

SIEMENS

Ingenuity for life

IoT Consulting

Co-Creation and Value Demonstration for the Internet of Things – from a Minimum Viable Product to a Proof of Value

[siemens.com/eba](https://www.siemens.com/eba)

At a glance

The world of energy systems is changing: most countries in the world have committed to drastically reducing CO₂ emissions until 2030. The majority of improvements are planned to come from energy intensive industries, commercial buildings, the transportation sector as well as from the energy sector itself.

Siemens Digital Grid provides you with world-class consulting to cope with the complex changes that drive the “Energiewende”.

We enhance your business through:

- A framework that links functional domains at our customers and ensures harmonization of all initiatives across them.
- World-class expertise as a global player that enables us to master the operational processes along the multi-modal energy system.
- Leverage expertise and dedicated experts throughout the entire customer journey.
- Agile definition and tracking of necessary initiatives through Customer Value Co-Creation (CVCC)

The challenge

Drastic changes are required in the energy transmission & distribution, public and private transportation, in the renovation and creation of infrastructure and in the industrial sector. The implications are not only more electric cars. An ever-increasing share of energy will stem from renewable sources and the required assets will be increasingly installed in so called distributed energy systems.

Private households become energy producers and are incentivized to participate in the economic markets. The industrial sector needs to adopt increased energy efficiency measures in their factories. Many of these improvements are only made possible by the revolutionary possibilities that advanced digital technologies have brought us in recent years, like a constant increase in computing power, decrease in storage costs and an increase in communication bandwidth.



The solution

With Siemens understanding and our leading role in shaping global markets, we can provide a joint *framework* to make sure that the transformation activities and organizational entities are in-sync and drive progress in a shared direction.

Our framework covers:

- **Business Environment**
Ecosystem and partner network, as well as interactions with other market participants
- **Organizational Capabilities**
Technical and organizational functions and processes
- **Technology Architecture**
Field devices and applications for data analysis and business support
- **Digital Repository**
Data management, processing and storage aspects of the networked system



From Minimum Viable Product to Proof of Value

Module I: Use-Case sharing and co-ideation

Based on multiple years of experience from various projects around the globe, we created a vast repository of energy and grid-related use-cases. In an industry proven approach, we document and structure our customers' pain-points to either map them to use-cases from our repository or to model new use-cases and co-create solutions.

Module II: Customer Value Co-Creation

IoT Consulting includes options for Customer Value Co-Creation where we jointly define objectives. To achieve these objectives, we iterate two steps: In the first step, gathered data is visualized and analyzed and a first *mockup* is created. Within this first step, the customer may be involved for further data requirement clarifications or provision of feedback. In the second step, a workshop is conducted to discuss identified data insights with the customer, evaluate the first mockup and develop it further to tailor it to customer needs and processes by sketching user stories and UI interfaces. The results are Proof-of-Concepts (PoC) that demonstrate that the technology can solve the functional objectives.

Module III: Value estimation

Identify the scope, breadth and depth of required change covering data, technology, organizational capabilities and the business environment.

Develop coherent value packs to reflect optimized use case deployment and estimate budgetary requirements. The result is a Proof-of-Value (PoV), that evaluates if the defined initiatives meet the targeted business value (i.e. cost saving, risk reduction, etc.)

Module IV: Integration road mapping

Design a strategy for realizing the future vision based on selected use cases including timelines, resource requirements, and best practice examples.

Further modules are:

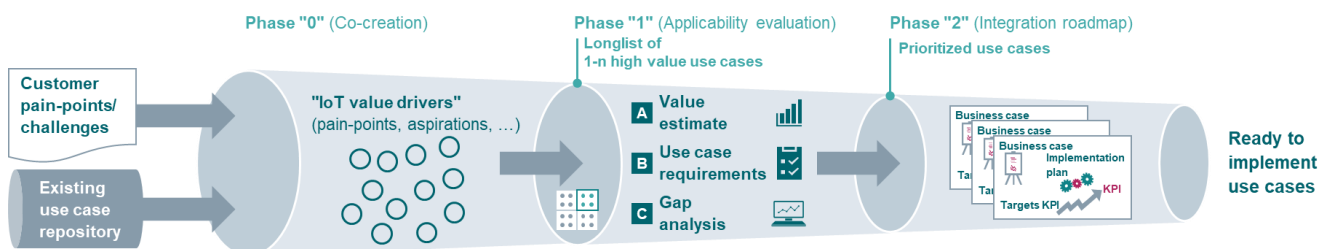
- Expert Support
- Architecture Analysis & Design
- Data Discovery & Analytics

How you can benefit

The most common entry point for our IoT Consulting approach is with the technological or operations departments at our customers and their challenges. Compare this to our other consulting offerings, Digitalization Ideation and Digitalization Strategy Consulting where we embark the process with the C-suite or Corporate Strategy and address fundamental questions of digital transformation. Furthermore, we appreciate that many customers already have ongoing initiatives and that is considered in our approach.

We also support our clients in:

- Cases where various departments have already started with "something" digital and you want to ensure that the various initiatives are targeted and harmonized
- Cases where multiple initiatives have been started but no clear expectation is formulated or the "language" to describe and measure the initiatives is missing.



Siemens 2019 Smart Infrastructure
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Article No. SIDG-B90003-00-7600 Dispo 06200

For the U.S. published by Siemens Industry Inc.
100 Technology Drive
Alpharetta, GA 30005
United States