



# IoT Solution Optimizer

IoT Virtual Twin Modeling  
for NB-IoT & LTE-M

Product Brief



# Complexity of LPWA design affects take-up...

## The industry lacks experience building & deploying battery-powered devices for Massive IoT



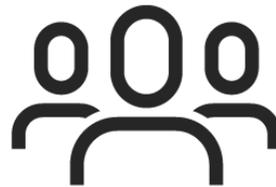
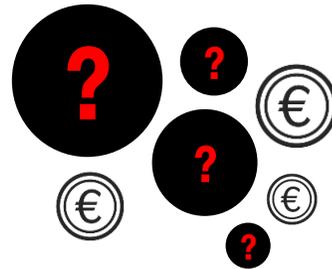
How does **network coverage** impact device battery life?



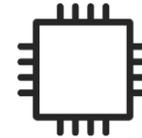
What **power saving features** apply to specific use-cases?



How do **mobility, temperature, roaming** affect performance?



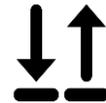
Companies face many  
risks, rising costs, low margins...  
**Endless trial-and-error**



How to adapt if modules are missing specific **capabilities**?



How do **protocol choices and encryption** affect efficiency?



When does app **communication** become top-heavy?

**Sounds familiar?** Tired of “proof-of-concepts”, need help securing “proof-of-business”?

# An IoT challenge, affecting the value chain...

To scale up business, a **new capability** is urgently needed for all parties



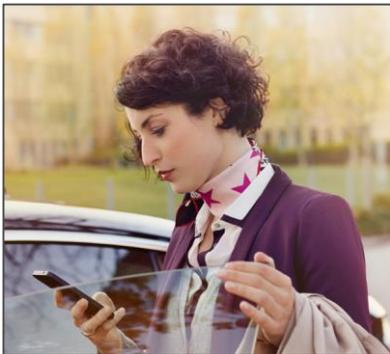
## Procurement Companies

- Scouting for suppliers across the fragmented IoT industry takes time
- Feature gaps are difficult to spot
- Design benchmarking is nearly impossible, few references available
- No tools to assess the fair market value in terms of performance



## Device Manufacturers

- Chain of prototyping cycles burning budget and delaying time to market
- Deployment impacts found too late
- New protocols are required for more efficient communication
- Costly field testing often needed to identify design improvements



## Operators, Service Providers

- No way to check how infrastructure changes impact customer devices
- Man-weeks of effort to calculate device battery lifetime for projects
- High risk that customer devices overload or damage the network
- Effort to explain complex features



## Consultancy / Integration

- Entering IoT consultancy requires a high initial investment
- Complex range, interdependencies of requirements, implementations
- Little experience in LPWA product design is a key knowledge gap
- Time is money, answers needed fast

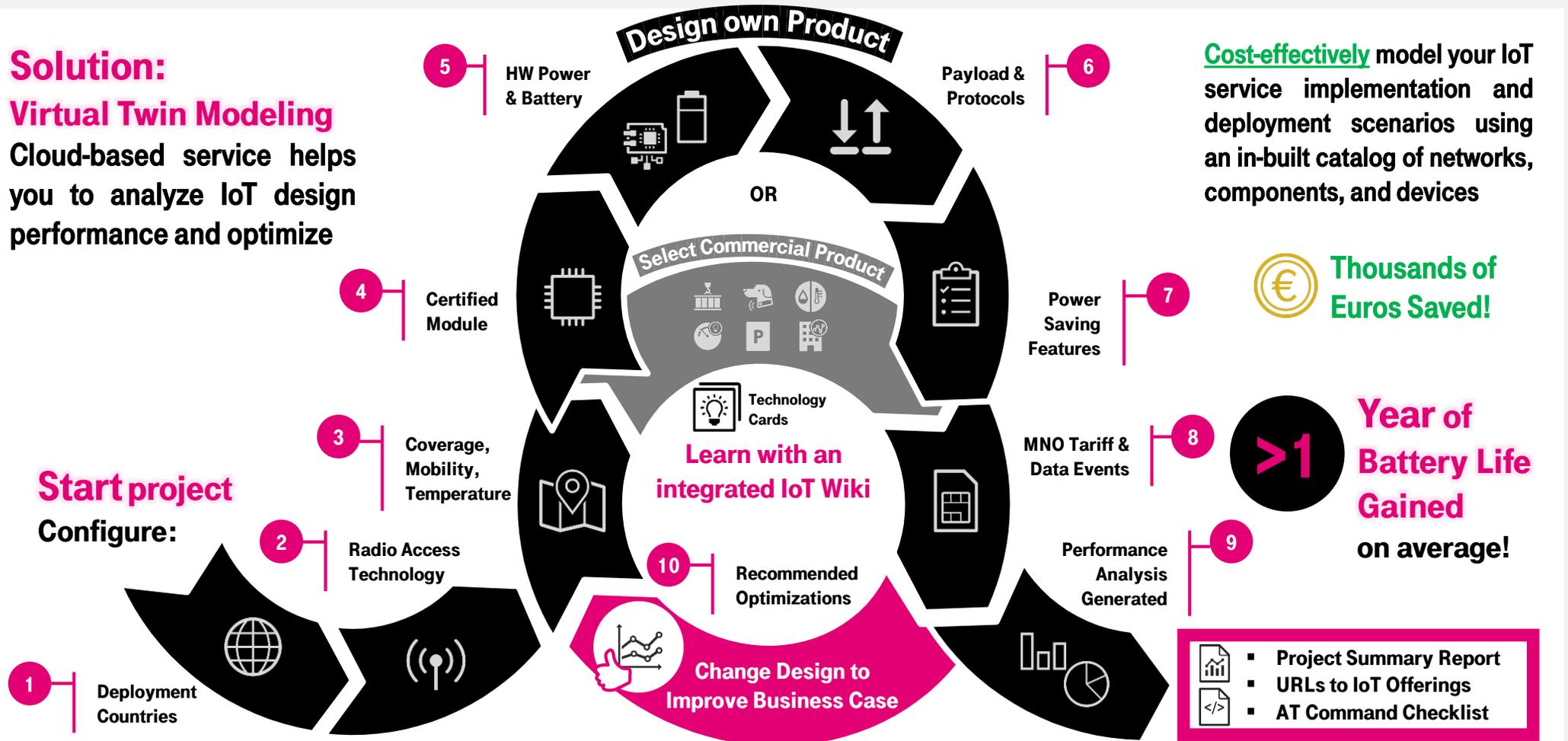
# Assess & optimize your IoT project in minutes

## Solution:

### Virtual Twin Modeling

Cloud-based service helps you to analyze IoT design performance and optimize

### Start project Configure:



Note: LTE-M support available in November, 2020

# How this tool can help you



## Improve your battery life

Identify in seconds if your solution has an **inefficient hardware or application**; implement recommended changes



## Leverage IoT supplier ecosystem

Explore the **growing catalog of devices and components** from our innovative, global partners



## Avoid costly mistakes

Identify pitfalls for your prototyping, **save costs in components, tooling, travel, and consultancy**



## Optimize for coverage

Learn how to **compensate for poor coverage**, and how to tailor your device for **network configurations**



## Peace of mind for your data

Geo-redundant, cloud-based service ensures scalability and availability with **EU data sovereignty** and **data privacy (GDPR)** compliance



## Gain time-to-market

Reduce prototyping cycles and avoid unnecessary, prolonged field trials; **get projects back on track, faster**



## Profit from in-tool training

Hundreds of integrated IoT technology **articles** to browse and learn from; discover when/how to use features



## Industry's performance database

**1000+ datapoints per module**, quality-controlled by supplier, to ensure reliable power consumption modeling

# Learn more!



**Flexible:** Licensing model with renewable subscription periods and add-ons

**Scalable:** Create unlimited projects with your account

**Personalized:** Fully white-labeled variants can be optionally delivered to enterprises

**International:** Implemented in over a dozen languages for your global business

**Future-proof:** Automatic upgrades with new features and capabilities

**Enabling:** Become a service reseller to onboard own customers, place products on shelf

Reach out to us: <https://tsi.iotsolutionoptimizer.com/contact>

