

Water Industry Deregulation: Implications, opportunities and mobile transformation

To compete in the deregulated water market significant investments in people, processes and technology is necessary. This white paper explores the opportunities for mobile to deliver value in the deregulated water market.

EXECUTIVE SUMMARY

Increased efficiencies, enhanced delivery of services, choice of pricing models, specialist services, better customer care - deregulation of the water market in England will transform the industry. This transformation will be driven by intensified competition between regional providers vying for business across England.

Water authorities will need to become marketing focused and commercially driven. These companies will have to be more attuned to customer needs and think more innovatively about the services they provide and how to drive efficiencies across their operations.

Water providers should be preparing to compete in the deregulated markets by making significant investments in people, processes and technology.

Providers should be looking at opportunities to differentiate their offering, including competitive pricing models, providing better service and greater innovation. Delivering innovations in customer service, metering, water efficiency and self-service, could also form part of a unique proposition to the water market.

As well as looking at how to drive improvements in the services offered to end consumers, driving down internal costs or increasing productivity or efficiencies across the workforce can also provide companies with competitive advantages. Water companies should be working within their organisation to achieve efficiencies, through driving down costs.

Among the many technology options at the disposal of water companies, mobile and Internet of Things (IoT) can provide water companies with many innovative options to engage with customers and improve internal work processes, across multiple sites and a largely field-based workforce.

The opportunity for digital and mobile to help support English water companies in delivering competitive advantage in the soon to be deregulated market is significant. In this white paper we explore the value mobile can deliver in the water market.

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COMPETITION - A DRIVER FOR CHANGE

After privatising water nearly 30 years ago, the UK government is now deregulating the utility. Opening the market in 1989 was meant to create competition, but regulations prevented all but regional providers from establishing a serious presence. Deregulation will make the industry more competitive, creating efficiencies in an open market with more options.

This will produce 1) the end of the de facto monopolies England's water companies have enjoyed, and 2) a highly competitive market in which firms compete for the business of 54 million English residents on equal footing.

With this new market set to emerge in 2017, the industry must start preparing now.

Changes In the Industry

Since privatisation, water companies have become effective monopolies, with each firm facing little to no competition in its respective region. Next year these companies will need to meet higher standards than OfWat's: individual customers will have more choices, and as a result, more reasons to leave their current providers. Very large companies have been able to choose their water supplier for some time now in England and now this choice is being extended to the whole market.

Water utilities must implement plans to become more efficient, more receptive to what their customers want, and more innovative in their offerings. Many water companies still operate like public sector entities - to survive, they'll need to adopt a competitive, agile culture and evolve quickly to gain key advantages over their competitors.

Easily accessible online comparisons will trigger the 'Go Compare effect,' as customers won't settle for the first price they see, posing real consequences for firms that underperform or fail to meet service level requirements. Thus, companies must find efficiencies that make it possible to lower prices and simultaneously differentiate their service from their competitors'. A nimble organisation with a novel approach to distribution, for example, stands to make headway in the new marketplace.

As with any big transition, the adjustment to this new market must be meticulously coordinated. All firms must have heavily-vetted, organisation-wide acquisition and retention strategies. On the marketing side, successful companies will compete with fast and innovative mobile media.

Scotland: An Upstream Success Story

Scotland deregulated its water market in 2008 and it has already produced great outcomes for both companies and customers. The market has since grown almost fivefold – from £540m per year to £2.5bn – thanks to an explosion of activity and competition, with 5% of customers switching suppliers and 50% renegotiating their water and sewerage services. Scottish consumers were given more choice and underperforming providers lost out as a result.

A Rundown of Benchmark Statistics

- £35 million in savings thanks to better water efficiency
- 26% increase in customer satisfaction
- £30m in discounts
- Public sector customers saved more than £20m in three years
- Customers conserved 16 billion litres of water and more than 28,000 tonnes of CO₂

Deregulation in Scotland was a victory for customers, businesses and the environment, but English firms should regard it as a benchmark minimum. That's because they know what to expect this time around – a considerable head start.

Furthermore, England's population of more than 54 million is ten times larger than Scotland's, meaning bigger winners and greater potential for disruption and innovation.

OPPORTUNITY

Companies will transition from monopolised markets to ones with a huge number of competitors fighting for 54 million discount-seeking, tech-savvy customers. This enormous shift in a previously static market means that winners will win big – and that losers could go out of business. Industry players should expect innovations in customer service, metering, water efficiency and self-service to have a serious impact on the current balance of power.

Obviously, the companies that take the lead will offer better services at more competitive prices. What makes this particular race for superiority exciting, however, is that it's the first time that providers are prompted by serious competition to innovate and find new ways of earning those advantages.

Objectives

Water utilities should work with customers and organisations to achieve efficiencies by driving down water use, and therefore, costs. New digital channels like mobile apps should be considered to create closer connections between consumers and companies, making it easier for customers to watch their usage and for utilities to understand their clients' needs.

Moreover, the IoT and other technologies could be deployed to sharpen utilities' ability to pinpoint service issues and enhance their solutions. For instance, IoT sensors can quickly identify the source and cause of a leak before it causes too much damage, or before it even begins.

Providers should use these innovations to improve their existing service and surpass the service offered by their competitors. Adapting only to maintain the status quo won't be enough to survive in the newly competitive market.

Some water companies will ultimately succumb to these emergent market forces, which will produce higher profits for those that successfully innovate, as well as happier customers and more public support for the whole industry.

Most water providers will likely identify the same opportunities afforded by this more lucrative market, thereby increasing

competition even further. That means each company will have to decide on a core competency they can bring to the market and win with. They won't be able to do it all, so they'll have to decide what represents the most value for their customers, run that against their current capacity, and then work to accommodate this new goal.

However, in previously deregulated markets, such as energy, many domestic customers never ultimately switched providers.

Motivating them to do so in the water utility sector will require an offering that's flashy and exciting enough to drum up real interest.

MOBILE TO DRIVE TRANSFORMATION

Mobile offers a huge opportunity to firms looking to improve service quality, largely because remote assistance can be provided through a branded interface. While apps have a vast number of practical applications in the field, their promise of greater efficiency is particularly exciting in three areas: customer service, operational efficiency and third party management.

RETAIL CUSTOMER SERVICES

Pre-empting customer needs, through understanding customer behaviour, is key to providing impeccable customer service and ensuring repeat and loyal custom and will be an important determinant in water providers' success in the market. Providing data transparency can also help to improve customer service by providing users with an in-depth history of their usage, as well as tips on how they might reduce it. Access to up to date account information for customers is essential in this digital age, helping to provide information to customers that they usually would have obtained from a customer service operative over the phone.

Mobile self-service customer tools, for both enterprise and private customers, are an ideal way to provide customers with information on their water services. Furthermore, a mobile solution could enable customers to set up and access their accounts and payment information to avoid or quickly catch any billing slip-ups.

Billing, account handling (e.g. payments, debt management and meter reading) and customer query responses all improve with enhanced mobile capabilities. The opportunity for enhanced capabilities allows any firm to easily share advice on water efficiency and maintenance requirements.

These tools will not only help improve the service provided, but will also cut down on the cost of call centres and client service consultants for water providers.

The traditional approach to customer service and information has been the call centre, which is expensive and can be complicated to manage. A mobile solution can help limit the size of support teams and thus the recruitment quotas companies must meet to

fill them, making operations more efficient and lowering costs. This will have a particularly significant impact for water companies who will have to upscale their customer service offering in response to greater demand from a deregulated market. This approach has been particularly effective for the telecommunications firm [Eircom](#), which had an iOS app created and implemented for customers to monitor their data usage.

A mobile app has also proven more effective than a company website that offers the same services. Your customers are keen to have important usage info in their pocket and utilities can allow them to report a leakage or any other issue with the push of a button.

In addition to the availability of basic customer account tools, water providers could look at combining mobile solutions and location technologies or IoT solutions to request maintenance or report problems. Once you've built the necessary IoT infrastructure, an app could allow customers to easily report outages in service, even letting them take a photo or send a text that helps your employees identify the problem.

The truth is deregulation is equal parts opportunity and threat. The water you get from one utility won't necessarily differ much from what you'd get with another. If you don't start to offer additional capabilities and perks to your customers, you'll lose them to a competing firm that does.

OPERATIONAL EFFICIENCY

Utilities companies' operational environments currently rely on manual intensive processes, making it difficult to improve performance and efficiencies across the workforce. Managing the largely field-based work force poses many challenges for utility providers as a result of:

- Limited collaboration between field workers and management teams
- Inefficient allocation of resources and management of field workers' time
- High dependency on inefficient and costly paper-based processes
- Lack of real-time data and status on assets
- Limited onsite access to data and information
- Reactive maintenance procedures

These limitations for water and all utility providers means businesses within the sector face challenges with driving operational efficiency because of lack of consistent processes and workflows. Managing job and resource allocation can be a largely manual process, which makes responding to urgent events slow and costly. The lack of data and deep understanding of how work is being carried out poses issues for maintenance of assets, predicting future workload and decision making for the sector. Mobile provides a powerful platform for water companies to use to improve workflows and manual processes, to drive efficient asset management and to improve customer service and responses to outages and service their customers.

Access to Information

A successful business operation should track information in real-time, with complete visibility across all aspects of the business and jobs roles to help identify where improvements can be made. Data should be tracked and relayed back to analysts and customer service operatives in real-time.

Effective systems will provide:

- Analysis of information on-demand
- Storage of information
- Optimisation of the flow of information between those in the office, in the field and the customer

- Integration of information and billing solutions

Traditionally, computers have been used for these processes, but now the evolution of technology allows for mobile devices to be used instead.

To operate effectively, employees need information, content and tools built around their job roles, at their finger tips. IT departments are working to adapt the changing dynamics of remote working and are looking at how to securely utilise cloud technology to store and access business data and documents, drawing together data from disparate sources. Mobile technologies can offer a valuable solution by providing constant access to your employees, as managers can provide real-time, location-based instruction and information.

Mobile can also reduce operational costs by enabling a completely paperless administrative process. The automated collection of real-time data will free administrators from tedious data entry, to focus on improving customer service and assisting employees in the field.

Workforce Management

The top companies in the country's new, deregulated market will need hundreds or even thousands of active technicians over the whole of England. Thus, managers will need to quickly and easily identify where their people are needed, and they'll need to get them essential information at a moment's notice.

Mobile can also support increased productivity and drive efficiency improvements by helping improve workforce management, manage assets more effectively, improve maintenance processes and increase health and safety compliance.

Water utilities should consider leveraging location technologies to effectively use and share data throughout the organisation. There will be 2.4 million remote utilities workers in the UK by 2020, and if companies want to expand beyond their regional boundaries, they'll need ready access to all of them. Apps and IoT can help companies organise a workforce of employees and possibly contractors across the entire country.

THIRD PARTY COLLABORATION

Utility firms rely on a vast network of partners and suppliers, apps can help to deliver better insight and build tools that improve communication, as well as sales & working practices, without compromising security.

Third party management or channel partner management can be improved by using mobile to open up channels of communication and share information. Mobile technology can help open up a communication channel between a company and third party suppliers, providing access to information and improved visibility of projects and jobs.

If the third parties and a water provider wanted to share data quickly, they would have to integrate the two companies' backend systems, a massively expensive and complicated process that poses major security risks.

Mobile technology can provide a simple and efficient solution. For example, an engineer for a third party contractor finishes excavating a utility's pipe. Rather than log on to the third party's system and mark the job as done, an enterprise integration transfers the data to the utility's back end, allowing the engineer to pull up the utility's connected platform on a smart device and communicate the information directly.

Going mobile offers plenty of opportunities to decrease overhead and improve value for customers by boosting field force productivity with job-specific applications. According to PA Consulting, companies who have implemented field force mobile solutions have increased productivity by an average of 30% and improved their ability to meet SLAs by 23%.

Utilities can also cut costs by reducing the occurrence of mistakes and allocating resource more efficiently, ensuring the workforce has the correct tools on site and reduce the time spent on a given job - especially on tasks the customer doesn't pay for. With more accurate information, workers' time will be more efficiently spent. Of course, fewer mistakes and more efficient service also fosters a better brand reputation.

MOBILE AT THE SERVICE LEVEL

The deregulated water industry presents opportunities for consumers and providers alike, particularly at the Service Level.

The addition of mobile technology in the deregulated water market will act as an enabler for this. Water providers are met with the opportunity and challenge of providing the best possible product to consumers, who will undoubtedly be choosing their providers based on competitive pricing, data transparency and innovation.

Innovative technology in water industry enterprises will allow for proper surveillance of protocols, system maintenance and staff management to ensure the delivery of quality service.

Leveraging the IoT and other Smart Technologies can help drive further efficiencies and provide facility managers with access to even more granular data. By using smart sensors and apps with a direct service, utilities can provide treatment plants with unparalleled levels of information, visibility and even lead time.

This kind of innovation will enable large companies to track thousands of employees logging job progress via apps, as well as improving resource allocation.

What's more, utility workers must often travel to rural areas where internet access is poor, but apps can be designed to include an offline mode so that these employees can still access essential information.

Service level is a huge factor for enterprise clients. For many production plants across industries, the quality of water is an important part of the manufacturing process. Poor quality water can affect end products and also impact the machinery used in manufacturing.

Many sites will have onsite water treatment facilities. If water companies were able to supply these companies with information on the quality of water in advance, this could prove valuable for facilities managers. Naturally, it will help production teams to know in advance exactly how much treatment will be required to help plan for when additional action must be taken.

In addition to apps which allow facilities managers or heads of operations to track down real-time water quality information, apps can also offer consumer-facing, quality-monitoring tools that enhance a utility's brand reputation.

Leveraging the IoT and other Smart Technologies can help drive further efficiencies and provide facility managers with access to even more granular data. By using smart sensors and apps with a direct service, utilities can provide treatment plants with unparalleled levels of information, visibility and even lead time.

If water customers are able to adapt their manufacturing processes and improve quality of outputs, because of the information provided to them by their water providers, these providers will formulate an integral part of their customers' processes, which will protect against competition.

MOBILE AT THE ENTERPRISE LEVEL

The new market offers utilities a huge additional opportunity to secure large, consolidated contracts with bigger businesses. Consolidation now makes sense for enterprises because deregulation has eliminated the captive market for water customers, but utilities will still need to develop a model that convinces big firms to use a single water provider across all of their English sites. And for that model to truly compel potential clients, innovation and technology will likely be a key component.

Very large companies have been able to choose their water supplier for some time now. Thanks to deregulation, however, the whole market will be able to make a similar choice too.

As the whole business market transitions out of a monopoly market with many inefficient operations, to one where a huge client could choose a single provider for all of their operations across England, utilities already have a major selling point on hand for larger clients. The remaining challenge will be to assure clients that they're capable of scaling enough to do the job properly.

To this end, digital solutions have enabled almost infinitely scalable systems and require only a larger data server in the cloud for greater usage. Moreover, the ability to share real time data and access to information shows potential clients that you can better organise employees across multiple locations, manage partner companies and inform customers of their usage and spending.

One final, crucial note is that heightened competition in the new market will force water providers to scale up their efforts in a multitude of arenas, including marketing, customer service, and maintenance. This holds especially true on the enterprise level, where mobile provides a scalable solution requiring minimal, if any, change management or training.

WATER EFFICIENCY FOR ENTERPRISE CLIENTS

No industrial enterprise using large quantities of water wants to misuse or waste any water, if it can feasibly be avoided. With a well-crafted digital solution, providers can empower their large clients to use water more efficiently and avoid exceeding usage limits through transparent access to their water usage and relevant data on how water is used in their operations.

This allows executives and workers within the client company to access usage information easily. Creating a mobile gateway to crucial information means that it's available in real time to both an executive travelling to a meeting and an engineer on the shop floor.

With water prices on the rise, large industrial clients will need to improve their efficiency to tamp down rising costs. Enabling transparent access to usage information, knowledge of bills and other services, like tips or guidance on how to use water more efficiently, could provide a competitive edge - a clear incentive for businesses and individual consumers to choose a tech-savvy utility provider.

The efficiencies that utilities and clients can achieve together will also be particularly useful from a corporate responsibility perspective, as the public now expects British companies to be both environmentally sound and increasingly efficient.

MOBILE: THE COMPETITIVE ADVANTAGE

Identifying core business objectives and defining how the business is going to deliver them in this newly competitive market, will be key for water utility providers. In many cases, developing a mobile solution may be appropriate. In defining specific mobile app opportunities user needs will need to be explored by looking at internal and external processes, communications and the service proposition. Where can processes be made more efficient, or where can the process or interaction with a user be enriched by mobile? Then these opportunities will need to be prioritised before beginning the process of developing successful mobile solutions.

Some of the key considerations for digital or mobile product development:

Agility

The point of agile, or agility in your development process is ultimately 'business agility', which is the epitome of continuous learning and continuous delivery. Companies need to evaluate the issues to define the scope, test and develop before repeating again. It's an ongoing and sustained activity and one that ensures products or outcomes are continually evolving to address the market, internal changes or expectations of the consumer.

API First

Many digital solutions for the deregulated water industry will require access to real time information and databases. To enable this access to data, open API's (application programme interface) will be a requirement. An 'API First' approach makes data more immediately available and offers clients more flexibility. An API foundation is a collection of functions that facilitates the creation of apps that can be used in conjunction with multiple front end products. Good APIs are the foundation of good apps.

APIs allow different applications to integrate with and gather data from a programme so that separate apps can combine and interact. A good API fosters easier collaboration with third parties and partners, who can use their proprietary systems in conjunction with your own.

Innovate: Fail Fast and Iterate

It is important for water utility suppliers to focus on innovation and how technology can be used to help them adapt to new market conditions and develop competitive advantages in the soon-to-be deregulated market. Establishing a culture of innovation is important — failure shouldn't be feared, steps need to be taken to push forward and learn from the past, to succeed in the future.

The best solutions are created in multiple iterations, allowing you to identify their weak points and limitations, change them accordingly and repeat. By iterating through the 'build-measure-learn' loop, companies can decide to continue with an approach or adapt their product to better suit their users. The result is a stress-tested solution rather than an ivory-tower ideal. This process makes it possible to improve the solution while it's already in use, producing fast responses to unanticipated issues and new developments that disrupt the industry. This ensures that you are building a product that solves real-world problems with a greater level of confidence.

This will never prove more important than in 2017, when utilities will not merely need a software solution for their businesses - they'll need a solution that is more reliable, more robust and more agile than their competitors'. Companies need to be able to adapt and change over time, a failure to adapt in the new deregulated water market could prove disastrous for any player in the market.

CONCLUSION

Digital and mobile capabilities can deliver a competitive advantage to all English water utility firms and produce real ROI. After deregulation, companies that can best maximise the value of their investments will quickly outflank their competitors.

England's water utility sector will experience a paradigm shift. The effects of deregulation will be felt across the industry and the leaders in the market will quickly be defined by those companies best prepared to offer a compelling competitive service.

Therefore, every provider – no matter their size, market or region – should start considering the tools at their disposal.

Essentially, deregulation will propel the water industry from 1989 to 2016, and the companies that opt for the best tech and leverage it most effectively, could ultimately prove the most successful.

Mobile is a key tool or platform for companies to leverage to help build competitive advantage in the deregulated market because:

- It connects all the capabilities of the IoT with all the efficiencies of two million utilities
- It is a scalable option for a market that will soon require rapid and effective scaling
- The integration and connections that it creates are mediated through all engineers, executives and customers in the industry
- Apps allow utilities to add value and create an identity in an industry where it has been historically difficult for competitors to differentiate themselves

Deregulation is a change in which utilities will have to invest, and mobile apps are the most dynamic and valuable investment they can make. But properly leveraging mobile technology can be a difficult and time-intensive process – which is why it's crucial to choose a product that's truly worth your investment.

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