

“These insights come courtesy of Pecan Street Inc., a research group running the most extensive energy-tracking study in U.S. history. . . . That kind of data is unprecedented in the electricity industry.



“The Pecan Street team is already using it to upend long-held theories about electricity use.”

Time, July 7, 2014

Structuring smart city implementations

Lessons from smart grid

What is a smart city?

High level

Installing lots of fancy technology to do stuff

3 types
of
"smart city"
projects

Improve provider operational
efficiency

Shape end user behaviors

Improve technologies used by end
users

Improve provider operational efficiency

Example: smart meters

Benefits

Existing types of service improve

from perspective of end user

Improve provider operational efficiency

Risks

“Am I paying more for something I already had?”

Improve provider operational efficiency

Focus on end user benefit

Insights

Do NOT emphasize

The technology being deployed

The company process innovations

Improve provider operational efficiency

Good

Examples

“We are making system improvements that will restore your power quicker if there is an outage.”

Improve provider operational efficiency

Problematic

"We are investing billions in smart meters."

Examples

"Smart meters will improve our efficiency in billing you."

"We will reduce our carbon impact because smart meters require fewer truck rolls."

Shape end user behaviors

Example: use less electricity during peak hours

Benefits

Provider achieves business or policy goals

Shape end user behaviors

Risks

Systems are frequently complex

Touting benefits to provider operations or to general public
as benefits to end user

Angering customers

Shaping end user behaviors

Can be effective in emergency situations
of limited durations

Insights

High risk of being ineffective or
angering end users

Smart – but not wise

Improve technologies used by end users

Example: installing 4G LTE networks

Benefits

Happy customers who can do more

Improve technologies used by end users

Typically

platform technologies

installed by private sector