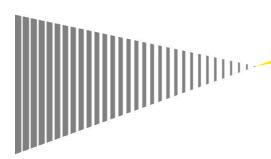
Smart Metering: from strategy to roll-out

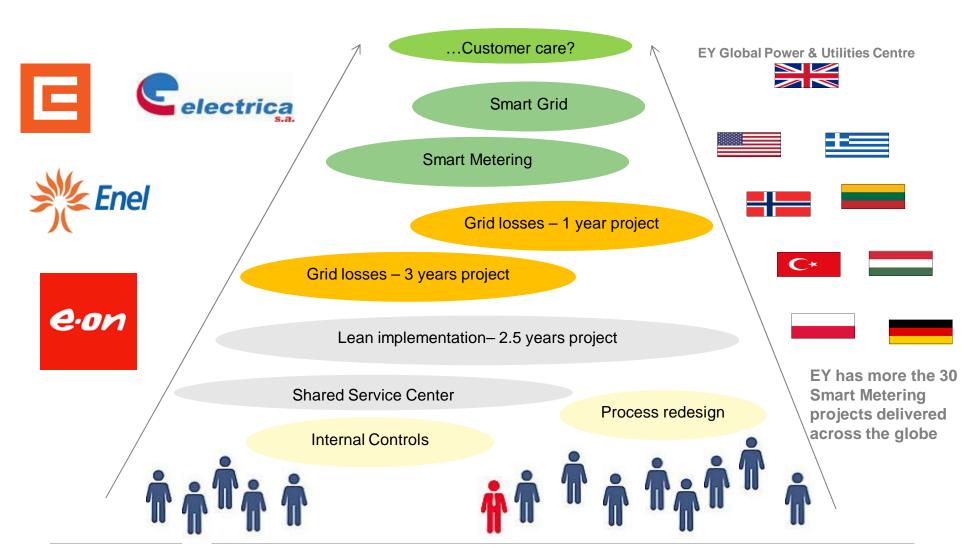
"Accesul la Rețea" Forumul Operatorilor de Rețele Electrice din România

Bucharest, 23 April 2015

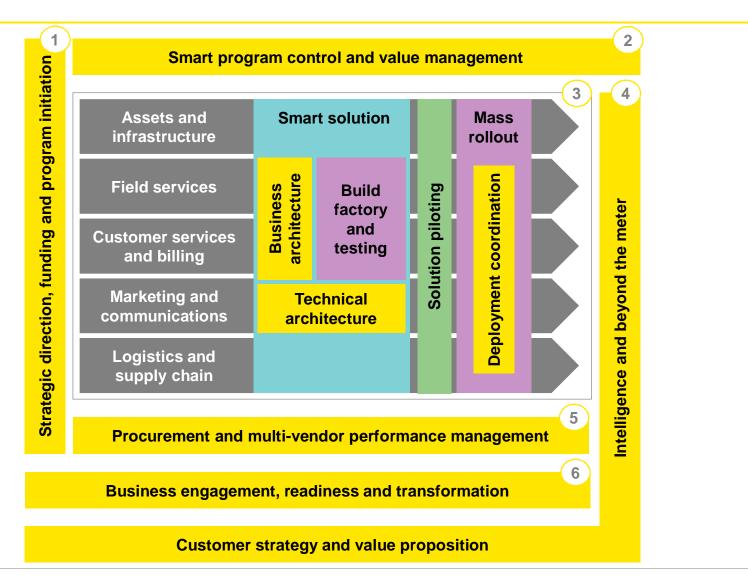




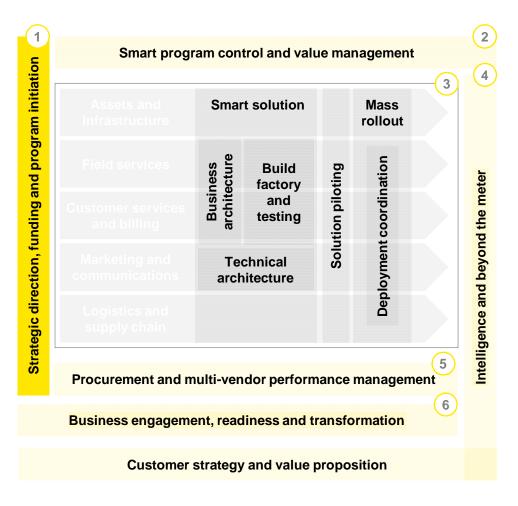
EY is the partner of Romanian energy companies in achieving strategic objectives



EY developed a six steps approach for delivering smart metering projects



Top management buy-in and involvement from the early stages is integral to success

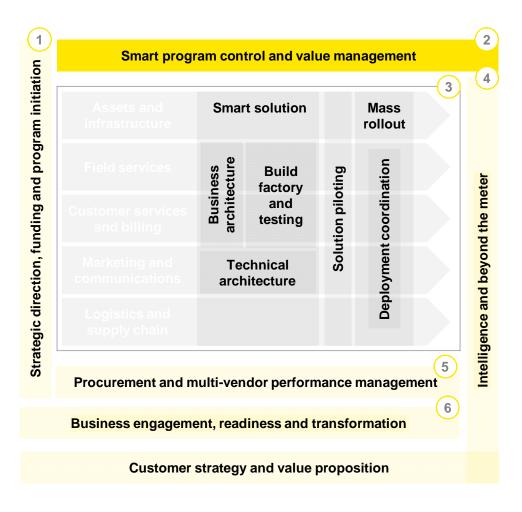


Lessons learned

- The majority of country smart metering business cases were positive however significant variation was recorded regarding costs or expected benefits (e.g. cost per meter range is from 77 to 766 EUR)
- "The business case is positive mainly after considering tariff recognition"
- Strategic alignment is essential for moving forward

Starting the journey. We support our clients in defining their smart agenda – including the strategy, rationale, motivation and economic business case. As early engagement is integral to success, we collaborate with our clients to ensure corporate alignment and obtain board level buy-in. We also help our clients' source and assess options to finance the considerable investment required to deploy smart.

A typical smart program will impact 70-80% of a traditional utility's operational organizational structure...

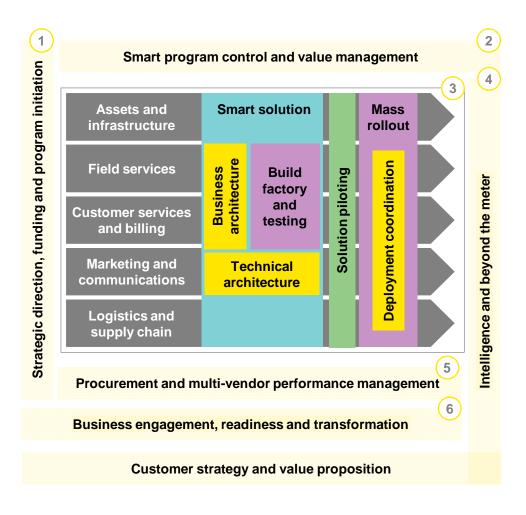


Lessons learned

- Allocate the right level of project management
- Set proper KPI's
- Provide independent and robust governance

Setting the framework. Smart projects are enterprise-wide people and IT change programs that require precise execution. We equip our clients with the proper project management structure to help them attain their strategic objectives. Throughout the journey, we also provide guidance to help make strategic decisions, mitigate risks, manage costs, accelerate benefit realization and unlock value..

... and proper management should have the "first time right" approach in order to ensure a healthy project budget



Lessons learned

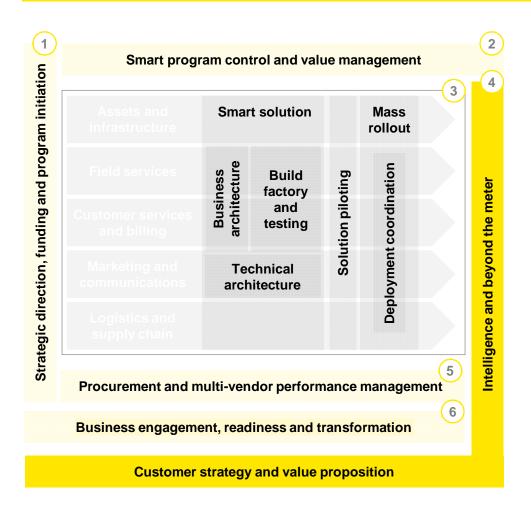
- The roll-out strategy has a significant impact on installation costs and on the expected benefits
- MDM system's scalability is very important
- Network security against cyber attacks is an increasing concern

Building the solution. We work with our clients to develop the overall business and technical architecture across the primary pillars of smart:

- Assets and infrastructure
- Field services
- Customer services and billing
- Marketing and communications
- Logistics and supply chain

We provide support in defining requirements, building processes, designing the technical architecture, launching pilots and evaluating the results. We help define the deployment model for the mass rollout, and assist in instituting a deployment operations center.

The customer represents the single greatest opportunity and risk to a smart program

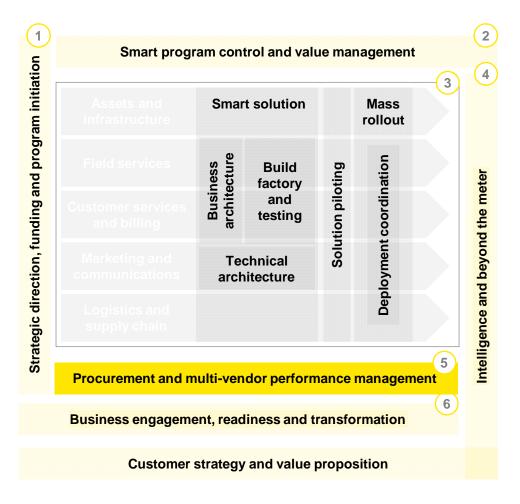


Lessons learned

- Time of Use tariffs (ToU) have affected lower income consumers which have not understood the principles and haven't adjusted consumption
- There have been privacy concerns around smart meters; with consumers rejecting the installation (although a decreasing trend was noticed)
- Accuracy of new meters was questioned as they usually show higher consumption than previous ones

Winning the customer. We help our clients structure their strategy to define the customer value proposition, minimize resistance to smart, control deployment, and deliver the desired customer experience. We support our clients in preparing for the smart data deluge and positioning to capitalize on opportunities enabled by smart infrastructure and data.

Proper supplier management, having in mind business requirements and... actionable contractual clauses can save the project in the roll-out phase

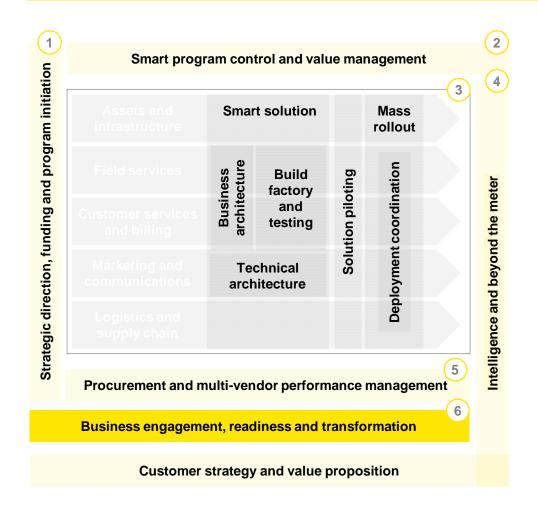


Lessons learned

- Vendor performance is a concern and it is always expected to cause delays; therefore, vendor management should be a priority for any smart deployment
- A must-have technical requirement of smart meters is the possibility to do firmware updates remotely
- Manage the suppliers based on fulfillment of business requirements not based on no. of units installed

Buying smart! Implementing smart means investing in a suite of complementary, but immature, technologies from both traditional and new players/vendors. Through our experience and expertise, we support organizations navigate the vendor/solution landscape, assist throughout the procurement process and prevent value-leakage post contract award.

Business engagement and buy-in can make the difference between increased internal efficiency or higher bureaucracy



Lessons learned

Live the procedure not just write it!

Readying the organization. To navigate this change, we equip our clients with the tools to ready their business, people and operating environment for the transition to smart. Effective change management increases the likelihood of business acceptance, reducing delay in adoption of new processes and technology, activating early benefits of smart, increasing customer satisfaction and ensuring a smoother transition to a smart world.

EY is a leader of the Romanian energy advisory market



Saulius Adomaitis

- Saulius is EY Romania Advisory Leader and Central & Southeast Europe Advisory Markets & Sectors Leader
- Saulius has extensive experience in advising in the energy sector across CSE



Valeriu Binig

- Valeriu is Partner within the Advisory practice
- Valeriu has 28 years of professional experience in the energy sector and he worked with clients from the entire value chain from generation to distribution.



Andrei Benghea-

- Andrei is Head of Performance Improvement and internal Energy Expert at EY Romania
- Andrei has extensive experience in implementing large scale projects in the energy sector

EY Romania Advisory Energy Leaders



Anca Albu

- Manager within Advisory department since 2006
- She has significant experience in Project management for IT systems implementation, Business transformation, process analysis and design



Tudor Montescu

- Advisory Manager in Performance Improvement working in Oil & Gas, Power & Energy
- Over 11 years of experience in consulting with Oil and Gas, Power and Utilities
- Experience with both strategy and functional projects



Mihai Draghici

- Manager within Advisory department, specialized in Power & Utilities sector
- Mihai has significant experience in leading performance improvement projects for major companies in Romania



Mircea Giurcan

- Advisory Manager in Performance Improvement specialized in energy sector
- Mircea has significant experience in business transformation, process analysis, risk assessment, shared service center set-up

EY Romania Advisory Managers



Thank you!

