

## INTRODUCTION

In an environment of rising expectations, it is critical for utilities to take an omni-channel approach to consumer engagement. This means going beyond paper and web to connect with consumers via all available channels, including mobile. However, a recent Navigant report<sup>1</sup> indicated that utility executives are not confident in their organizations' mobile development capabilities.

This paper gives guidance to utilities that are planning to expand their consumer-facing solutions and are interested in an omni-channel approach. The following key considerations are discussed:

1. The **functionality** required for a successful omni-channel solution
2. How to future-proof via the right **platform** approach
3. The **build vs. buy** decision
4. What factors to consider to ensure **ease of deployment**
5. The **ancillary support** needed for a successful rollout

In addition to these considerations, the paper also suggests key requirements that should be addressed and vetted with every vendor, to ensure the utility can capture the highest near-term and long-term value from their omni-channel solution.

## FIVE CONSIDERATIONS

### 1. FUNCTIONALITY

Delivering engagement across multiple channels is a double-edged sword: if done well, it presents a huge opportunity to digitally engage consumers across numerous touchpoints; but if done poorly, it's easy to confuse or even lose users. Therefore, it is critical to create an engaging and seamless experience. Mobile development, in particular, can cost hundreds of thousands (if not millions) of dollars. With this kind of cost commitment, driving engagement to other channels requires more than just a replication of a paper bill or a responsive version of a website. Also, while bill pay and outage are typically the two most common digital engagement features provided by utilities, the most comprehensive solution will provide more: consumers expect new, positive interactions with their service providers; they're not interested in the status quo. Examples of these modern utility features include:

**Consumer-centric** | The mobile solution should support utility goals but must also be use-case oriented to provide functions important to consumers, and not just a bunch of features

#### KEY VENDOR REQUIREMENTS

- Provide metrics and proof of user engagement
- Share experience and plan for testing the solution on real users
- Share experience and plan for A/B testing

<sup>1</sup> Navigant: *Bridging the Divide: Utilities and the Customer Capabilities Gap*



**Push vs. pull** | Rather than relying on the user to proactively log in to pull data into an app, the mobile solution should push relevant notifications

**Insights** | Leading utilities are providing features like disaggregation, gamification, personalized tips and recommendations



Push notifications engage users with timely, relevant information

## ENGAGING VIA MOBILE

Mobile engagement doesn't necessarily mean an app. We're all familiar with mobile apps (Uber, Instagram, etc) but a mobile solution can also mean responsive web pages accessible via the phone's browser (Mobile Web), and triggered via SMS and email notifications. This type of Mobile Web functionality has a broader reach than a Mobile App, allowing the utility to engage many more consumers with a similar level of digital features and functionality.

## Utility Insight

**Customer-Centric Design** | At the 2016 Mobile Utility Summit in Denver, Con Edison discussed how they had developed a mobile-optimized site in 2009 and then outsourced a mobile app in 2013. At that time, ConEd had no professional web design staff and was focused on channel-centric design rather than customer-centric design. The result was a text-heavy app that required numerous clicks for navigation, making it hard for customers to find what they were looking for, and creating the impression amongst many customers that ConEd was "hiding" things.



Having learned from that experience, today ConEd is undergoing a digital transformation process leveraging *user stories*\*, a software development methodology designed to ensure customer-centric design.

More information on ConEd's experience is available at [this link](#).

### *\*User Stories in Modern Software Development*

Modern software development is centered around user stories as the best approach for identifying the most important consumer functions. The user story is typically defined in a Product Requirements Document (PRD) and it describes the type of user, what they want, and why. An example User Story is below:

## User Stories

#	As...	I want to...	So that...
1.0	a <role>	<goal/desire>	<benefit>
1.1	a utility ratepayer	understand my most inefficient appliance usage	I can lower my energy bills



## KEY VENDOR REQUIREMENTS

- Provide info on the customer journey and how the platform evolves over the course of the consumer lifetime for various functions, programs, and channels
- Share development/product roadmap

## 2. PLATFORM

A single, purpose-built solution that only serves an immediate need is not the right approach to long-term engagement success. Instead, the focus should be on finding platform solution that provides rich functionality now, along with the flexibility to grow with changing needs in the future. Key aspects of a platform vs. a single-use solution include:

**Modular** | A platform is able to serve multiple programs (e.g. Energy Efficiency, Demand Response, and Consumer Engagement) and should be flexible enough to start small and grow with time, with the utility only paying for is needed, as it's needed

**Choice of Channel** | Consumers tend to be fluid in their use of information – they may start with a mobile app but then lose interest and move to email, or transition over time from paper to web. The proper platform can provide the same functionality regardless of consumer channel (e.g. SMS, email, paper), allowing utilities to reach the customer wherever they are in the engagement lifecycle



Omni-channel communication reaches users via their preferred channels

**Customizable** | Platforms can have completely customized branding and content, specific to a utility's geography, climate, goals, customer types, and more

**Extensible** | An advanced platform should integrate with other solution components, enabling various business models to fit the specific market approach

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### Utility Insight

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**Life Without a Cohesive Platform** | An executive of one large utility described how the lack of both CIO oversight and control over decentralized digital initiatives led to varying levels of maturity over digital strategy and created multiple disparate initiatives across the organization. As a result, consumer experience suffered: the utility required different applications for moving, billing, energy insights, complaints, and outages.

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## KEY VENDOR REQUIREMENTS

- Outline differences between NRE and product costs
- Provide cost of \$X/year as an alternative to a single all-in charge
- Describe in detail the focus on utility market/customer
- Require the availability of public APIs
- Document the details of previous deployments
- Provide both cost and process for solution updates

## A HYBRID APPROACH: Combining new and existing functionality

Many utilities already have a mobile app that provides core functions like bill pay and outage. These core functions can easily be combined with an off-the-shelf digital engagement solution that provides added insights and engagement. Some off-the-shelf products can provide this functionality via APIs, which can add the engagement and insights directly to existing utility digital assets, and create a rich, seamless experience for consumers across all channels of engagement.

## 3. BUILD VS. BUY

Once the decision has been made to expand channels, it is imperative to think through the ramifications of developing the mobile capabilities in-house, utilizing a third-party vendor to build a custom solution, or buying off-the-shelf. Each option has advantages and disadvantages:

### Build Internally

- **Advantages:** The utility has full developmental control and can design/build to exactly match their needs
- **Disadvantages:** Requires internal skill set and budget not just for the initial deployment but on an ongoing basis for maintenance and support

### Build Externally

- **Advantages:** By hiring an external firm to build to spec, the utility maintains full control and eliminates the internal development skill set requirement
- **Disadvantages:** The solution can feel “deserted” after the project ends, and maintenance fees related to updates, support, bug fixes, hosting fees, etc. can be significantly higher than expected

### Buy Off-the-Shelf

- **Advantages:** Speed of deployment and product refinement through previous utility deployments, plus ongoing maintenance (bug fixes and improvements) and development costs are amortized across multiple customers
- **Disadvantages:** Potential lack of differentiation and customization

In summary, while some utility functions are unique, many are common across all utilities. Therefore, the numerous advantages of an off-the-shelf solution make it the best option, in particular if it has a flexible and extensible platform that can be customized to provide unique content and specific functions.

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## Utility Insight

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**The Importance of Domain Expertise** | One large European utility experienced challenges with a third party mobile app developer. They hired the company based on their world class user interface and user experience skills, but quickly ran into problems because the partner lacked an understanding and context of the utility business. This became a major burden on the utility team, as the partner required constant education through the development cycle on such things as the definition of a kWh, how bills are calculated, and the different regulatory requirements driving their business.

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## KEY VENDOR REQUIREMENTS

- Provide relevant references for previous mobile deployments
- Complete a gap analysis of utility requirements vs. vendor's off-the-shelf standard product
- Provide Statements of Work from previous clients
- Document specs up front, allowing the utility IT department time for review, and ensuring the specs conform to the utility's design requirements.

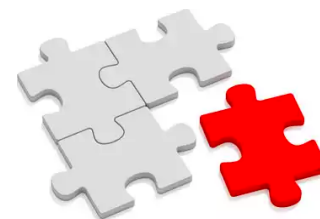
## 4. EASE OF DEPLOYMENT

By utilizing Software-as-a-Service (SaaS) and industry-standard development protocols, a scalable off-the-shelf solution can avoid scope creep and be deployed quickly and easily. Further, an IT-friendly solution is a must; most utility IT departments are very busy and would appreciate if the chosen solution was:

**Compatible** | The solution should fit into existing IT infrastructure

**Robust** | Offers proven standards for security and SLAs that have been hardened by previous utility deployments

**Adaptable** | The solution's data integration process should adapt to your environment, not vice-versa



The best solution will be compatible and adaptable with existing infrastructure

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### Expert Viewpoint

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*"When you build your own product, you don't just get to walk away and let it run when it's finished. The same team that built it will probably spend a lot of their time providing maintenance, support, and tracking for it once it's complete. This means that you won't necessarily get the resources back that you diverted to build the solution in the first place, they'll stay diverted as long as you continue to use it. You also might end up bringing on new hires to supplement your current team's activities. Even though you'll be getting a customized solution for a product that's built in-house by a trusted team who knows your business and end-users - if this isn't their daily job, they might overlook certain critical functions or features that a seasoned solution provider would not. Sometimes it's better to let the experts guide you than to learn by trial and error with a critical mobile implementation."*

*[Build vs. Buy: How Should You Roll Out Your Mobile Analytics Solution?](#)*

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## KEY VENDOR REQUIREMENTS

- Provide examples of previous deployments and recruitment metrics
- Share content samples for landing pages, FAQs, support and training
- Detail their offering and capabilities for maintenance support (e.g. how quickly do they fix bugs and how often do they roll out new releases)

## 5. ANCILLARY SUPPORT

It's important to identify all of the issues *around* the deployment of an omni-channel engagement solution and not just focus on getting it out the door. The right partner will be experienced in providing ancillary support, such as:

**Marketing/Launch Support** | Encouraging users to adopt new ways of engaging with their utility requires expertise in consumer marketing. For example, marketing to millennials requires more than just bill inserts and web banners

**Organizational Impact** | A partner with previous deployment experience can set appropriate project expectations

**Customer Support** | Providing support to utility Customer Service Representatives on an ongoing basis is something that a good partner will include in their bid. That CSR support will typically include both pre-launch training and ongoing training as new features are released



CSR support is critical for a smooth rollout and ongoing customer success

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## Utility Insight

**Identifying the Root Cause** | One large European retailer launched a new digital program designed to encourage customer engagement and reduce impact on the call center. Instead they experienced an *increase* in customer calls. Upon further analysis, the utility discovered that the unhappy calls were indeed decreased. However, the program was sending notifications to users about their consumption, and this increased energy usage awareness caused consumers to call the retailer to inquire about different rate tariffs available to them, leading many of them to renew their contracts for an additional two years.

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## CONCLUSION

In an environment of rising consumer expectations, it is critical for utilities to engage their consumers, and deploying an omni-channel solution gives utilities the best opportunity to build meaningful relationships with their consumers beyond the once-per-month paper bill. This paper was written to help utilities determine the right approach to identifying the best engagement platform for their needs, with the goal of maximizing both near- and long-term value.