A Faster Flight to Value

Collaborating to Get More, Sooner

BY ROGER WOODWORTH

Collaboration is a simple idea. Find friends to coordinate and cooperate on some common purpose. Share costs and perspectives to advance the effort. Gain the benefit of learning that's more robust than going it alone. And enjoy the advantage of acting on insights sooner than others do for greater value.

Certainly, utilities have a history of coordinating some things among themselves. The work of trade associations on matters of policy is one example. On this front, the efforts of the Edison Electric Institute, the National Rural Electric Cooperative Association, and the American Gas Association stand out.

Another example can be found in research consortiums that are focused on utilities' technical and operating interests. Topping this list are the Electric Power Research Institute, NRECA's Cooperative Research Network, and the Gas Technology Institute.

Roger Woodworth, principal consultant at Mindset Matters, helps others align strategies for greater impact. Previously he was vice president and chief strategy officer of Avista Corp. He's chaired Edison Electric Institute's customer service executive advisory committee and was board president of the National Hydropower Association and the Northwest Gas Association.

By participating in forums like these, utilities support fundamental industry interests. The stronger voice or deeper understanding that results is important. But such coordination is to collaboration as water is to soup – necessary but insufficient. Other ingredients, other allies, are needed if greater value is to be realized. Full collaboration requires more.

Don't Wait-and-See

Fundamentally, utilities are paid to tightly manage risk. The precedent is clear. It's best to avoid undue costs or system failures. So, utilities strike the seemingly safe path of doing what worked before.

In this context, it's not surprising that utilities are slow to adopt new technologies. Sure, studying new things, pitching in some dollars for others to sort it out, is temptingly easy. It's harder to lead discovery and do the work to create new value. But in this time of rapid change, standing still is a rising risk of its own.

Technology-enabled improvements of all kinds await discovery, development and deployment. How might utilities speed along the adoption curve while containing risk? One way is to actively participate in creating solutions, engaging others and aligning efforts to build out the system for value.

Drones as a Case in Point

It was just a few years ago that some utilities, research consortiums, and universities began studying the utility industry use of drones. But did you know that "Monitoring system for power lines and right-of-way using remotely piloted drone," U.S. Patent No. 4818990-A, was filed in 1987?

Here we are, three decades later. The technology has advanced. Other businesses, including agriculture, emergency response, marketing, and delivery services are embracing the use of drone technology. And the Federal Aviation Administration is advancing new regulations to address related public interest matters.

Perhaps your utility is supporting drone research now underway in the above-mentioned consortiums. Maybe your utility claims membership in the trade associations that have weighed in on formative public policy. That's okay for those in the wait-and-see camp. A few others are pressing forward on their own. But neither approach is sufficient if you want your utility to realize the value of this new technology sooner.

Value Discovery and Deployment

To be blunt, experiments in isolation and one-off project engagements don't provide context for developing greater value. Neither does arguing public policy from the sidelines. The best value flows from aligning all elements of a system.

Yes, studying how to safely fly a drone close to energized lines is important. Understanding differences in high-definition photography, LIDAR, and infrared thermal imaging is crucial. Standards for systematically gathering key data are critical. So too is developing algorithms to analyze data across time. Public policies that make sense must also be in place to support efficient use of the technology.

Systems are complex. That's why those who foster parallel development and integration of all the elements will be most effective at shaping the future. Those who share the risks and rewards of collaboration will earn the best value. And those who survive wait-and-see will pay the premium.

A Place to Start

There are thousands of utilities across the U.S. Imagine just five or ten, in different geographies, teamed up to advance useful applications of drones to their companies and the industry. Imagine, too, that these utilities embrace other actors in the ecosystem as part of a consortium dedicated to making drones work for utilities.

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By pooling resources (such as cash, know-how, insights, relationships, field trials, etc.), this mix of allies will reduce their risk and increase the odds of success. They'll hold greater sway to shape outcomes. They'll get early use of breakthrough discoveries. And they'll literally own a piece of a better future.

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Do your own due diligence, but here's a sample of possible allies that could help a utility drone consortium get off the ground.

Skyward in Portland, Oregon is a consultancy that provides operating software and other services to operators of unmanned aerial vehicles, or UAVs. They know who's who and what's what when it comes to drones, the policy issues, and more. Wouldn't utilities benefit from the insights they've already gathered?

Drone Deploy in San Francisco, California offers a downloadable app to guide UAVs for land assessments in agriculture, mining and construction. The app has been used to assess highways, too. So, why not utilities' linear infrastructure?

Industrial Skyworks in Toronto, Ontario has already done some project work with utilities on transmission and building efficiency assessments. Their thermal imaging for tracking temporal changes in vegetation management is intriguing. How might their work inform development of industry-wide standards?

Commercial Drone Alliance in Washington, D.C. formed recently to smooth the policy pathway to commercial use of drone technology. They're gathering actors in the developing drone industry ecosystem. Will your utility be first to join them?

Whether with drones or some other emerging opportunity, collaboration is a smart path to more value, faster. Simply look to the horizon. Take stock of the larger context. Assemble a network of allies that can help align all parts in the ecosystem. But do so only if your utility is committed to fly faster to value. PUF

Of all renewable generation, fifty-six percent is expected by the Energy Department's January Short-Term Energy Outlook to be utility-scale in 2018. Twenty-one percent is expected by the industrial sector, fourteen percent by the transportation sector, seven percent by the residential sector, and two percent by the commercial sector. This doesn't take into account utility-scale nuclear.