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ENERGY TECHNOLOGY MUSINGS

An offshoot of Musings from the Oil Patch, Energy Technology Musings will focus and provide commentary on notable insights, trends and news related to technology and software within the energy industry.

INSIGHTS & TRENDS

TECHNOLOGY AND VISION CREATE MARKET OPPORTUNITIES

New business opportunities are traditionally born from the realization that an industry needs a solution to a problem. The thought is that someone knows, or thinks they know, that solution, but they just haven't gotten their idea in front of the people wrestling with the problem. While inventors may think they know how to solve the problem, it is only after they have created their solution that it can be tested. That will determine its success or failure.

In many cases, the problems seeking solutions are more about making something work better. Frustrated people believe there must be a better way. Unfortunately, they are not familiar with alternative technologies, or their application, when considering possible solutions. Maybe it is because they lack the vision for applying non-industry specific technologies to resolve their industry's problems.

The digital age is opening potential market opportunities for technologists who understand how their specific technology could be harnessed to address problems in other industries. Think about how satellite imagery, coupled with real estate appraisals, tax rolls and sales data, helped create a tool for characterizing the value of homes in neighborhoods people might be considering purchasing.

Today, drone technology is changing real estate marketing and insurance claims adjusting. In one case, prospective home buyers gain a better perspective of the attractiveness of a home and its location by seeing it from a totally different perspective. In the other, stressed-out homeowners, looking at their storm-damaged home, are comforted by the speed in which their faceless insurance company can provide assurances about repair expenditures. In both cases, a business opportunity evolved from the application of a non-related technology.

The successful technology entrepreneur will have the vision and understanding of the potential and limitations of their technology, enabling them to conceive solutions for customer problems. Those solutions don't have to be perfect, but they do need to be cost-effective and easy to use. Future versions of the technology solution will generally improve on both qualities. Who knows, they may also create new business opportunities adjacent to the initial problem. Combining technology and vision can be a powerful tool for helping people solve problems and make money. 🦋

COMPANY SPOTLIGHT



Background: While a Sloan Fellow at MIT in 2012, Josh Adler learned about the exponential growth the oil and gas industry was experiencing from the shale revolution. While Josh had no prior oil and gas experience, he knew that any industry growing that fast presented a multitude of opportunities for value enhancement through process improvement. After researching the differences between conventional and unconventional oil and gas operations, Josh realized that the amount of water that had to be sourced, handled, and disposed was one of the most substantial variations, and he believed that applying innovative digital solutions to oilfield water logistics could help operators save time and money.

In 2014, Josh founded Sourcewater initially to serve as an online marketplace for buying and selling oilfield water, as sourcing water was a very manual process that involved calling or emailing several parties. Over the next few years, Sourcewater was actively utilized by thousands of users. However, the number of years, Sourcewater was actively utilized by thousands of users. However, the number of transactions completed through the platform was relatively small, which meant that users were primarily utilizing Sourcewater for market intelligence purposes. This led Josh and his team to pivot from a transaction-based revenue model to building out a subscription-based oilfield water research data offering in 2017.

Value Proposition: Oilfield water information offered by the major energy data providers largely relies on regulatory filings, which typically lag actual activity by several months to a year. [READ MORE](#)

For this Company Spotlight, we interviewed Sourcewater Founder and CEO, Josh Adler, about their efforts to make the oilfield water industry more efficient and transparent. Sourcewater strives to show where every drop of water comes from and ultimately goes to in the oilfield, both on and beneath the surface of the Permian Basin and other U.S. shale plays. For more information on Sourcewater, please visit www.sourcewater.com.

NOTABLE NEWS

Barclays Issues Its Digital Oilfield Report: "Frac to the Future; Oil's Digital Rebirth"

The investor community has delivered a crystal-clear message to the oil and gas industry; deliver better financial returns in an ESG-conscious manner. Barclays believes these are the two primary factors driving the adoption of digital solutions and will reduce the cost of production by almost 10% globally while increasing recovery rates by the same amount over the next five years. 🦋

In early January, Bloomberg reported that Warburg Pincus was nearing a sale of its portfolio company, RS Energy Group, to Genstar Capital in a deal that values the energy research group at ~\$1 billion. According to Bloomberg, Warburg acquired RS Energy in 2015 from Investment Technology Group Inc. for about \$120 million and has made at least two bolt-on acquisitions. 🦋

Related Press Release

[Genstar Close to Buying RS Energy from Warburg](#)

Rebellion offers a real-time monitoring platform that visually identifies and quantifies gas releases to quickly detect and analyze leaks. The monitoring system incorporates artificial intelligence software that automatically alerts plant operators if a gas leak, fire or security issue is detected and provides detailed analytics. The platform provides a patented gas cloud imaging system that incorporates cameras and proprietary hyperspectral imaging technology to pinpoint the source of a leak and measure the volume and concentration of gases. 🦋

Related Press Release

[Honeywell Acquires Rebellion Photonics, A Leader in Intelligent, Automated, Visual Gas Monitoring Solutions](#)

Apergy and DCP Midstream have jointly agreed to develop artificial intelligence tools to increase asset reliability, enhance safety, and improve efficiency. The main application appears to be reciprocating machinery with an end goal of anticipating changes in machine health weeks in advance of a potential failure in the field. 🦋

Related Press Release

[DCP Midstream and Apergy Announce a Joint Technology Development Agreement to Improve Reliability of Oil and Gas Operations Using Artificial Intelligence](#)

Geoforce offers a cloud-based software platform that provides a unified view of assets and vehicles collected from satellite and cellular-based GPS devices. The value proposition of the Geoforce platform is centered on reducing maintenance costs, increasing transparency between parties, and improving safety and compliance. 🦋

Related Press Release

[LLR Partners Acquires a Majority Stake in Geoforce](#)

Hitched is an industrial rental marketplace striving to make life easier by connecting the best equipment and services to the people who need it. Through the use of in-app platforms, Hitched matches rental equipment (generators, light towers, pumps, forklifts, etc.) with customers and eliminate the hassle of logistics. 🦋

Related Press Release

[Hitched, Inc. Secures \\$5.5 Million Series A Funding Led by Cottonwood Venture Partners](#)

M1neral is building an all-in-one transaction management platform for minerals and royalties. Kyle Chapman, Co-Founder, and CEO of M1neral, stated "The mineral and royalty market is extensive in value but highly fractionated with over \$500 billion in value spread across more than 12 million owners around the country." 🦋

Related Press Release

[Energy Tech Startup M1neral Raises \\$1.6M to Fast Track Mineral and Royalty Acquisition Processes](#)