How local government business-as-usual is changing with use of civic technology.

Civic technology (civic tech) is an emerging field with a blurry definition, even among those who deal with aspects of it on a daily basis. In 2014, a group of USDN members explored the landscape of the civic tech field and produced a study to define what it is, chart the lay of the land, and explore what civic tech could do for urban sustainability.

So what is civic tech?

The scan defines civic tech as the use of information technology to engage local government and community residents in behaviors that:

- Improve the quality and accountability of public services;
- Facilitate resident-driven improvements to local quality of life; and
- Deepen participation in public decision-making and infrastructure maintenance.

In short, civic tech serves as an interface for local government and community members to virtually interact. The interaction can identify and solve problems, such as using open data to improve communications between state and local business registration offices or spotting trends in public transit use by district. It can also make governments function more like the private sector, offering streamlined online versions of hard-copy tasks such as filing construction plans to obtain building permits. It can encourage virtual interaction in public meetings by providing online surveys during city council sessions, for example. Or, it can simply be used to communicate and track the mundane details of public maintenance, such as reporting potholes and noting completed repairs.

Examples of civic tech solutions featured in the scan:

- **SeeClickFix** ([seeclickfix.com](http://seeclickfix.com)) allows anyone to report and track non-emergency issues via the Internet, empowering citizens to take care of and improve their neighborhoods; provides tracking of repairs; and ultimately contributes to more community involvement.
- **ChicagoBuildings** ([chicagobuildings.org](http://chicagobuildings.org)) is a publicly accessible tool that identifies vacant and abandoned buildings in Chicago that may be hazardous to the neighborhoods around them.
- **OpportunitySpace** ([opportunityspace.org](http://opportunityspace.org)) is a similar application that re-envisions “forgotten” spaces.
What is the difference between civic tech and smart cities?

Whatever shape it takes, civic tech is differentiated from the term “smart cities” by essentially being the softer, community-facing side of technology: a new normal for interaction between citizens and their governing bodies, and a door to big data access and use through local crowdsourcing.

<table>
<thead>
<tr>
<th>Sample Differences</th>
<th>Sample Components</th>
<th>Sample Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Cities</td>
<td>Usually involves heavy infrastructure components, as well as hardware, software, and applications</td>
<td>Smart grid, energy efficient (automated) buildings, and transportation mode synchronization</td>
</tr>
<tr>
<td></td>
<td>Involves long-term economic planning</td>
<td>Fiber optics, wireless sensor networks, and a mindset that prioritizes sustainable economic development</td>
</tr>
<tr>
<td></td>
<td>Includes detailed deployment with communications strategies</td>
<td>Smart meters, red light cameras, and traffic signal management</td>
</tr>
<tr>
<td>Civic Technology</td>
<td>Is primarily software or application based, can be cloud based, and does not need to connect to a city server</td>
<td>Parking applications (ParkMe), land applications (ChicagoBuildings), and community sharing (Peerby)</td>
</tr>
<tr>
<td></td>
<td>Involves operational budget planning in some cases</td>
<td>Web platforms that provide educational information, community challenges / competitions, etc., and require ongoing maintenance and support</td>
</tr>
</tbody>
</table>

Civic Tech and Sustainability

One challenge this work shares with the smart cities work is linking civic technology to city sustainability. The 2014 Verge Conference focused on introducing the techniques of civic tech and smart cities to achieve deep carbon reductions, so the conversation is starting to evolve. But is all civic engagement relevant or of interest to municipal sustainability directors? Most widely adopted civic technology applications have a strong public service link, like SeeClickFix. The few that do directly connect to sustainability (such as USDN’s RentRocket) have struggled with data access and sustained funding. The more clearly linked civic tech applications deal with energy efficiency (e.g., Joulebug) and transportation (e.g., PlugShare).

Scan Conclusions

The civic tech field is now old enough that local governments realize it is time to incorporate it into operations, but traditional city processes and procedures are not yet set up to fully accommodate this way of interfacing with citizens. Learning from each other’s experiences can help cities begin to understand how civic tech can be used to reach sustainability goals through behavior change. USDN members in various stages of this process can access the lessons of those who have gone before, and modify their planning and implementation strategies accordingly.