Encompass Your Own Digitalization Story
Drive value creation for your business

Gudrun Lindemann
Senior Management Consultant
gudrun.lindemann@siemens.com

Digitalization is considered as one of the mega trends of this decade that is changing our world dramatically.

What are the fundamental changes induced by digitalization?
Infrastructure operators, such as power utilities are keen to embrace the challenges of digitization and seize the opportunity for creating a truly smart infrastructure for cities. As digitalization gathers pace, all domains of modern life – including the way people work and live – are at the cusp of profound change:

- New forms of housing and accommodation change the way we live
- Novel ways of travel, transport and mobility provide new possibilities to the ways we move
- New attitude towards, and new forms of work change our ways of working
- Increased consciousness of sustainability is changing our values and also spending and consuming ethics
- Shared economy is changing the role of ownership
- Evolving role of retail and shopping is changing our everyday life.

New forms of, and structures for, producing energy are affecting the role of communities and infrastructure utilities fundamentally.

In short, as historical system boundaries dilute, a new integrated system is emerging.

Three main aspects characterize the new integrated system:

- The systemic interplay of electrification, automation and digitalization is the basis for an efficient, cross-sector system
- Infrastructures merge into smart worlds and determine new markets and business areas
- Characteristics of the increasingly renewable energy sources make electrical energy the dominant energy type with new, digitally driven value chains, based on maximum flexibility.
Which fundamental questions arise for the power utility?

- What is my future role to play?
- Where do I earn money in the future?
- How do I keep pace with development?
- Which new capabilities do I need for this?

These questions are most typically raised by change agents and decision makers, while the company has the mandate to maintain its every-day business, constrained by time, financial resources, human resources, and the legacy system landscape etc.

The good news: There are solutions! Far from being an unsolvable issue, the range of options available today seem unlimited. For every challenge faced by society, there is a variety of solutions proposed by the industry that not only offer unprecedented degrees of freedom, but also a plethora of choices (see Figure 2).

Technologies, as well as hardware and software solutions for these challenges are at different stages of maturity. These stages range from being deployed in the field, to being available, and undergoing investment review by the utilities. Utilities have to consider options, such as large scale smart meter roll-out, investment in Business Analytics applications, etc. While the list of choices is large, the business case is often vague.

Figure 2 - Harness the Complete Sequence from Data Capturing to Business Context

“I don’t think there’s any consultancy out there like Siemens with their industry-leading Compass methodology that could take a utility as far as we’re planning to go.”

Brad Wasson, Program Director, Reduce and Shift Demand, NB Power

So, where to start?

All this leads utilities and infrastructure operators to raise the key question: How to manage complexity and keep track with the pace of change?

The simple answer is: A structured and comprehensive approach is needed to embrace the challenges, consider legacy systems, and design the appropriate digitalization strategy for your company today.
Siemens Digitalization Compass™ closes the gap between technologies and business value, systematically addresses the core dimensions across the business domains (see Figure 3):

**Objectives – What am I trying to achieve?** Business objectives an organization wishes to achieve.

**Business Capabilities – How can I do this?** Different ways an organization can execute a different activity depending on the extent of their business transformation aspiration.

**Technologies – What do I need?** Incorporate different digital grid technologies.

The structured approach guides and drives the utility on its way to become a “Utility of the Future” taking into account the existing legacy environment.

A phased systematic approach provides guidance from initial strategy design or review, according to the utility’s specific needs. This approach creates a digitalization roadmap, executable scenarios, and KPI based business cases in order to allow informed management decision making. The phased approach of the Digitalization Compass allows utilities to start with high-level strategy and roadmaps, and leads them to finely detailed implementation master plans.
Beyond that, Siemens can continue as an implementation partner, enabling the organization to manage and implement the required changes. In addition to Program Management support at the level required, we also provide our Value Management methodology to optimally manage the structured transformation program over the long-run.

**Getting started and finding out the optimal path and expected return on invest**

**Siemens as your partner for Digitalization**

- Our vast global project experience, know-how, and industry knowledge is at your service to make your business thrive in a digitalized world. The Digitalization Compass approach has proven its value for utilities around the world, now let it work for you!
- We help you plan your route!

Our aspiration is to turn your infrastructure challenge into business.

**Want to learn more?**

Available case studies:

- New Brunswick Power, Canada
- Aziende Industriale, Switzerland

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

Email: power-technologies.energy@siemens.com