



Roadmap to Modern: Beyond 311 to the Modern Citizen Experience

ORACLE WHITE PAPER | NOVEMBER 2015



Disclaimer

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



Table of Contents

Disclaimer	1
Table of Contents	2
Executive Overview	3
Engage	6
Omni-Channel	6
Tune-in to Citizens: Social Media, Online Communities, Surveys	6
Personalization, High-Fidelity, Citizen-Directed Profiles, and Outreach	7
Empower	
Efficient Use of Channel: Email, Mobile, Chat and Social	9
Enhancing the Agent Experience	10
Pervasive Back Office Automation	10
Adapt	10
Easier Deployment and Configuration	10
Enhanced Transparency	10
Seamless Integration	11
Conclusion & Next Steps	12

Executive Overview

Life has changed considerably for consumers in just the last five years. Remember, in January 2010, we had not yet touched our first iPad. Now of course, elected officials and department/agency executives conduct the business of government against a backdrop of dramatically changing citizen expectations driven by our pervasive mobile and social experience. Naturally, today's citizens want to be able to interact with government from their phones or tablets, wherever and whenever they think of a question or problem. Citizens expect consistently high-quality information and service regardless of their communication channel. Traditional channels are still important, but the emergence of social, mobile and cloud computing experiences have changed the game. The reflection of our changing technology landscape can be seen in the changing attitudes, behavior and ultimately expectations of modern consumers:

Behavior

- » 50% of all search queries are done via mobile¹
- » More than 20% of time spent online is spent on social platforms²
- » 58% of all Americans and 47% of those earning less \$30,000 per year use smart phones³
- » Of all uses for a mobile phone, making a call ranks fifth overall⁴
- » Chat usage in customer service has increased 24% in the last three years⁵

Attitude

- » 75% of citizens expect to complete government transactions online⁶
- » 79% of citizens believe the government can improve service levels⁷
- » 69% of citizens believe government agencies should monitor social media during emergencies⁸

With all of this in mind think about how the scope and expectations of 311 programs have grown, especially since the 1996 landmark launch of 311 services in Baltimore. By making 311 a central point of contact for all non-emergency inquiries, government leaders have made it the natural face of citizen service and engagement in many municipalities. Lately, however, citizen expectations are rising along with advances in our experience as modern consumers. The good news is that even as the wave of technology advancement raises the service expectations of consumers, it also offers new tools with which municipal leaders can modernize the citizen experience.

Cloud-based applications and technologies, particularly in the realm of the customer experience, are improving rapidly to meet escalating citizen expectations. The best of these enable a Modern Citizen Experience (MCX), highlighted by the following key capabilities:

Engage	Offer omni-channel (i.e. all channel) access with emphasis on self- service, mobility, automated assistance, personalization & knowledge
	Understand constituent concerns through social media, online communities, and tailored surveys
	Balance privacy and personalization by giving citizens control of their contact profiles & preferences – then communicate commensurately and securely
Empower	Support easy agent navigation of customer channels (phone, web, mobile, chat, text, social media, communities) – Omni-channel
	Modernize agent dashboard & controls; use knowledge to achieve greater effectiveness with less training
	Introduce pervasive back-office service automation including modern field service mobility
Adapt	Deploy easily and quickly respond to changing department, agency, & citizen needs including: knowledge/content, request types, forms, workflow, & reports
	Enhance stakeholder transparency & control: department/agency heads, elected officials
	Facilitate seamless integration to legacy/departmental systems and support open data initiatives

In the past, pursuing such a broad scope of capabilities and objectives all at once would require multiple vendors, steep project management hours, and potential finger-pointing when things didn't work properly. What changed? Today the best cloud-based customer experience platforms not only give us the favorable economics and perpetually up-to-date software we have come to expect, but now offer broader capabilities and channel support in a coherent, integrated package with the flexibility to meet widely varying business demands. Let's see how.

Engage

A modern citizen engagement platform helps you meet a wide variety of demands and citizen expectations. New ways to engage range from applying for disaster relief, or getting educated about new programs, to facilitating online communities, tuning in to citizen sentiment trending on social media, simply interacting with citizens on their channel of choice and much more.

Omni-Channel

Municipalities have worked to open up new citizen communication channels for years. There are many great examples of mobile applications developed either by a city or county, or in partnership with private or commercial specialists. But then the key challenge becomes integrating interactions across different channels into a coherent customer experience. Additionally, how you maintain the channel itself or the integration going forward remains an important cost consideration. This is where the major costs lie.

Then you have new channels that might be more technically challenging and cost-prohibitive to develop in the first place. These channels might include: live chat and co-browse integrated into your citizen self-service web experience; telephony integration, or a unified interaction center for social media. Here is what you should expect in a modern citizen engagement platform:

- » A single platform to support all major modes of customer interaction, including: web self-service, mobile self-service, text, web chat, email, phone, online communities, surveys and social media
- » The ability for service agents to navigate seamlessly across <u>all</u> modes of interaction (subject to role of course) in supporting customers
- » A knowledge foundation that enables relevant content to be incorporated into citizen interactions regardless of channel
- » Tools to enhance & personalize self-service interactions and transactions: automated, personalized interactive questionnaires, natural language search, guided assistance, content recommendation, email deflection, proactive chat, and more
- » The ability to submit self-service online requests, apply for programs or benefits, and purchase or remit

Tune in to Citizens: Social Media, Online Communities, Surveys

It is one thing to provide tools that help citizens find relevant information, submit requests/complaints, and even apply for services and/or benefits. It is another thing entirely to identify citizen concerns, sentiment, and trends systematically and comprehensively. Your modern customer experience platform should enable you to tune in to your constituents in these key ways:

- » Identify major themes, trends and volumes of citizen sentiment emerging through social media and in turn be responsive
- » Facilitate citizens' ability to interact and collaborate through online communities moderated by municipal representatives
- » Capture citizen concerns and sentiments through targeted, structured surveys

New social media monitoring and listening tools incorporated within customer engagement platforms enable municipalities to participate, learn, and utilize information gleaned from social channels. By harnessing this information, you can deliver content to targeted populations and better anticipate citizen needs. Your citizen engagement platform should enable you to precisely coordinate content delivery through your social properties as well as engage one-to-one where appropriate.

Modern citizen engagement platforms also enable you to offer a collaborative experience by facilitating online communities. Citizens organizing around a common topic or concern can "join" a topic or theme-focused online community where they can post opinions, ideas, or questions. They can even search and locate related content through an integrated knowledge base. Such communities can be effective ways to crowd-source ideas and answers to civic challenges. It also helps citizens help each other, while perhaps avoiding otherwise costly contact center interactions. In terms of the bigger picture, they can help bridge neighborhood gaps and foster a greater sense of community.

Surveys and email marketing are also important components of MCX platforms. They have become synonymous with "spam" largely due to over-use and abuse by commercial enterprises. When used appropriately, however, and targeted to specific audiences who opt-in wishing to subscribe or participate in a particular area of government, these tools are indispensable. For example, when a municipality decides to hold a town hall meeting on a specific issue, they could easily invite like-minded citizens to attend meetings in either a physical or virtual environment. Appropriately targeted surveys offer a way to get a very detailed impression of the opinions of engaged citizens in a specific topic area. They offer a structured means of measuring and understanding citizen satisfaction.

Personalization, High-Fidelity, Citizen-Directed Profiles, and Outreach

Improved web portals, along with responsive design and mobility, have made it easier for citizens to interact with their municipalities. Still, online citizen self-service remains underutilized. Some municipalities have begun to pursue a strategy of co-locating broad online civic access and request for service around functions that already attract citizens to the online experience, (e.g., utility bill payment and usage calculators). The key to making this strategy work includes enabling citizens to control their own online profile and fine-tune their subscriptions.

The more a municipality can provide a personalized experience for its citizens while respecting their privacy preferences and securing personal information the better the chances of establishing a mutually productive online relationship. The foundation of personalized citizen access and engagement includes the following capabilities:

- » Access: Ability to sign into a government portal securely and maintain personal contact information, account information, and preferences giving citizens access to interactions and functions across agencies
- » Control and Flexibility: Citizens should be able to change their opt-in and opt-out preferences globally and on an agency-specific basis (i.e., citizens determine the topics to which they subscribe)
- **» Convenience:** Once citizens have opted into interaction with a given agency, any subsequent online transactions or forms should auto-fill with citizen contact information except when a citizen wishes to remain anonymous
- » History: A citizen's online account should provide easy self-service access to a history of their online requests, applications and transactions
- » Security: Citizen data should be protected with the highest levels of standards-based security and encryption

Together, these key capabilities create a "high-fidelity" approach to customer data management. With this foundation, established government agencies should expect their customer engagement platforms to give them the ability to initiate outreach to targeted audiences. In fact, this concept borrows from commercial marketing best practices, that outreach should be largely dynamic, initiated by email, web pages or social properties and continue interactively through web landing pages.

Finally, citizens' concern about confidentiality remains a major inhibitor in reporting issues, especially online. While open records laws vary from one state to another, municipalities can offer options to protect citizen's identity when they report issues. (For more information on open records law please review the "Open Government Guide" published by The Reporters Committee for Freedom of the Press.)

Empower

Today's modern citizen engagement platforms offer improved usability as well as greater efficiency for the workers who provide citizen service. This applies to contact center agents on the front lines of citizen interaction and extends to agency specialists and mobile service workers as well. Municipalities can expect to realize positive business results across contact center metrics: reduced average handle time, better first-call resolution, and improved overall service efficiency at every stage. Such improved application usability and business automation will yield greater effectiveness with lower training costs.

Channel Efficiency: Email, Mobile, Chat and Social

Earlier we explored the idea that current consumer trends and customer expectations drive the need for a full spectrum of customer interaction channels. While many municipalities have added communication channels incrementally these efforts suffer from lack of business continuity and integration. Understanding expectations for a modern citizen service platform can help define a more effective strategy.

A modern citizen engagement platform must include native support for today's critical channels including mobile, social, and text message. As you consider the needs and demands of your constituents you might or might not incorporate all channels, but your platform shouldn't restrict your choices. Just as importantly the platform must unify management of your channels and enable interactions to move seamlessly across channels. Let's consider today's critical communication channels:

- » Email Addressing inbound email with auto-generated replies and routing have not traditionally offered a significant payback. Inbound email is often expensive due to the unstructured and sometimes lengthy nature of email inquiries. Look for platforms that offer the ability to integrate knowledge article suggestions into the process of submitting emails. This "deflection" approach has been shown to dramatically reduce email volumes and deliver immediate citizen resolution.
- » Mobile Some municipalities are now reexamining the cost-benefit of developing and maintaining the standalone mobile applications. In some cases you may receive superior payback from a mobile web approach that employs responsive web design. Above all, look for a citizen engagement platform with strong integration capabilities and APIs. This will help you incorporate third party or custom-developed mobile applications depending on your needs.
- » Chat Like email, web chat for a long time offered a questionable return-on-investment. That has substantially changed. Modern web chat now enables customer service agents to run multiple chat sessions at once and incorporate easy access to knowledge base content and standard text templates. Highly optimized chat today offers average interaction costs that are substantially lower than phone-based support. Look for a platform that enables you to selectively expose chat within targeted areas of your web experience and even suggest chat to citizen-browsers proactively where appropriate.
- » Text With the proliferation of text messaging among all demographic segments, citizen demand for text engagement has increased. The perception of it being a more immediate channel makes it very attractive. However, this perception creates a service expectation that will need to be managed. Similar to chat, texting can be a multi-threaded service experience for the agent, and can be highly efficient.
- » Social In terms of impact, no channel is evolving as fast as social networking. Properly used and managed, social channels allow municipalities to rapidly disseminate information to broad groups of citizens and discern their sentiment toward specific policies and concerns. These capabilities can help you demonstrate truly responsive government. Social monitoring, community moderation and effective message dissemination should be core capabilities you look for in a citizen engagement platform. Finally, your social engagement capability should integrate directly with service request tracking so you can associate a request or case with a trending topic, post or thread of citizen interactions.

Enhancing the Agent Experience

The first generation of 311 customer service applications tended to reflect the natural organizational complexity of local government. This was true for customer service agents and citizens alike. While the 311 dialing code offered a very simple government access point, citizen-facing web sites continued to be a reflection of government complexity. The result was much slower web channel adoption than desired. Similarly, applications used by 311 service agents to automate service also reflected the complexity of government. Unfortunately, the complexity reduced service agent effectiveness, increased burnout, and increased agent training time and expense.

Today, your citizen engagement platform can offer a far more flexible, intuitive approach to locating answers and services. A powerful knowledge foundation enables citizens to locate desired information through intuitive natural language search instead of needing to know which departments perform what services. Modern knowledge bases continuously calculate the effectiveness and popularity of articles. Now municipalities can easily list the top 10 or 20 articles (representing service as well as information requests) in order to eliminate any need for search in many cases. Effective knowledge article reporting can also reveal seasonality patterns to ensure articles are presented at the appropriate time.

For agents, the customer service platform should enable them to field inquiries across all channels and quickly deliver accurate resolution or referrals. This means recognizing that among different service tier users (e.g., contact center, back office, mobile workers) differently configured visual layouts are required to best meet their respective needs. Different visual layout options can include multi-column formats, grid layouts, a GIS-driven experience, wizard-like screen-by-screen intake, and more. Configurability of the user experience should also enable you to precisely reflect your aesthetic and branding standards throughout the application.

Pervasive Back Office Automation

Ideally, a centralized citizen engagement center in local government will realize a steady improvement in first call resolution (FCR) rate. This has long been a standard key performance indicator in customer engagement centers. And, as we have already discussed, a strong knowledge foundation with agency participation in that knowledge base should significantly improve the FCR metric. Still there are many calls to citizen engagement centers that will not be resolved with the first call (.e.g., calls requesting road repair or reporting graffiti). Here are the keys to cost-effective service in these situations: 1) capture necessary and sufficient information during the original call, 2) automate the handoff of the request to the agency, and 3) associate original request and eventual work order, and 4) automate request closure.

Many 311 operations have had challenges in this area. Some lacked the ability to capture unique data elements specific to many different service request types across the municipality. Some lacked workflow to route requests appropriately, or lacked the integration capability to seamlessly hand off service requests to departmental applications. Many had difficulty automating service request closures and citizen notifications upon work completion. A modern citizen engagement platform should offer all of these capabilities as core functionality:

- » simple, multi-channel request intake configuration across hundreds, even thousands of different request types
- » a powerful workflow configuration and runtime environment capable of routing and escalating requests, structuring work processes for those agencies wishing to automate request fulfillment, and automating closure notices
- » robust integration support capable of handing off requests to third party applications and updating the customer engagement application when corresponding work orders are updated, as well as seamlessly incorporating key systems such as GIS

Adapt

The final pillar of the Modern Citizen Experience is adaptability. Adaptability means how readily you can respond to changing citizen expectations and adjust to changing business conditions. Early cloud computing gave businesses a way to deploy applications quickly and at a fraction of traditional capital expenditure. But early cloud applications were also frequently inflexible, one-size-fits-all environments; very limited in terms of offering a tailored experience. Today, the best cloud citizen experience platforms offer not just the original promise of cloud applications, but also configurability to match your business needs, powerful built-in analytics to enhance visibility and control, and robust integration capabilities together with strict security and privacy standards to maintain compliance.

Easier Deployment and Configuration

Basic citizen engagement, (e.g. search and locate content, request for service) should be available out-of-the-box with little to no configuration. From there you should be able to readily configure knowledge and content, business process and escalations, communication templates, specific data elements to track reports, and even visual layouts. Your configurations should persist as you progress to new software releases, usually on a quarterly basis.

You should be able to tailor your deployment not just to the needs of your municipality but down to the specific needs of each agency. You should be able to configure once and easily change your configurations over time as the needs of your agencies and expectations of customers change. Customer engagement in a municipal government is not monolithic. In earlier 311 generations, agencies frequently feared a compromise or loss of control over their customer engagement business functions as they joined a common customer service platform. Now, however, modern citizen experience platforms should largely give agencies an active role in configuring key elements of the platform to their unique specifications.

Enhanced Transparency

Modern citizen service platforms potentially collect huge volumes of data. With new open data imperatives, the data collected needs to be more readily accessible than ever before. But at the same time, sensitive data needs to be secured against unauthorized access. Agile platforms must offer facilities to aggregate and stage certain data while making it intelligible for open access. On the other hand, these platforms must provide best-in-class safeguards against unauthorized access and specifically prevent the external release of any personally identifiable information (PII) or other sensitive data. The infrastructure for these platforms should be certified with industry standards and continuously improved to address emerging data security threats.

Empowering internal stakeholders, including agency heads, elected officials, group-level managers and others, is about providing timely access to reporting, business intelligence and actionable data. The platform must enable designated power users within these stakeholder groups to configure reports suited to their business needs. Data security and access control should give particular roles and users all the data to support their business function but no more. For example, an agency or department executive should see all data limited to their department, but across all geographies. Alternatively, the office of an elected official should see all performance data across functions of government but limited to their geography. Modern customer engagement platforms will offer the flexibility to support this level of control, and make reporting easy for key stakeholders.

With data properly secured, transparency is primarily about public accountability. Service levels, volumes and changes in how citizens access services can be provided publicly and in a timely way. Making this data readily accessible can change the dynamic of public perception by helping citizens understand resources, demand for

services, request volumes, and service efficiency. This degree of transparency shows citizens that their government is committed to them. The agility of a modern platform drives this transparency.

Seamless Integration

Most governments have made significant investments in disparate service automation systems across different agencies. The notion that one customer engagement system will replace all of these is unrealistic and unworkable. Instead, it is crucial that your central customer engagement platform integrate with major agency systems including GIS. Modern customer service platforms offer standards-based integration protocols and application programming interfaces (APIs). Such tools enable you to automate complete business processes, typically originating in citizen requests with resolution provided and tracked through agency systems. Complete, closed-loop service automation enables you squeeze inefficiencies out of your business processes and at the same time improve citizen satisfaction. You should expect cloud-based customer engagement platforms to offer robust integration capabilities and thus close the loop with agency systems.

Conclusion & Next Steps

The Modern Citizen Experience offers an unprecedented ability to engage citizens with greater efficiency and improved agility. Municipal leaders can take advantage of these abilities now, while reducing overall costs to deploy and maintain technology. By employing cloud-based citizen engagement platforms, municipal leaders and decision-makers can expect unprecedented benefits:

- » improved licensing flexibility
- » negligible up-front capital expenditure
- » significantly reduced costs to maintain the platform (no hardware, no database, et cetera)
- » broader and deeper engagement capability
- » and improved usability, security, performance, and scalability.

Just as importantly, these powerful new citizen engagement platforms can become instrumental in achieving larger objectives. They can improve the sense of community and collaboration between citizens and their local governments, and with each other. They can drive greater transparency with their operations, improve citizen access to information, and yield a better understanding of citizens in return.

This is a time when you can expect much more from your technology and applications vendors for far less in terms of cost. There is no need to compromise. Citizen-centric cloud applications for government are no longer one-size-fits-all. The Modern Citizen Experience is engaging, efficient and agile. Expect to have it your way.



Oracle Corporation, World Headquarters

500 Oracle Parkway

Redwood Shores, CA 94065, USA

Worldwide Inquiries

Phone: +1.650.506.7000

Fax: +1.650.506.7200

CONNECT WITH US



blogs.oracle.com/oracle



facebook.com/oracle



twitter.com/oracle





oracle.com

Integrated Cloud Applications & Platform Services

Copyright © 2015, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any propose electronic transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0615

Roadmap to Modern: Beyond 311 to the Modern Citizen Experience November 2015

Author: David Terry, Oracle Public Sector

Contributing Authors: Spencer Stern, Principal, Stern Consulting



Oracle is committed to developing practices and products that help protect the environment

 $_{\rm 1}$ Localeze/15Miles Comscore Fifth Local Search Study 2012

 $_{\rm 2}$ Nielsen Company, "Internet and Social Media Consumer Insights"

³ Pew Research Center Internet Project Survey, 2014

₄ Comscore Datamine Study 2012

 $_{5}$ Trends For Customer Service in 2013

 $_{\rm 6}$ "Next-Generation Government," The Center for Digital Government, 2014

⁷ The "2011 Federal Customer Experience Survey" by MeriTalk is based on an online survey of 1,000 Americans in July 2011

 $_8$ Infogroup|ORC Study, 2010