

Optimizing Business Architecture: Going from 0 to 60 in 12



Carol Manson

San Diego Gas and Electric Co.

SDG&E Overview

- 4,100 square miles of service territory in San Diego and southern Orange counties
- Serving 3.5 million electric and gas consumers
- 1.4 million electric meters and 850,000 natural gas meters
- 5,000 employees
- Regulated Investor-Owned Utility (Sempra Energy - SRE)



Unique Changes In Electric Utility Industry

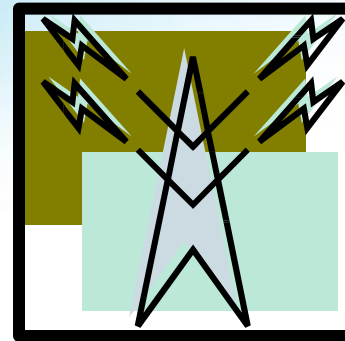
The New Core Business:



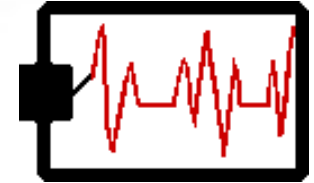
Is the Utility still out of sight, out of mind, unless there's an outage or bill error?



Smart Meters



Smart Grid



New Time of Use Rates

Plug-In Vehicles



Competition from Self-Generation
(# is doubling yearly)

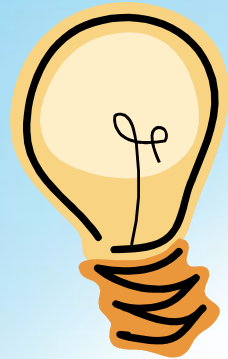


Old Utility vs. New Utility

Non-Unique Changes and Challenges

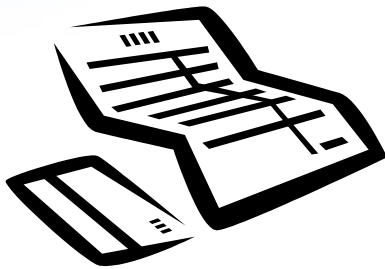
Methods for 100+ Yrs

- ❑ Limited Market Segmentation
- ❑ Limited Services



Start/Stop Service

Paper Bills



Website Last 15 yrs



Methods for the Last 5 yrs +/-

- ❑ Greater Segmentation
- ❑ Wider Services, especially w/ Web & Mobile:

- Start/Stop Service
- Paperless
- Online Bill Pay
- Notification Preferences
- Text, Email
- Set Bill Alerts
- Outage Reporting
- Proactive Outage Notifications
- Estimated Restoration Times
- Live Chat
- Social Media
- Specialized Customer Contact Center



Phone Center



It's the Wild West (and We're Shooting from the Hip)

- **The Early Years:** 2008 – 2012 (Smart Meters installed beginning 2009)
 - New customer strategies were developed and implemented to meet the new reality
 - “Customer-centered design” efforts began 2008-9 with “customer experience” discussions, training for our execs and managers, program designers
 - These were new tools applied to the utility space while they had been utilized in other industries for great periods of time with great results

Our Results:

- Best in Class Customer Engagement (industry accolades)
- Innovative but ad-hoc efforts relied upon ad-hoc systems and support
- No cohesive plan to keep it sustainable

Initial BA Effort – One group, 3 months

- **Launched July of 2012 For Customer Programs Group**

- New team identified too many and non-integrated IT systems/applications; we could foresee they were only going to multiply as our innovations and customer engagement kept growing (especially related to Big Data).
- Accelare, Inc. – An initial, compact, time boxed engagement in Summer 2012 (8 weeks) to achieve:
 - To tightly align IT investments and activities with Customer Programs' business vision and goals
 - Provide the decision framework, methods, and tools to ensure goal-aligned investment decisions
 - Identify near- term opportunities to reduce current business issues/pain (low hanging fruit)
 - Provide a foundational platform that can be enhanced over time to align and integrate the overall planning approach of the business vs. a one-off planning approach – Strategy To Execution.

Foundational Platform : Finding the Work that Matters

- **Capability Models used at SDG&E:**
 - a reference providing a common and shared understanding of the value stream of business capabilities needed to run an effective and efficient business; i.e., what work matters and what doesn't is being determined (Accelare)
 - **Formalize strategies and identify the capabilities** – Build The Model: Workshops, Discussions, 1X1 meetings to identify and then polish the ultimate model
 - **Value Mapping** – Financial Impact/Customer Value
 - **Heat Mapping** - Then, How Effective/Efficient Are We Doing the Work that Matters? The heat mapping/scoring shows what capabilities need attention

Capability Model Example

Observations:

- More “specialized” capabilities on an intra-departmental basis
- Focused model, less “breadth”
- Many low heat capabilities (especially with low financial impacts)

Surprises:

- Some “old utility” capabilities were still revered as bringing the most value, but it no longer held true. Let’s not gold plate the past with the wrong investment.
- Information Management & Support Operations Families accounts for half of the high-heat.

CUSTOMER VALUE

STRATEGIC SUPPORT
1.1. Needs Assessment - Customer & Company
2. Relationships & Communications
2.1.1. Customer Relationship Management & Education
2.2. Training - Inter/Intra-Departmental, Vendor
2.4. Presenting & Communication
3.4. Bill Forecasting
3.6. Rate Comparisons
3.8. Bill Quality Assurance
3.9. Customer Issue Identification & Resolution
4.2. Conflict Management
4.6. Collections Negotiation
6. Branch Office Management
6.1.1. Facility Management & Security
6.3. Customer Service
6.4. Sales & Promotion
6.5. Feedback Analysis & Process Improvement
7.1. Knowledge & Skill Development & Application
7.1.3. Company Knowledge Development
7.1.4. Customer Knowledge Development
7.5.4. Customer Impact Evaluations
7.13. Bill Design

BUSINESS NECESSITY
2.1. Relationship Management
2.1.2. Community Relationship Management
2.1.3. Collection Agency Relationship Management
2.1.4. Law Enforcement Relationship Management
2.6. Change Management
3.7. Rate Analysis
3.10. Trend & Pattern Recognition
3.11. Account Process Documentation
4. Credit Collections & Cash Management
4.1. Customer Locating
4.3. Customer Research & Segmentation
4.5. Lead Identification
4.10. Litigation Preparation & Participation
5.1. Business Control Management
5.2. Contract Management
6.1. Branch Office Operations Management
6.1.2. Business Continuity
6.1.3. First Aid Training and Administration
7.1.5. Industry Knowledge Development
7.2. Data Collection
7.3. Data Accessibility
7.4. Direct Access Data Management
7.6. Data Reporting
7.12. Policy Development & Writing

ADVANTAGE
1. Develop Vision & Strategy
2.5. Hiring & Staff Development
3. Customer Billing
3.1. Account Attribute Management
3.2. Rate/Tariff Program Management
3.3. Bill Calculations & Generation
3.13. Billing Exception Handling
4.8. Payment Management
6.2. Payment Processing
7.1.1. Tariffs & Billing Knowledge Development
7.5.5. Billing System Validation
7.8. IT System Automation & Flexibility
7.11. Customer Privacy & Security
7.14. Business Process Development & Automation

ESSENTIAL
1.2. Risk Management - Customer & Company
1.3. Strategy Development & Execution
2.1.5. Internal Relationship Management
2.3. Regulatory Participation
3.5. Usage Price/Cost Calculations
3.12. Work Queue Management
4.4. Theft Investigation
4.7. Asset Security
4.9. Cash Reconciliation
5. Project Management
5.3. Vendor Management
5.4. Workforce Management
7. Information Management & Supporting Operations
7.1.2. Regulatory Knowledge Development
7.5. Data Analytics
7.5.1. Operational Analytics
7.5.2. Project Analytics
7.5.3. Financial Analytics
7.7. Requirements Gathering & Writing
7.9. IT System Review, Design and Testing
7.10. IT System Administration

FINANCIAL VALUE

Results In 3 Months: September 1, 2012

- Clear, documented strategies for Customer Programs (and its 180 employees) (middle management, director level)
 - A capability model adopted, with buy-in across the organization
 - Capabilities rated by value (financial/customer impact)
 - Capabilities assessed for performance (how efficient/effective)
 - Gap analysis – what capabilities had high value, but were performing low
 - Root causes of performance gaps were identified and analyzed
 - Projects to fill those gaps identified
- Fall 2012 – Showed the value of the exercise in two very concrete ways:
 - Director incorporated high heat capabilities into his 2013 Managers' goals
 - Incorporated into project planning immediately for 2013 capital expenditures.

Starting with the Areas that Provided the Most Value

Addressing the biggest hurdle: Model to Implementation

ADVANTAGE		ROOT CAUSE	PROJECTS
2.4.	Program Design	To Be Done Fall '13	TBD
2.4.1	Program Innovation	To Be Done Fall '13	TBD
2.4.2	Program Alignment to Strategy		DR Summit
2.4.3	Market Research and Analysis for Program Design		TBD
2.4.4	Applying Segmentation to Program Design		SEGMENTATION
2.4.5	Program Planning	To Be Done Fall '13	EECP/DRMS
2.6.	Program Management		EECP 1, 2
2.6.2.	Program Enrollments		EECP/DRMS
2.6.5	DR Event Management		DRMS
4	Info Management and Reporting		EECP/DRMS
4.3	Report Design, Creation, Modification for Info Presentment		EECP/DRMS

By Dec 2013 – Complete the Process for the Five Remaining Groups in Customer Services

- ✓ Customer Programs/Projects
- Advanced Meter Operations
- Commercial and Industrial Services
- Customer Communications
- Customer Operations
- Residential Services

- Clarify strategic intent
- Identify operational capabilities
- Determine “strategic” capabilities
- Identify performance challenges
- Identify root causes
- Develop projects to close the gaps

Identified By Accelare:

- Implementing more “systems” without addressing the core issues will exacerbate the current problems
- Lack of governance, accountability, & performance management are a major concern
- You can (and should) solve the foundational problems incrementally – ***but make them a priority***
- Expect culture change to be a significant challenge
- 2013 will be a year of transition (and frustration)
- Senior management attention is critical to success
- **Customer Programs lacked these very foundational elements:**
 - Cohesive ongoing strategy development and management
 - Business-IT Governance
 - IT Portfolio Management (PMO)
 - Process Management Discipline
 - Information Architecture
 - Information Management

Yearly Process Completed By Year End 2013

~\$30M Approved For the Right CS Projects in 2014

- ❑ Ongoing, the CCRB uses Capabilities, IT Governance to approve changes

**Strategy Update/Capability Models Update
Value Mapping
Heat Mapping
(Dec – February)**

- ❑ 2 FTEs for all Customer Service (CS) Groups to start
- ❑ 1 FTE to maintain ongoing

- ❑ Launched & Staffed a CS PMO in 2013

**Launch Projects
Capability Models Used in Goal Setting
(January)**

**Root Cause Analysis & Gap Analysis to ID Projects Needed
(Spring)**

- ❑ Inventoried 77 systems
- ❑ Solution Architecture Reference Doc developed Summer '13
- ❑ 3-5 yr IT Roadmap

- ❑ Prioritize projects By Capabilities, Value, Heat

**CapEx Review Process For Funding Projects
(Fall)**

**Investment Roadmap Update/Business Case Development
(Summer)**

- ❑ Alignment to Business and Systems Architecture, IT Governance, Data Governance, Opportunity Analysis Tool

Opportunity Analysis Tool

Technology Strategy Group

Strategic Viewpoint	Internal Viewpoint	External Viewpoint
Strategy Alignment	Operational Impact	Customer Impact
Capability Alignment	Risk Assessment	Regulatory Impact

Strategy Alignment - Vendor Solution for DR Programs

Dashboard **Strategy** Capability Operational Risk Customer Regulatory

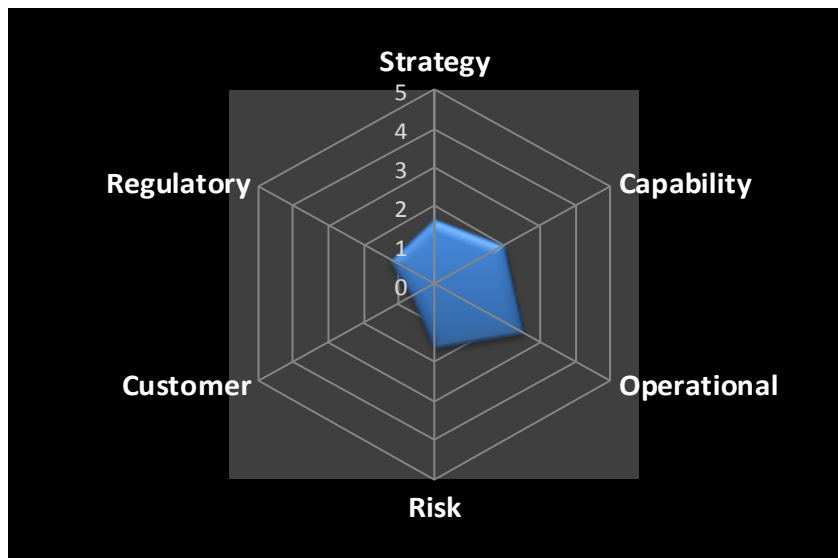
The strategy analysis explores and measures the opportunity's potential impact on the current set of strategies. Opportunities may affect one or more strategies or none at all. This assessment determines the degree to which the opportunity is required, supports, enhances, or even detracts from strategy realization.

In Column C, indicate how the project contributes to or achieves Strategy Alignment, by selecting from the dropdown menu.

Strategy	Contribution
1. Know what the customer wants and design simple, value-added programs.	Inhibits or detracts from alignment
2. Match customers to the programs most suited to their needs.	Neutral - neither supports or detracts
3. Customize methods of communication to customer preferences, including two-way communication.	Minor support
4. Utilize an accessible, holistic view of the customer to design, market, and evaluate programs based on customer behavior.	Neutral - neither supports or detracts

Opportunity Name: Vendor Solution for DR Programs

Opportunity Summary



Normalized Scores (1-5)

Strategy	1.7
Capability	2.0
Operational	2.5
Risk	1.6
Customer	0.6
Regulatory	1.3

Operational Impact - Vendor Solution for DR Programs

Dashboard Strategy Capability **Operational** Risk Customer Regulatory

The operational impact analysis looks at the opportunity from an internal operational viewpoint. The analysis takes into account how the opportunity impacts both the efficiency and effectiveness of current company operations.

Please rate the project's impact on business efficiency.

Minor business efficiency support.

Please rate the project's impact on business effectiveness.

Minor business effectiveness support.

Customer Impact - Vendor Solution for DR Programs

Dashboard Strategy Capability Operational Risk **Customer** Regulatory

The customer impact analysis looks at the opportunity from an external viewpoint. The analysis explores the breadth of customer impact; i.e., how many customers would be impacted by the opportunity, as well as the depth of customer impact, as in the degree it changes something in their lives.

Please rate the project's impact on the breadth of customers (number of customers).

Neutral - neither supports or detracts from customer breadth.

Please rate the project's impact on customer depth (impact to individual customer).

Inhibits or detracts from customer depth.

New Norms In Our Conversations Reflect the Culture Change

- “What capabilities is it trying to serve, and are they already served elsewhere? (Goal: reduce redundant systems)”
- “Are the business capabilities that project is intended to serve in need of attention?” (Goal: finding the work that matters)
- “Are you “gold plating” again?”
- “Where is that project idea on our Solution Architecture Roadmap?”
- And my favorite:

“Do less.”

Some of the Takeaways

- It's possible in one year: to build a business architecture from the ground up, to drive project decisions from a rational alignment to strategy and an IT architecture roadmap; to build in governance and to staff it appropriately.
- Key Components:
 - ❑ The most obvious one: we had the will to do it.
 - ❑ Early successes demonstrated value & hard benefits; found further hard benefits as the year progressed.
 - ❑ Early & often communication across various sectors and management strings: Exec briefings, staff meetings, roadshows, presentations, all in order to manage change, to tout the benefits and opportunities.
 - ❑ Buy-in at all levels by the end of the year, but it wasn't necessary at the start. Early successes showed value, and the buy-in expanded.
 - ❑ Identified champions and leveraged them as we went.
 - ❑ Increased where and how business architecture could be used as we learned (goal setting, staffing, budget planning, regulatory reporting, etc.). Make business architecture a "Best Practice" you're sharing with new audiences.

Questions?

- Carol Manson
- Customer Programs, SDG&E
- Cmanson@semprautilities.com
- LinkedIn