was able to benefit from the industry knowledge of experts throughout every phase of the project.