Implementing Turnkey Enterprise-wide GIS: The Unimin ArcGIS Journey

ESRI UC
2014

UC1486
Quick Introduction to Unimin / Sibelco

- Unimin (estd 1970) is the North American arm of the Sibelco Group (estd 1870)

- Multi-Billion Euro, Family owned business

- 230+ Mining operations around the world, ~50 across USA/Canada & Mexico

- Historically focused on the Industrial Silica business (largest supplier globally)

- 30+ year presence in US unconventional oil & gas industry, the current boom began in 2010/11


Today Unimin is the Largest Supplier of Proppants for Hydraulic Fracturing in North America & Worldwide
Outline

- The Vision, Goal & (R)Evolution
- From Stonehenge to the space-age
- To "ELA" or Not to "ELA" - that is the question?
- What we bought & how well it worked for us
- How many committed people does it take to screw in a GIS?
- Wins & Lessons
Vision for Business Intelligence

- Combine Visual (Spatial) Relationships, Historical, Current Performance Data & Forecast Information with Quantitative Analysis Tools.....with better FUTURE OUTCOMES in Mind

Anywhere/Anytime Input, Access & Output

ESRI ARC GIS Visual / GeoSpatial Analysis + ERP / COGNOS / TM1 Forecasting, Planning & Quantitative Analytics System + Salesforce.com CRM & Competitive Intelligence

Global High-Availability Database + ERP System for ALL Business Critical Data

It’s About - Connecting Mines & Minds to Markets
The Challenge is To Convert High Volumes of Data Into Coherent & Coordinated Sets of Information to Enable Business Decisions
A Long-Term View of the Value of GIS from Day-1

Evolve Business Intelligence Capability from Static Disparate Data to Information Based Decision Optimization in 36-months.
From Stonehenge ........

Our Starting Point – *Culture Eats Strategy for Breakfast*......
- Old fashioned Industrial minerals company
- Very cost conscious and not tech savvy
- Zero in-house IT capacity / capability
- Slow to adopt change

Driving Forces – *Market Made Us Do It*.....& The Drivers ..... *Committed People Helped*
- In 2010/11 US unconventional (shale oil & gas) erupted in earnest *driving* changes in growth rates, thinking and business practices
- Large volumes of disparate data
- New People, infusing new approaches and ways of thinking....
- Help from ESRI’s pre-sales effort (Peter Will, David Jacob) & Industry Partners/Mentor (Chris Franks, Freeport McMoran)
<table>
<thead>
<tr>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
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<tr>
<td>- Unlimited software (w/ geographic limitations)</td>
<td>- Software and Services a la carte</td>
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<td>- You’ll spend less over 3-years (hopefully!)</td>
<td>- 3-year commitment</td>
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<td>- Can be combined with an EAP (usually for less)</td>
<td>- Do you really need / are able to extract value of an EAP?</td>
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What We Bought & How Well It Worked

Server + Hosting

Database

Services

Desktop (10.1 & above)

• Sales & Marketing
• Distribution
• Geology
• Mine Planning
• Operation
• Environmental Affairs

Fact-based Data

Analyze & Share

Decision Making

ArcGIS Online

Web maps

Users can access anytime & anywhere

ESRI Premium Support
How Many Does It Take to Screw in a GIS

- It DEPENDS... on
  - Your company’s / leadership's commitment to GIS
  - The scope & support for your vision of GIS as a tool
  - A Project vs. a Program Approach
  - How much is In-sourced vs Out-sourced
  - Getting Good, Unmotivated Advice Upfront (make friends at the UC, and across the industry)
  - Get a Mentor / Industry Partner
  - Ability to Leverage ESRI Resources
From Stonehenge……. to The Space Age

Our Starting Point – *Culture Eats Strategy for Breakfast*……

- Old fashioned company & culture
- Very cost conscious and not information technology savvy
- Zero in-house IT capacity / capability
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Today – *Solid Progress To Date.....Many Miles yet to Go*

- 3 Person Core Team (sponsor, commercial, operations)
- Subscribe to Software, Tools and Services as needed.
- Fully Hosted With Premium (Tech) Support
Wins & Lessons

Wins – Green Now

- Delivered on the short-term promises we made......
- Executive Decision making is Indeed Supported by GIS views
- Started Very Small, and Have Stayed Small Vs. Impact
- Cool Users (Effective Users with a knack for selling their ideas) Make the Tools Cool!!!
- Value of centralized data is now appreciated – enables single / current “version of the truth”

Lessons – Saves/ Gets Green Later

- Things will progress slower than you plan(ned), so ensure spend in line with ability to execute (IRR vs ROI)....longer-term goals have been delayed by a year or more......IT IS a MARATHON
- Add (People) & Resources in a Timely manner.... Needed IT support for managing hosted server
- Cool Tools Don’t Make Cool Users!
- Don’t buy it just because it’s on “SALE!”
Thanks For Your Attention!

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We’re Hiring!! – Experienced GIS Manager