



Southwire®
WE DELIVER POWER...RESPONSIBLY



Harnessing Breakthrough Technologies to Stay Ahead of the Curve

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R&D | Southwire® Company

S O U T H W I R E® C O M P A N Y

AGENDA

- Southwire® Introduction
- What's Innovation?
- Introduction to SPARK™ & Grid of the Future Domain
- Innovation Methodology & Ecosystem
- Disruptive Grid Technologies & Global Trends
- Accelerating Innovation with innosabi solutions



ABOUT SOUTHWIRE®

WE DELIVER POWER... RESPONSIBLY®

- Leading wire and cable manufacturer in North America
- Produce half of the cable used to transmit and distribute electricity throughout the United States
- Found in 1950, Family owned
- \$10B in annual revenue with 64 facilities
- Committed to: Growing Green, Living Well, Giving Back, Doing Right, Building Worth, and R&D Innovation



Innovation is the ability to generate and execute new ideas—incremental, evolutionary, or revolutionary—and it starts with creativity.

-IDEO

What's Innovation?

Poll Question

What type of innovation is your top priority?

- **Incremental Innovation:** Small, continuous improvements to existing products, services, or processes.
- **Evolutionary Innovation:** Significant advancements that reshape offerings but build on existing foundations.
- **Revolutionary Innovation:** Radical, game-changing breakthroughs that create entirely new markets or industries.

Innovation at Southwire®

- Harnessing disruptive technologies
- Differentiated product leadership
- Customer centric innovation
- Market-driven research strategy
- Competitive product development
- Internal collaborations to gather insights and align innovation priorities.

Who are we?

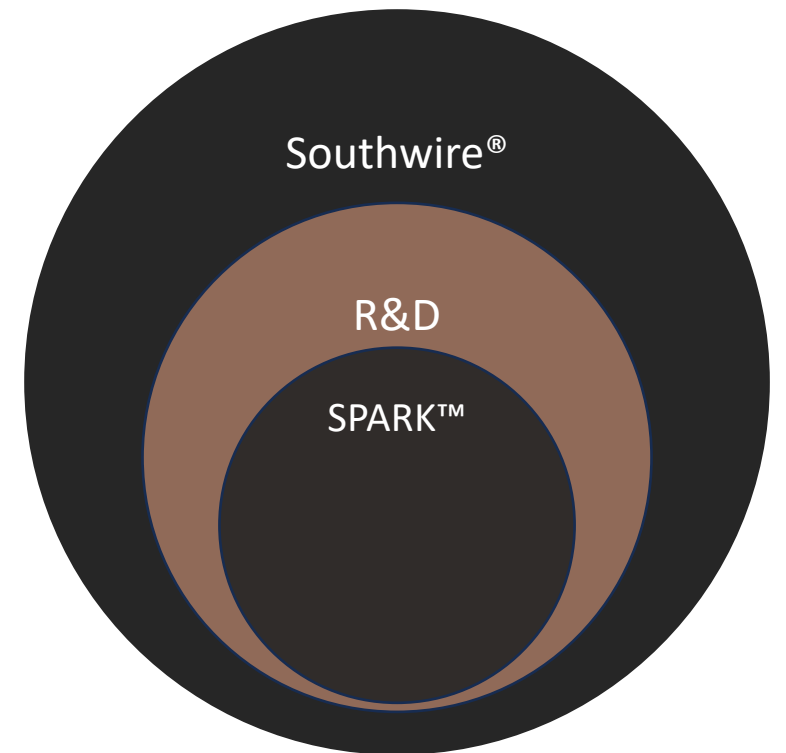


SPARKTM

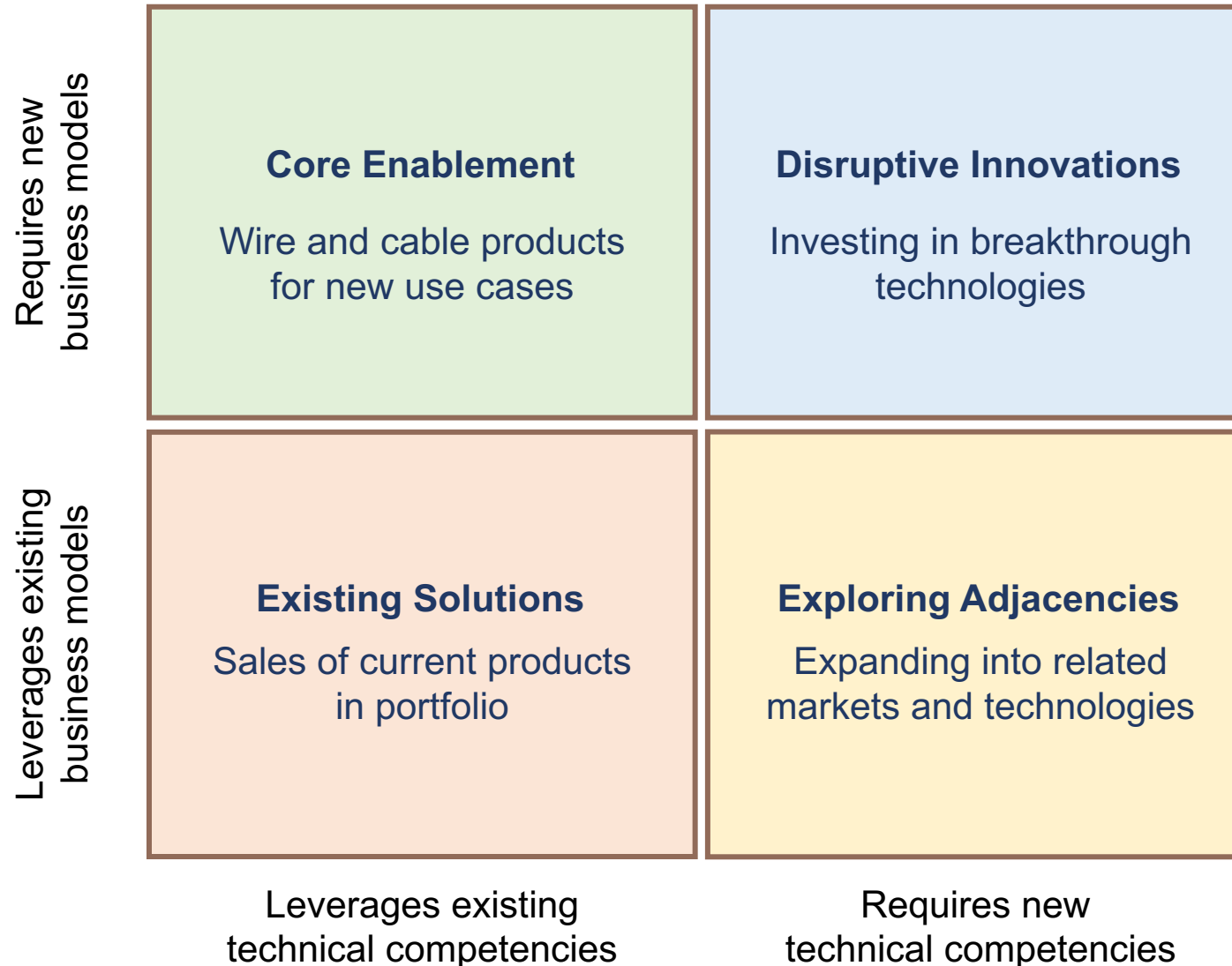
SparkTM is the catalyst for scaling innovation across the organization, driving profitable, responsible, and sustainable growth through new thinking, learning, and methodologies. Dedicated to **redefining power delivery**, SparkTM connects visionary talent, foundational research, and strategic partnerships to advance disruptive technologies and sustainable solutions.

With two domains, **Grid of the Future and Convergence of Data and Power**, focusing on disruptive technologies, SparkTM is shaping a smarter, cleaner, and more accessible energy landscape.

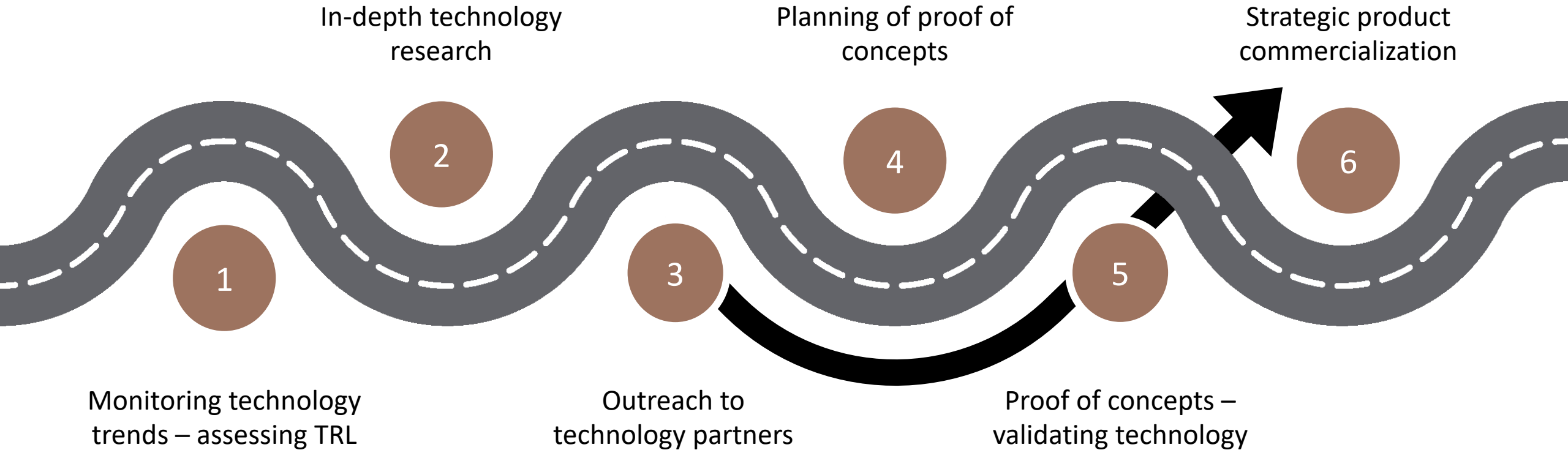
Located in the heart of Tech Square at Georgia Tech, SparkTM thrives in an ecosystem of startups, accelerators, and industry leaders, fostering collaboration to push technological boundaries.



Innovation Methodology



Innovation Roadmap



Poll Question

How would you rate the level of disruptive threats your industry or business is currently facing?

- **Minimal (Stable & Secure):** Little to no disruption; industry and market conditions are steady.
- **Low (Mild Shifts):** Some emerging changes, but existing models remain largely effective.
- **Moderate (Noticeable Impact):** Clear signs of disruption requiring adaptation and innovation.
- **High (Significant Upheaval):** Major shifts forcing strategic changes and transformation.
- **Severe (Existential Threat):** Disruption is fundamentally altering or threatening business survival.

Domain – Grid of the Future

Vision Statement

Powering Southwire® to **disrupt** the energy transition towards a smarter, more sustainable, and resilient grid of the future.

Mission Statement

Driving Southwire® towards **disruptive leadership** in the modernized electrical grid by **anticipating emerging trends** and leveraging relationships through **collective expertise** with an emphasis on **delivering strategic innovations** and **holistic solutions** that foster **profitability, resiliency, and sustainability**.

Ecosystem Management



Technology
Partners



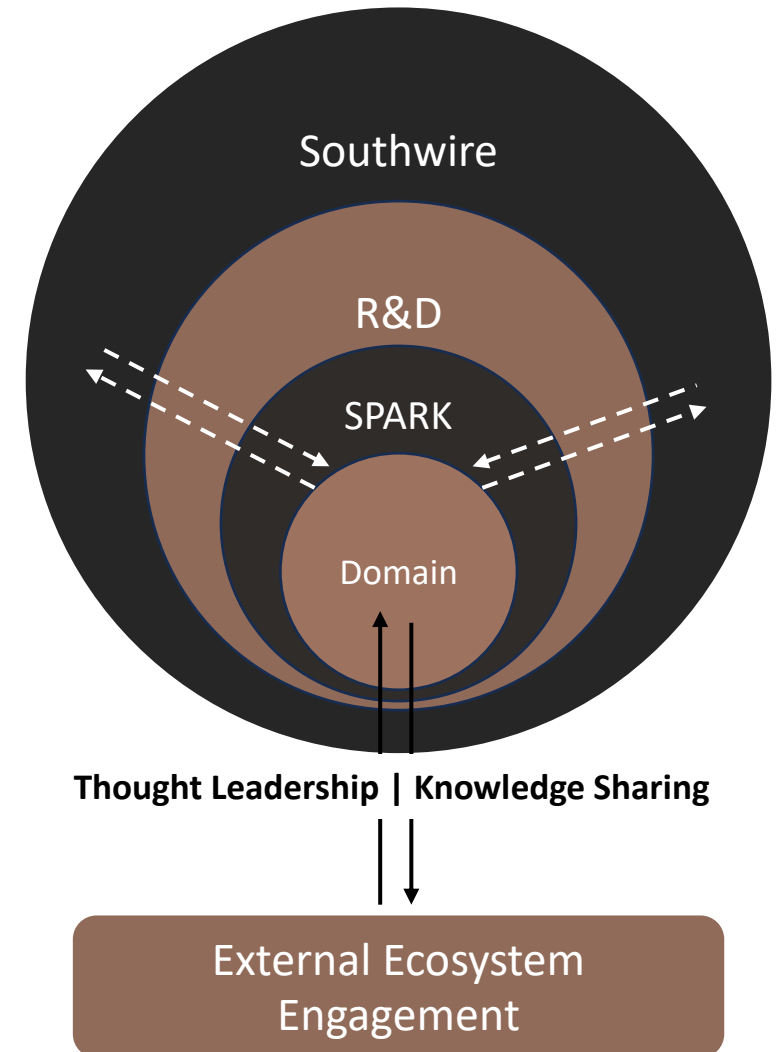
Research
Projects



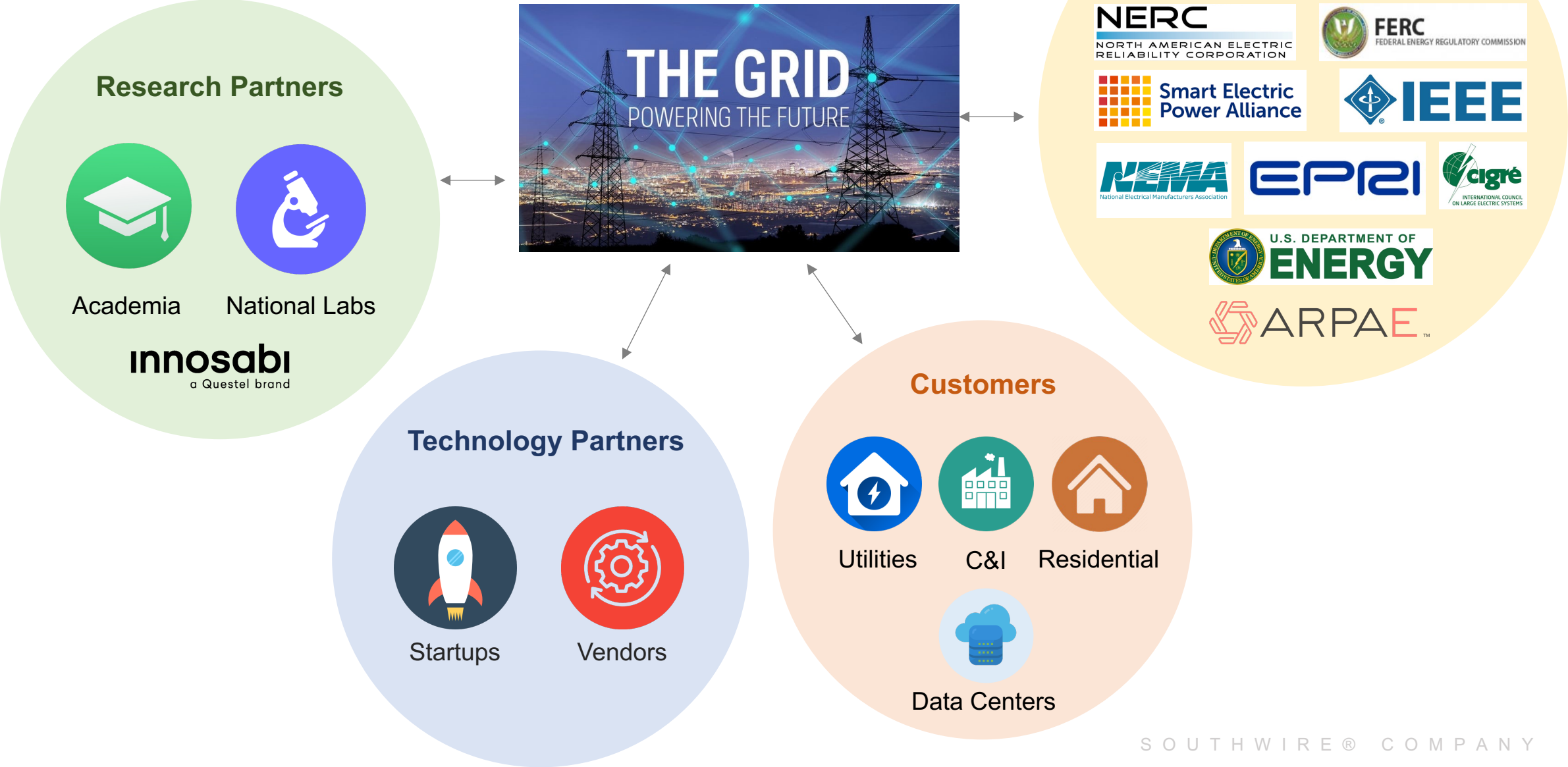
Proof of
Concepts



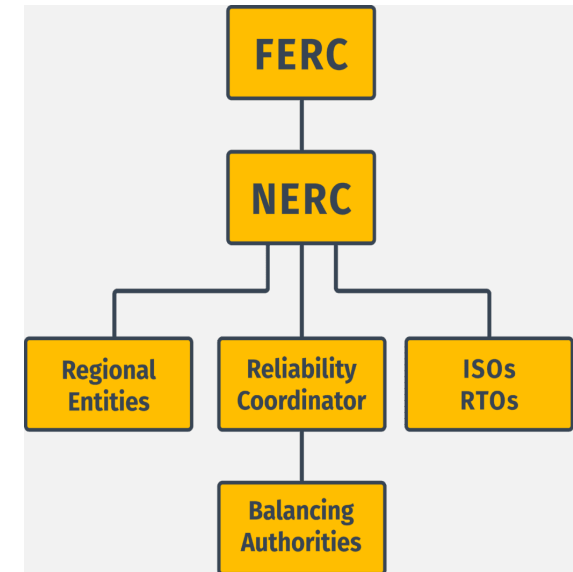
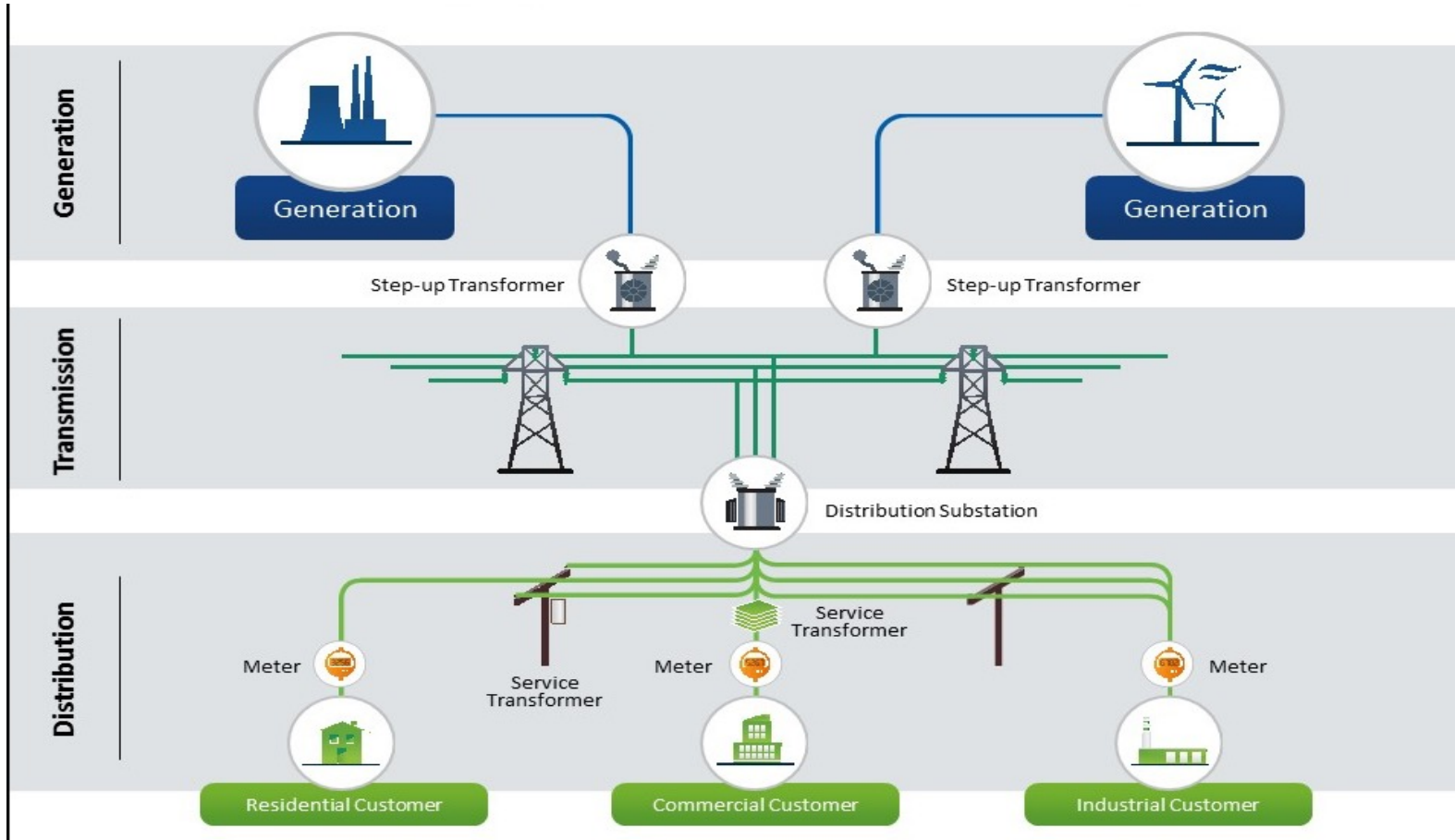
Industry
Engagements



Innovation Ecosystem



The Present Grid

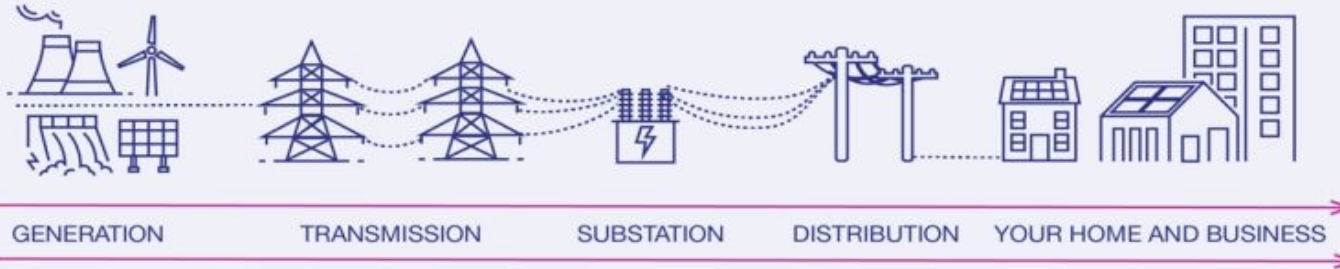


NERC
NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

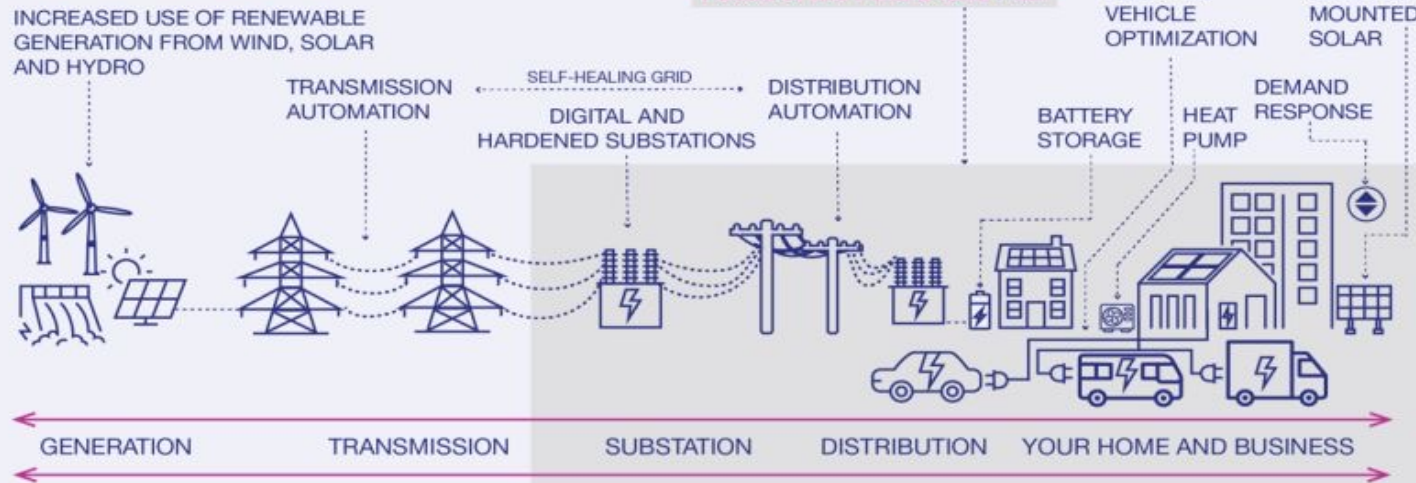
- Aging infrastructure – outdated technologies – lacking efficiencies.
- Power plants are 30+ years old. Power XFMRs are 40+ years old.
- Transmission lines are 25+ years old. 450,000 miles of lines.

The Grid of the Future

Yesterday's Grid

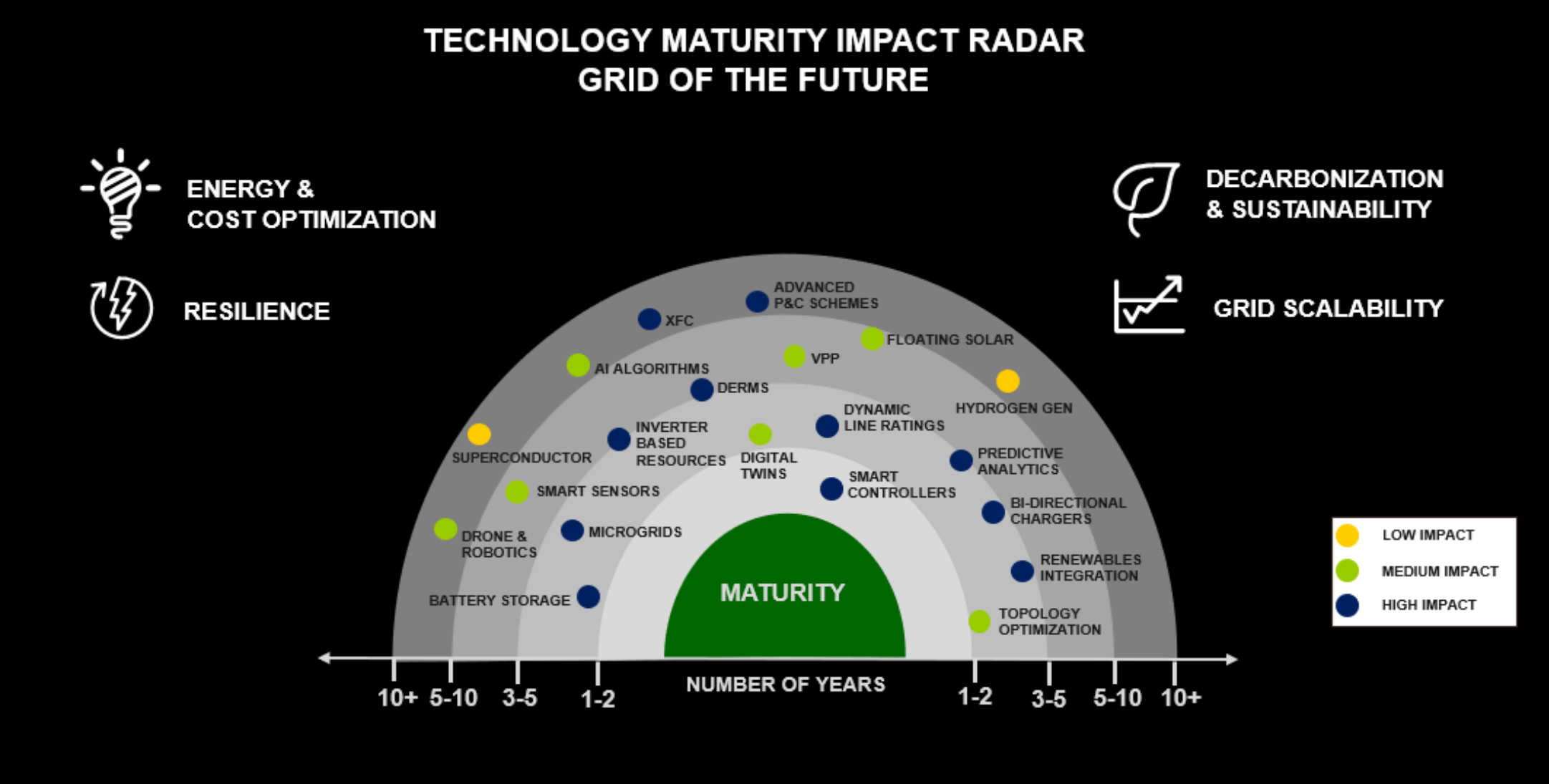


Tomorrow's Grid



- Adoption and implementation of Renewable Energy sources/ DERs
- AI / Automation of T&D systems for self-healing and power outage restorations
- Digital Substations, VPPs
- Introduction of energy storage
- EV loads and optimization
- Bi-Directional power
- Prosumer model

Disruptive Grid Technologies

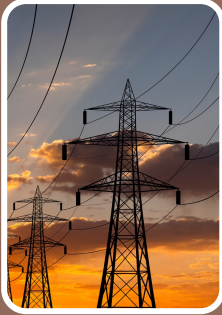


Technology Innovations

← Grid Resiliency, Reliability, Grid Hardening, Grid Enhancement, Sustainability, Electrification →



SMART GRID TECHS
(Bi-Directional, FD, VPP)



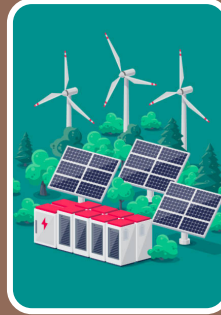
GRID ENHANCEMENT TECHS
(DLR, AAR, Optimization)



RENEWABLES INTEGRATION
(Battery, Solar, Wind, DER)



GRID ELECTRIFICATION
(HVDC, SMR, V2G)



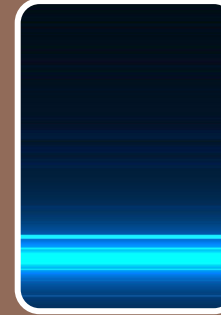
MICROGRID TECHNOLOGIES
(Controllers, Inverters)



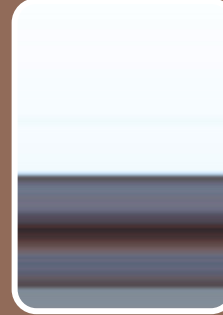
ENERGY MGMT SYSTEMS
(AI, Electrification, EVs)



ENERGY STORAGE
(BESS, Hydrogen, Supercaps)

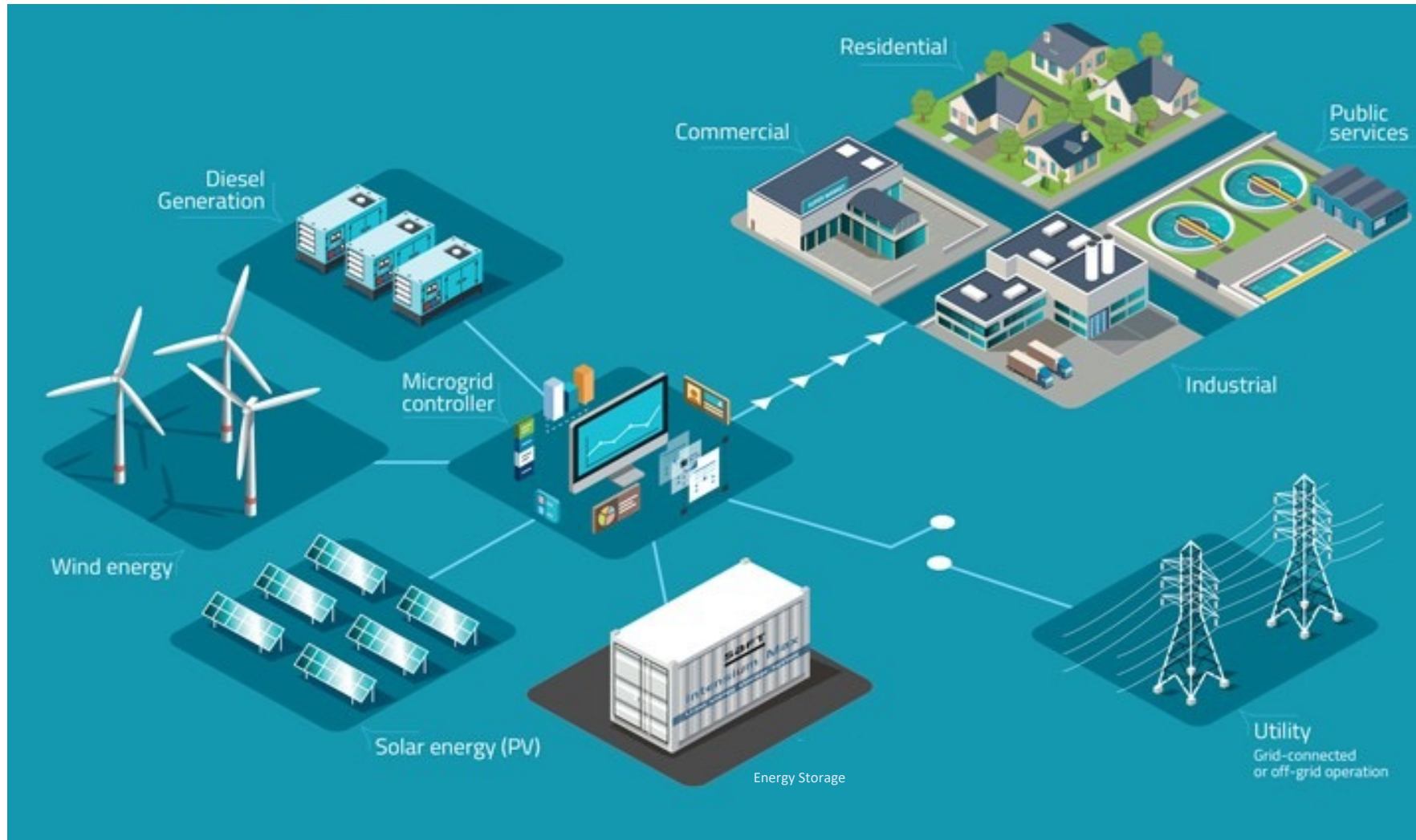


DIGITAL POWER SOLUTIONS



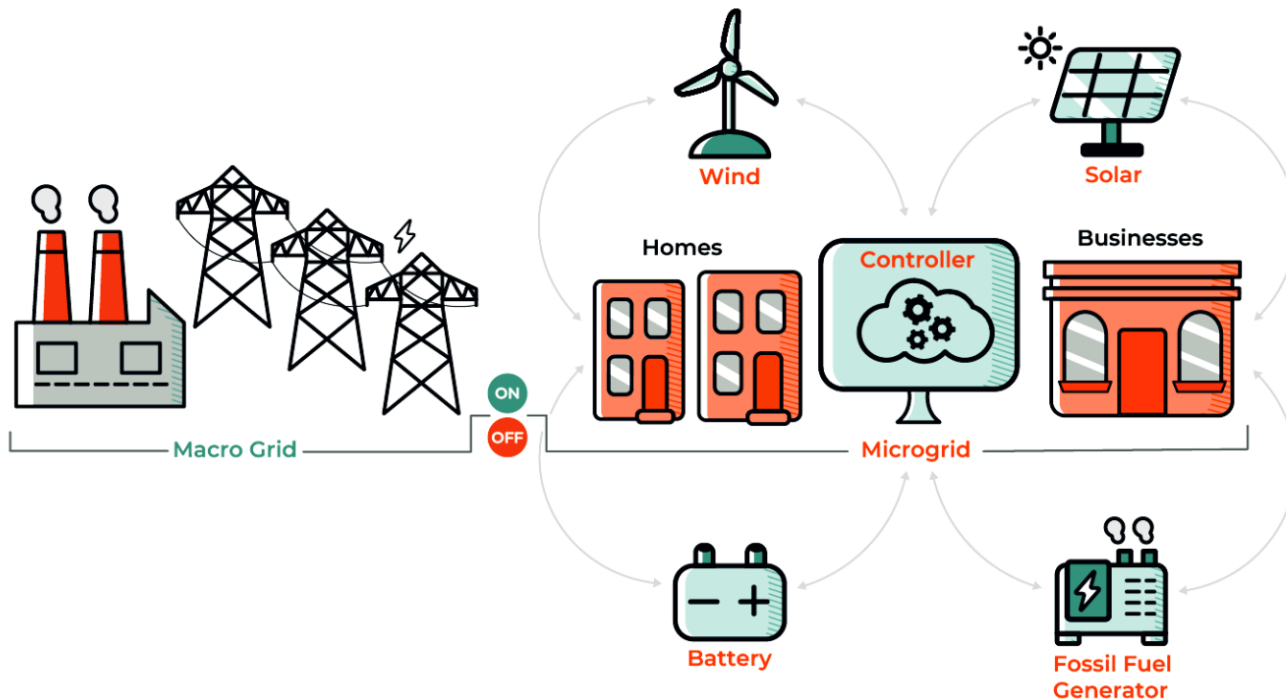
REGULATORY COMPLIANCE
(FERC, NERC)

Microgrid Ecosystem



Global Disruption Trends - Microgrids

MICROGRID



Cybersecurity

Artificial Intelligence

Interconnected
Microgrids

Virtual Power Plants

Off-Grid Power
Systems

Remote Monitoring

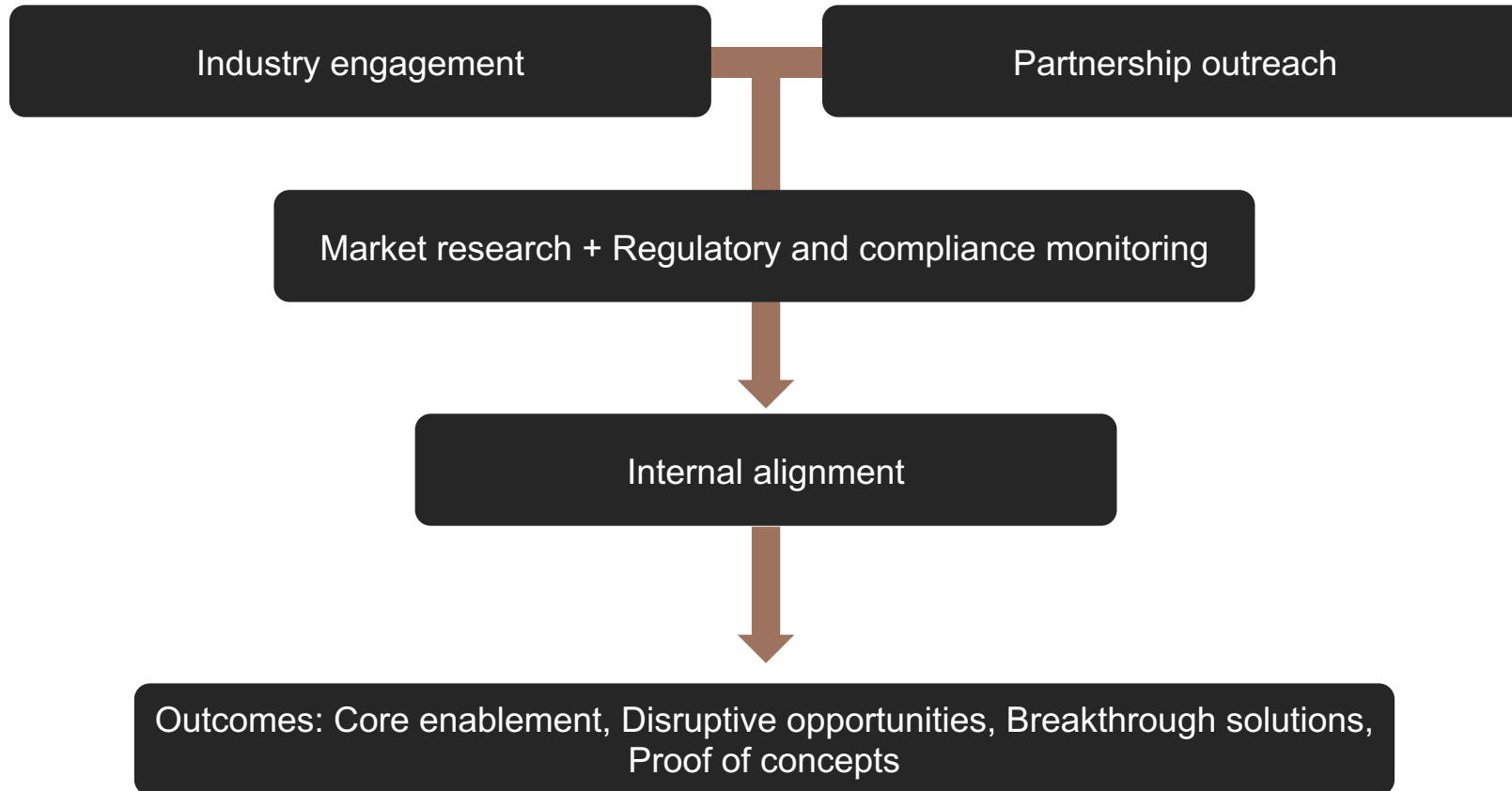
Battery Storage
Advancements

Transportation
Integration (EV)

Demand Side
Management

Grid Modernization

Ecosystem Management



Poll Question

How does the complexity of your innovation ecosystem compare to Southwire's?

- **Much Simpler (Streamlined & Focused):** Few stakeholders, clear direction, and minimal complexity.
- **Somewhat Simpler (Manageable Complexity):** Some moving parts, but relatively straightforward innovation process.
- **Similar (Comparable to Southwire):** A balance of internal and external collaboration, regulatory considerations, and evolving market demands.
- **Somewhat More Complex (Highly Multifaceted):** Multiple stakeholders, regulatory hurdles, and intricate R&D cycles.
- **Much More Complex (Vast & Challenging):** Extensive networks, global operations, and significant technical, market, and regulatory complexities.

innosabi in our Process

innosabi
a Questel brand

**Holistic innovation
management tool for:**

Technology trend monitoring

Ecosystem management

Cross-functional collaboration

Dashboard overview

POCs planning and tracking



**Welcome to your
open innovation
platform**

Email address

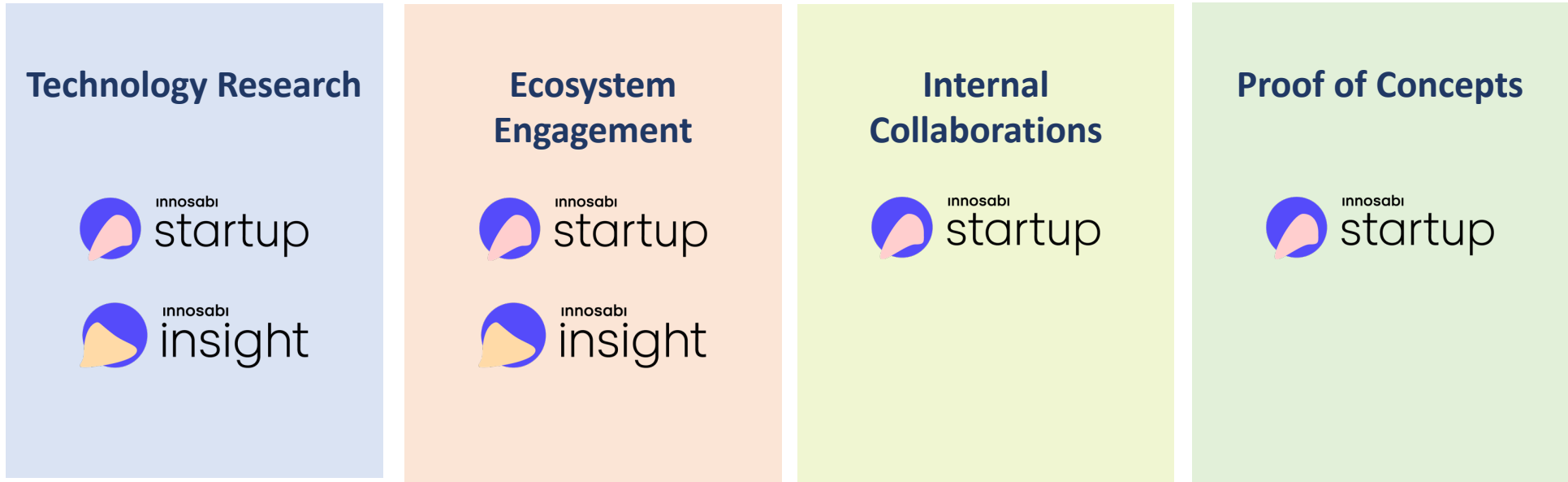
you@example.com

Password

[Forgot Password?](#)

Please enter your password

Sign In



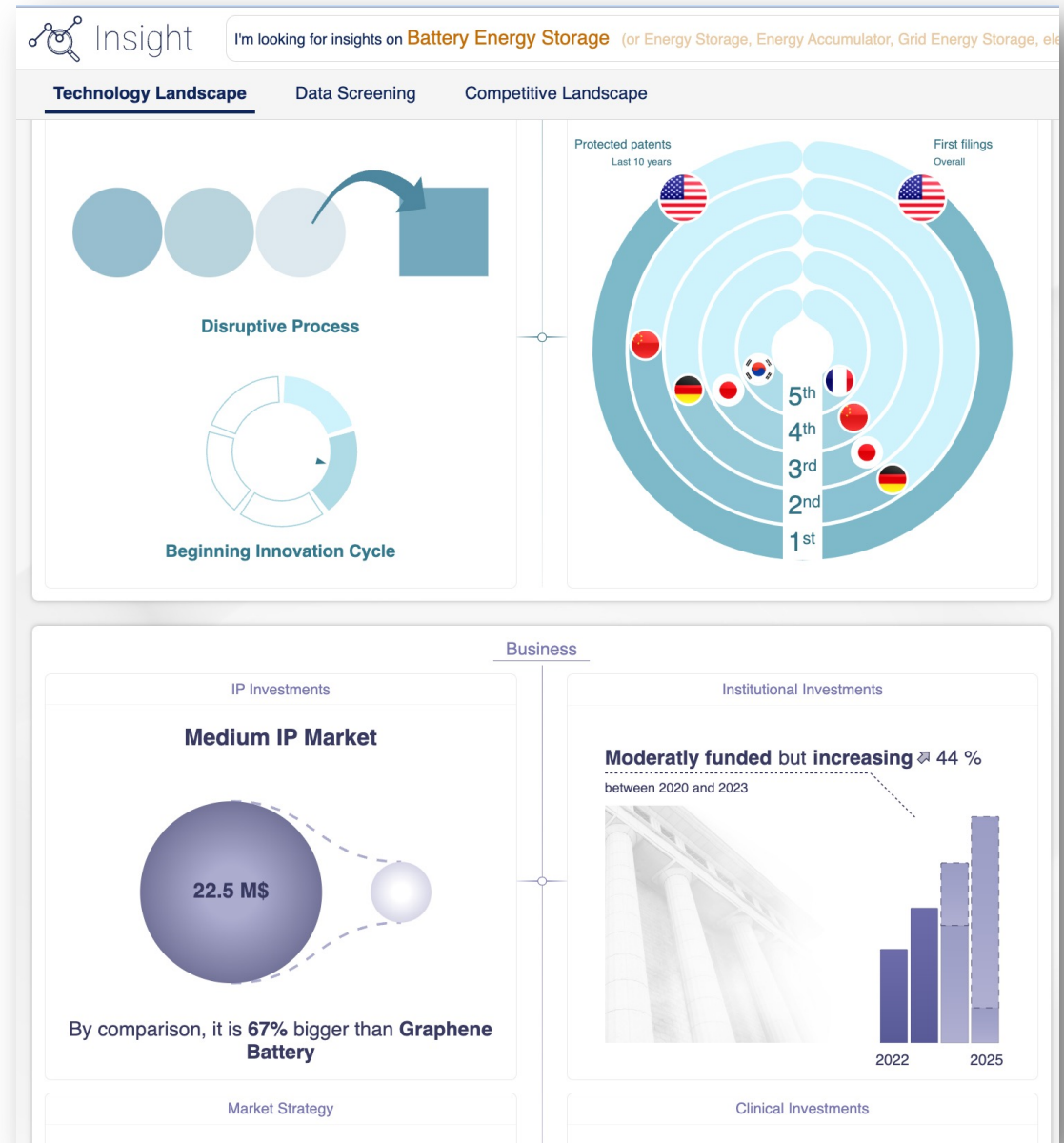
4 Strategic Initiatives



Strategic Partnerships

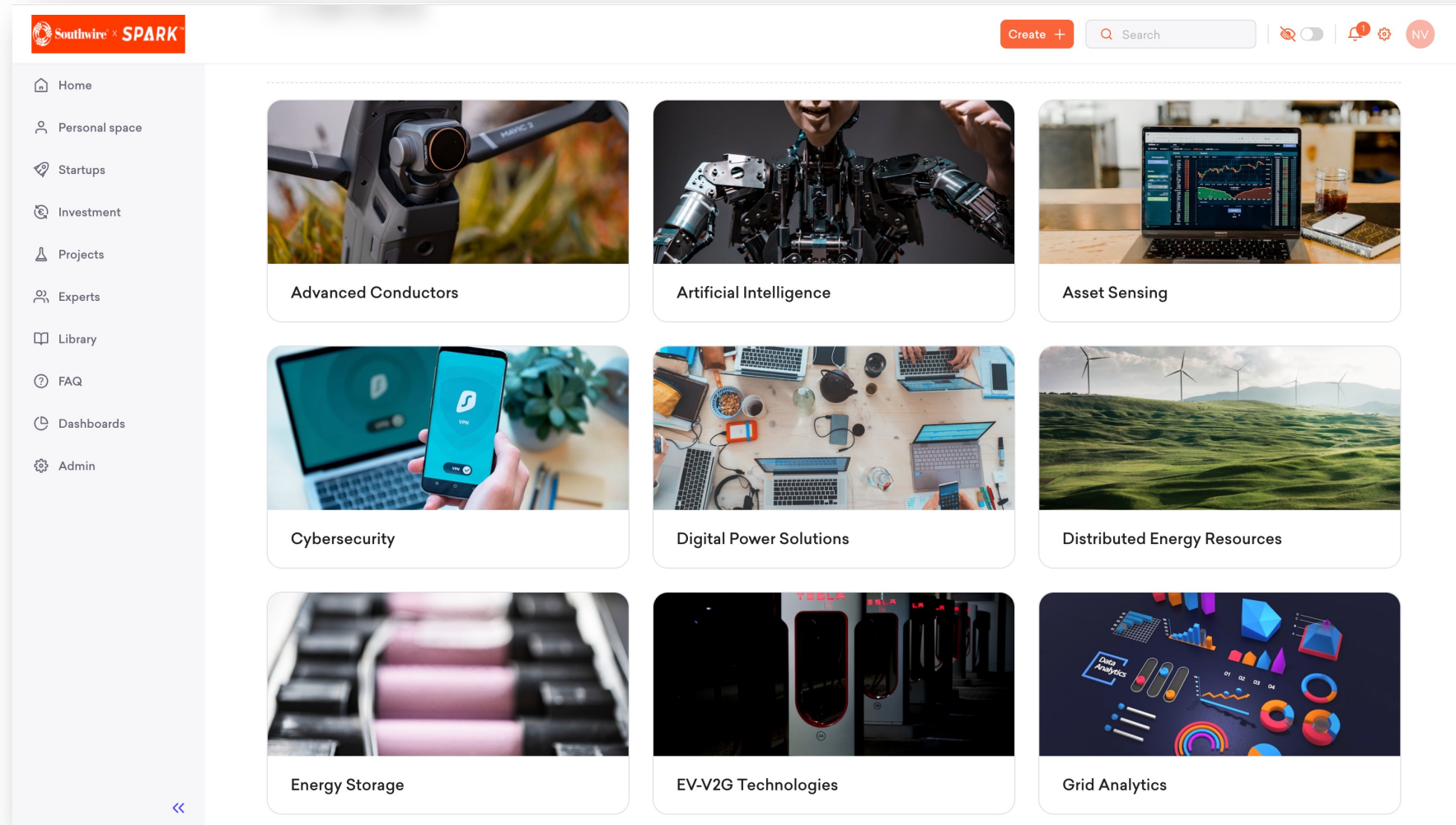
Technology Research

- Technology trend analysis
- Global IP/patent landscape studies
- Emerging trends for breakthrough opportunities
- Strategic business decisions



Ecosystem Engagement

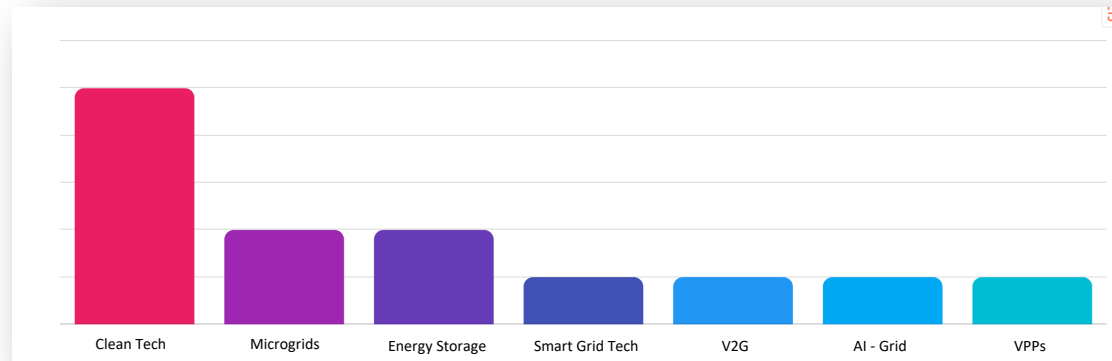
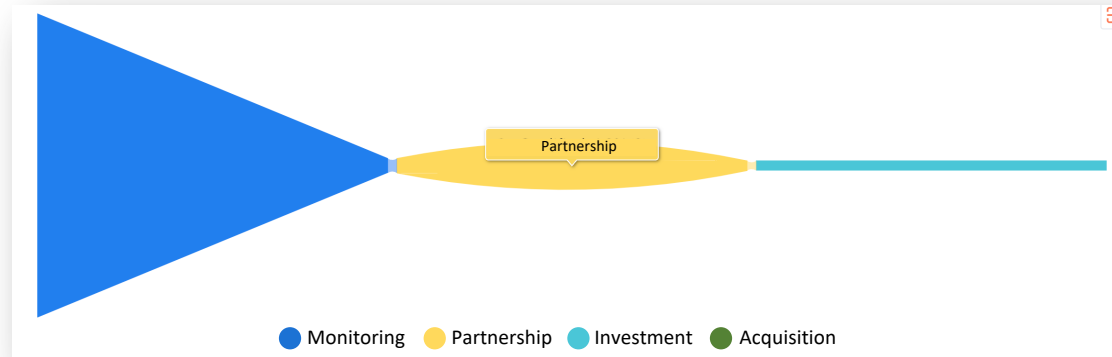
- Competitive benchmarking
- Domain technology segments
- Strategic industry partnerships
- Centralized innovation management



Internal Collaborations



- Strategic partnership alignment
- Technology & Industry scouting
- Dashboard & meaningful KPIs



ACTIONS & FOLLOW UP

ADD

Call
Meeting
Event
Note

ACTION COUNTER

Total
0
0
0
0

TIMELINE

Actions ▼
 Users ▼
 Date ▼

Clear all filters

February 2025

02/20/2025, 09:27 AM
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Proof of Concepts



- Technology feasibility assessments
- Validating business synergies
- Identifying commercial opportunities
- X-functional solution alignment



POC 1

Energy Storage, Grid Enhancement
Technologies, EV-V2G Technologies, Grid
Analytics

Domain(s)

Grid of the Future

Startup(s)



Solar Edge

Solar Edge develops cutting edge systems that meet the needs of the industry. They are based in the US and have manufacturing facilities ar...

1 - In the radar

Start date

📅 02/01/2025

End date

📅 10/01/2025

We're making the future current!
Interested to learn more or collaborate with us?

Gary.Walia@Southwire.com



T H A N K Y O U



Southwire®

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