

## Itron Distributed Energy Management

Austin Chambers

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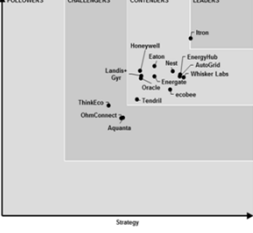
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### #1 RANKED MASS MARKET DEMAND RESPONSE VENDOR



**Table 2.1 The Navigant Research Leaderboard Overall Scores**

Rank	Company	Score
1	Itron	77.7
2	Whisker Labs	67.6
3	EnergyHub	67.5
4	AutoGrid	67.0
5	Nest	58.6
6	Edison	54.3
7	ecobee	62.2
8	EnergyGate	61.9
9	Homeywell	60.5
10	Landis+Gyr	59.5
11	Cradle	58.9
12	Tendril	53.1
13	Aquamta	48.3
14	ThinkEco	48.3
15	ChenConnect	45.8

(Source: Navigant Research)

## NAVIGANT

September 2017

Itron SCAMPS - Itron DEM 2

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### DEMAND MANAGEMENT AND ITS EVOLUTION

System Capacity → 
 Increased Optionality → 
 Highest Operational Value → 
 New Revenue Models

<b>Grid Operations</b>	Systemwide Results at Scale	Visibility and Precision, AMI + 2-way Resource	In the control room: Responsive, Flexible and Local	Incent customer to be dynamic grid assets, not grid liabilities
<b>System Planning</b>	Pay for Performance Resource, Basic VPP	System Capacity, EE, Carbon, Capacity Market Participation	Optimize Grid Utilization, Defer CAPEX	The right DER's, In the right location, Deployed the right way
<b>Market Enablement</b>	Homogeneous Customer Experience	Focus on Customer (New Rates, More DER's)	Multiple Delivery Paths (Communication Paths, Loads, Technology, Choice)	Through insight and an open system, encourage new revenue streams

Itron SCAMPS - Itron DEM 3

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### CENTRAL HUDSON GAS & ELECTRIC – CASE STUDY

- Working with Central Hudson Gas and Electric to defer new T&D investment through 16 MW of capacity reduction across three specific zones
- Project developed in conjunction with New York State's Reforming the Energy Vision (REV)

#### Results

- Innovative new compensation model enables program to drive increased earnings
- Achieved greater than 30% customer participation within a zone where the need was most timely in just six months
- 8 MW of load already under management



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SCAMPS - Iron DEM 4

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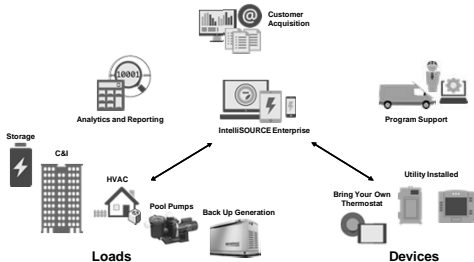
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### CENTRAL HUDSON GAS & ELECTRIC – CASE STUDY



SCAMPS - Iron DEM 5

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### CENTRAL HUDSON GAS & ELECTRIC – CASE STUDY

- » **Whole Home Generator Program**
  - Existing backup generation is used as a DR resource
  - Switches create automatic switchover
  - Estimated 3.9kw per unit
  - Incentives of \$500 and \$250 a year



SCAMPS - Iron DEM 6

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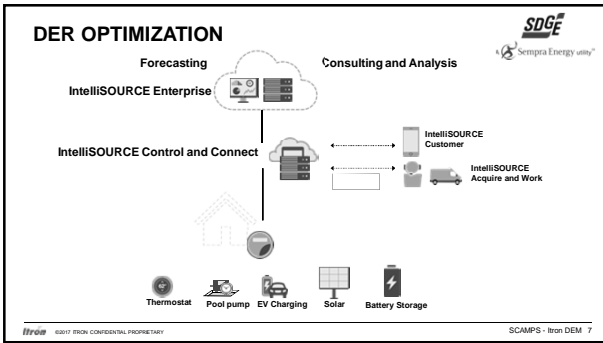
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### SMART HOME STUDY

- » Demonstrate DER orchestration and optimization while maintaining customer comfort
- » Investigate how different rates can impact customer behavior
- » Assess potential for technology-enabled improvements to grid reliability
- » Assess commercialization potential
- » Coalition of vendors:

*SDGE* *AESC* *Itron* Center for Sustainable Energy *oxygen* INITIATIVE

A Semptra Energy unit

©

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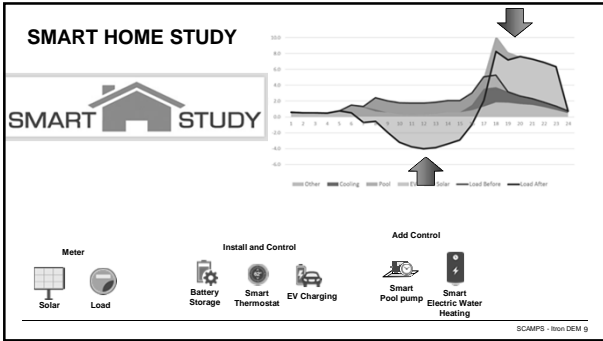
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### UNLOCK NEW REVENUE OPPORTUNITIES

<b>New Utility Business Models</b> <ul style="list-style-type: none"><li>Service Business - Optimize Appliance Use and Maintenance</li><li>Revenue Optimization - Tariff Selection</li><li>Monetize IoT and Distributed Apps</li></ul>	<b>DER Programs Provide New Channels</b> <ul style="list-style-type: none"><li>DER Marketplace</li><li>Consumer Engagement Portal</li><li>Promote / Deliver Unregulated Programs</li></ul>
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SCAMPS - Iron DEMo

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### CUSTOMER EXPERIENCE DRIVES SATISFACTION

Learn → Enroll → Receive → Save → Encourage → Support

 Educational Marketing	 Enroll and Schedule Installation	 Up-Front Incentives	 Manage Energy Use	 Recurring Incentives	 Multi-channel Program Support
	 Connected Technology		 Positive Feedback		

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### HIGH RATES OF CUSTOMER SATISFACTION

	Energy Planner – 99% customer satisfaction
	Demand Conversation – 98% customer satisfaction
	Energy Select – 95% customer satisfaction
	Peak Solutions – 98% customer satisfaction
	Summer Advantage – 93% would recommend program to others

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**THANK YOU!**

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