RISE OF THE NETWORK ORCHESTRATOR

What Clean Water Can Learn from
Facebook, Airbnb and Uber

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Water utilities today face a number of fiscal challenges that are a direct result of inadequate rate structures, declining revenues, and large fixed costs required to maintain those assets that were provided by the grants program many years ago. These challenges also include the interrelated issues of economic sustainability and viability; climate change and resiliency; affordability; the financial and public health impacts of aging infrastructure; and the related demands of an increasing or decreasing population, depending on where you are in the country.

The public's expectation is that water utilities will, of course, continually provide them with essential 24/7 service. But in light of these growing challenges and issues, water utilities may now need to look beyond a "business as usual" approach for meeting the ongoing and varied needs of their customers and communities.

The historical US Water Utility business model has been based on implementing and managing vast networks of physical assets for revenue generation. Essentially, utilities have been "asset builders" that invest, build, develop, and lease physical assets to generate revenue. However, there are other business models today that utilities should consider to better position themselves to meet the mounting challenges in the water industry head on.

REIMAGINING THE MODEL

The rate of technology innovation in other industries across the globe is accelerating disruptive change that has led to a dynamic new business model: the "Network Orchestrator." The customer is at the center of this new model, which focuses on leveraging improved connectivity and harnessing the vast interconnected networks

of customers and other relationships. This innovative approach is being successfully applied by business organizations around the world, including Facebook, Airbnb, Uber, and Alibaba. The one key thing that these companies all have in common with water utilities is that they "own" the relationships with the customer. However, these pioneering "Network Orchestrators" have generated vast fortunes from leveraging and monetizing those relationships with the customer.

Obviously, there are other potential business models available to utilities that are worthy of considering, including options based on a combination of the following: *Service Providers*—entities that provide services to customers to generate revenue; *Technology Creators*—entities that develop and sell intellectual property to generate revenue; and *Network Orchestrators*—entities that create and build a network of relationships to interact and collaborate in value creation to sell products or services to generate revenue. The Network Orchestrators model also allows an opportunity to incorporate aspects of the other business models mentioned.

In today's challenging economic times, executives and managers across the water sector are faced with making choices between maintaining and updating aging infrastructure, meeting new and more stringent permit regulations, or honoring pension and personnel obligations from a limited capital resources pool. Progressive water utility executives and managers understand that existing business models that have been successfully used for decades need to be reimagined in order to generate the desperately needed revenue to meet these ongoing needs.

Forward-looking water utility managers can take this opportunity to concurrently change their organization's vision from just meeting their regulatory requirements for the lowest capital investment to enhancing the quality of life and supporting the economic growth of its ratepayer communities, as well as those downstream communities, in a sustainable manner. This will further help them in proactively preparing for a world and an economy where the resources that are used for the treatment of water, and the water itself, will have a far greater value.

Water utility executives and managers today have a unique opportunity to transform their organizations into a "Utility of the Future," by applying a new business model that brings stakeholders from all sectors of the community together to interact and collaborate on how to generate the revenue to fund and maintain projects that will not only protect the environment, but also fuel the economic potential for the community. The collaborative Network Orchestrators model may be the catalyst that brings widespread change to the status quo, and generates success more rapidly, more holistically, and in a much more sustainable manner.

KEYS FOR THE NETWORK ORCHESTRATOR

The skill set of water utility managers already includes constructing and managing their assets and staff. However, as Network Orchestrators, water utility managers will now also be required to learn and implement "softer," less defined skill sets such as relationship building, holistic planning outside of traditional water sector projects, and considering partnership opportunities with non-traditional players. So, what type of leadership is needed to address the challenges that utilities face today, as well as to propel them forward by embracing innovation and change?

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Previous generations of water utilities demonstrated their commitment to public health, safe water, sound infrastructure, and professionalism by their actions and deeds. Their stewardship set the bar for us. That "stewardship" is a form of custodial leadership that, at its core, is built upon choosing service over self-interest. Key elements of the Network Orchestrator model include concepts associated with collaboration and

partnership which are also aspects of an outwardly focused "custodial leader." Therefore, adapting to this model can be easier for water utilities than organizations in many other sectors.

Some of the key elements of the Network Orchestrator business model include identifying and evaluating:

- Key collaboration partners to achieve goals
- Key activities that deliver value to customers and generate revenue
- Value propositions that may be unmet customer needs, to generate additional revenue
- Existing and new customer relationships to advance the utility's "brand" into new market segments, to generate new revenue
- The most cost-effective channels to interact with customers and partners, and;
- The most important cost structures to achieve maximum revenue generation from existing and new customers

The elements of the Network Orchestrator business model are used together to understand the investment goals of water utilities and the potential for maximizing their return on investment.

An additional strategy associated with the Network Orchestrator model is "asset monetization." This approach is just one of many strategies utilities can use to drive better financial performance through revenue-growth, and better cost management by unlocking some or all of the economic value embedded in various operational assets. This "unlocked value" might be in the form of cash, longer-term changes to lower cost or to introduce variability to the cost structure, or other conversions of non-income generating assets to current or future bottom-line value. These assets can be tangible or intangible, and can include utility business processes, information technology, licensed treatment technologies, intellectual property, and an experienced workforce.

SOLUTIONS FOR SECTOR CHALLENGES

Pooling resources and technical expertise, importing best practices from other successful partners, and achieving economies of scale can lead to better efficiencies, lower costs, greater revenue generation, and higher return on investment. Opportunities that the Network Orchestrator business model can provide:

- Repair and modernization of existing infrastructure

- Implementation of holistic and sustainable processes and infrastructure towards Utility of the Future initiatives

- Predictable and consistent rates for customers

- Predictable and consistent revenue for Water Utilities

- Incentives for economic and social growth for the community

- "Brand positioning" of cities and regions with minimal or no "Water Business Risk" for industries looking to relocate back to the United States

The last time the water sector went through a period of transformative change was 1972 through 1974 when the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA) were enacted. Today, many forward-looking water utility managers have an opportunity to again change how they organize themselves to provide cost-effective services to the community. The potential of the Network Orchestrators model for water utilities is only limited by the level of creativity the water utility managers and their key partners possess.

DIALOGUES THAT LEAD TO CHANGE

The Mississippi River Nutrient Dialogues, facilitated by the US *Water Alliance*, provide an innovative example of collaboration and partnership in the water sector. Between March 2013 and February 2014, a group of committed leaders in agriculture met with drinking water and wastewater utilities for four sessions in cities across the Mississippi River Basin to explore how their sectors might mutually benefit by working together to reduce excess nutrients in waterways within the Basin. Through this dialogue, skepticism about the benefits of collaboration between the agricultural and water communities was transformed into optimism, and a readiness to work together. The meetings also included representatives of conservation and environmental organizations and state and federal government agencies.

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The Nutrient Dialogues were a productive exchange of views among diverse stakeholders and an opportunity to identify various solution strategies. Through the Dialogues, a "playbook" of sorts was developed for discussions and collaborations elsewhere, and more specifically, highlighted positive actions for moving forward in three critical areas in the near term: (1) watershed-based leadership and decision-making, (2) market mechanisms, and (3) data monitoring and modeling.

The concept of a "Watershed Protection Utility," an ambitious longer-term endeavor that would integrate components from all three of these areas to advance a statewide or regional nutrient strategy, was also introduced. In addition, the Dialogues provided useful tools and ideas about new approaches that can be helpful to those seeking collaborative approaches to managing excess nutrients on the ground. They also helped bring the attention of policymakers to opportunities for enabling and productively driving improvements in water quality by showcasing existing efforts and potential opportunities for collaboration between the agricultural and water sectors.

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FOR GENERATIONS TO COME

There is no doubt that water and wastewater utilities across the country are facing many common challenges. Effective utility management, along with consideration of new ways to generate revenue, can help utilities respond to both current and future challenges.

Re-examining their business model at this time can help water utilities in achieving their common mission of being successful 21st century service providers. By taking the best attributes of each business model—Service Providers, Technology Creators, and Network Orchestrators—a holistic and sustainable approach to utilities management, including revenue generation, can be realized.

The Network Orchestrators business model is key to this realization. Capitalizing on this moment to adopt the model can position water utilities to be successful both now and for generations to come.