



WELCOME

VIRTUAL MEETING WILL BEGIN AT

11:30 AM Central

Society of American Military Engineers

Omaha Post

April 9th Meeting



Omaha Post Meeting

Society of American Military Engineers

Omaha Post

April 9th, 2024 Meeting

Meeting Agenda

- Pledge of Allegiance
- New Member/ Guest Introductions
- Invocation
- Lunch
- Announcements
- Membership Spotlight
- Presentation
- Q&A
- Split Kitty Drawing
- Closing Remarks

Pledge of Allegiance



I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one Nation under God, indivisible, with liberty and justice for all.

Introductions

Introductions

- Welcome SAME Student Chapter Members
- Welcome New SAME Members
- Introduction of Guests

Invocation

Please join us in the invocation before we dismiss for lunch

Lunch

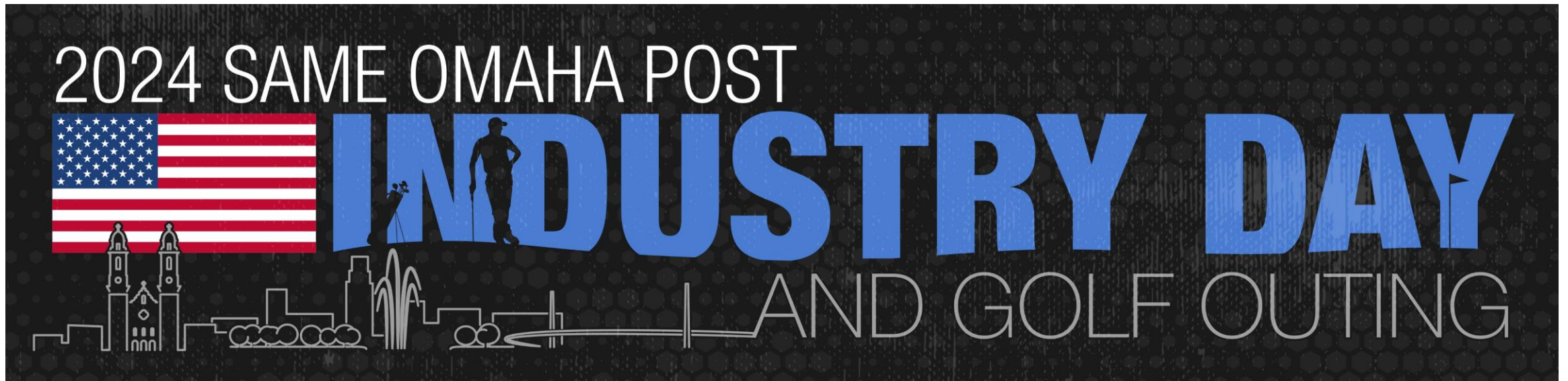
Dismiss by table

Announcements

- **The Black Hill Defense and Industry Symposium**
 - ▶ April 10-11 @ The Box Elder Events Center (631 Watiki Way, Box Elder, SD 57719)
- **SMP Competition Day and Awards Ceremony**
 - ▶ April 11th at Scott Conference Center
- **Meet the Buyers Lincoln**
 - ▶ April 24th – 8 AM-3 PM with lunch provided @Nebraska Extension in Lancaster County (444 Cherry Creek Rd Suite A, Lincoln, NE 68528)
- **May - Monthly Omaha SAME Post Meeting**
 - ▶ May 7th at Field Club of Omaha
 - ▶ Topic: Small Nuclear Reactors

Announcements

- **Omaha Industry Days**
 - ▶ May 29th-May 31st, 2024 at CHI Center



Membership Spotlight





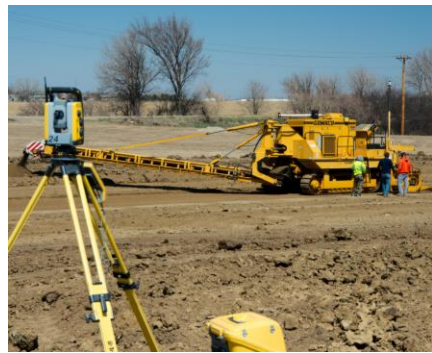
MEMBERSHIP SPOTLIGHT



COMPANY OVERVIEW

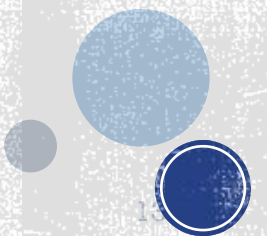
- Professional Civil Engineering and Land Surveying firm that established its roots in Omaha, Nebraska in 1980
- Our work includes a wide range of municipal, heavy highway, airport, railroad, utility, and commercial development projects
- Our staff of 25 includes three licensed civil engineers, three licensed land surveyors, three FAA certified sUAS pilots, qualified AutoCAD and MicroStation technicians, and six land surveying crews.
- Our professionals carry licenses in Nebraska, Iowa, Kansas, and South Dakota.





CORE SERVICES

- Civil Engineering
- Land Surveying
- Mobile LiDAR Scanning
- 3D Machine Control Modeling
- Aerial Mapping (Photogrammetry, LiDAR Scanning)
- Geographic Information System (GIS)
- Construction Contract Administration





OUR CLIENTS

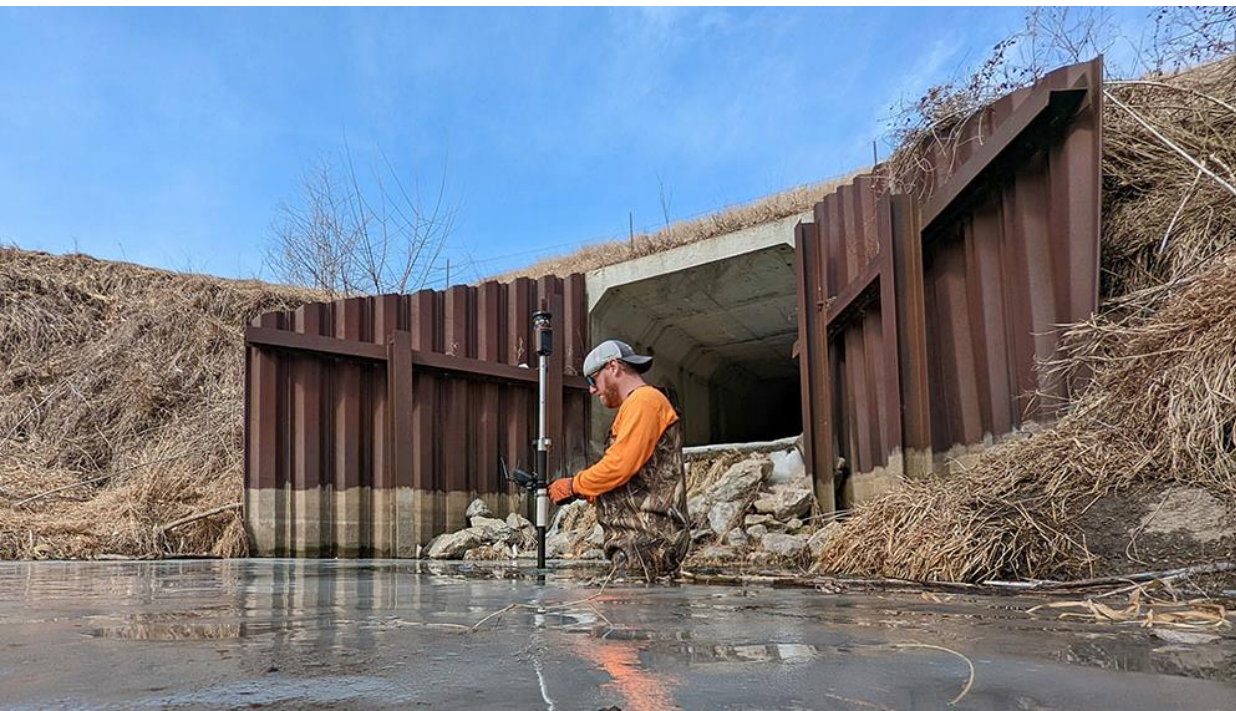




CIVIL ENGINEERING

- ❖ Site Design
- ❖ Roadway Design
- ❖ Parks and Recreation Design
- ❖ Land Development
- ❖ SWPPP (Stormwater Pollution Prevention Plan) On-Site Inspections and Reporting

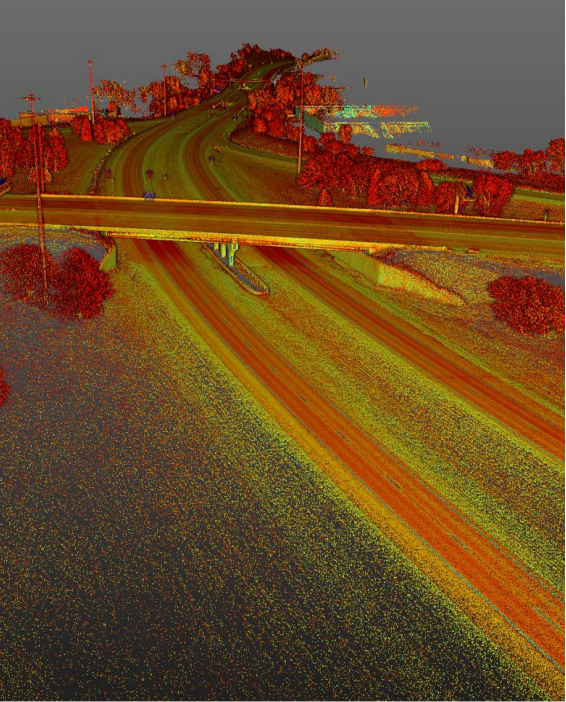




LAND SURVEYING

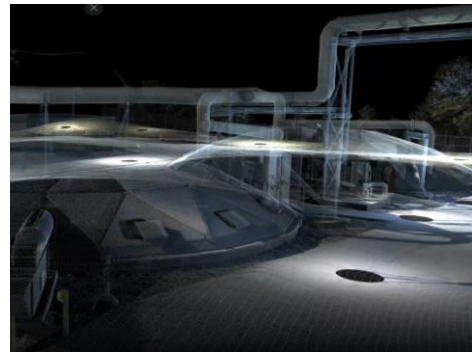
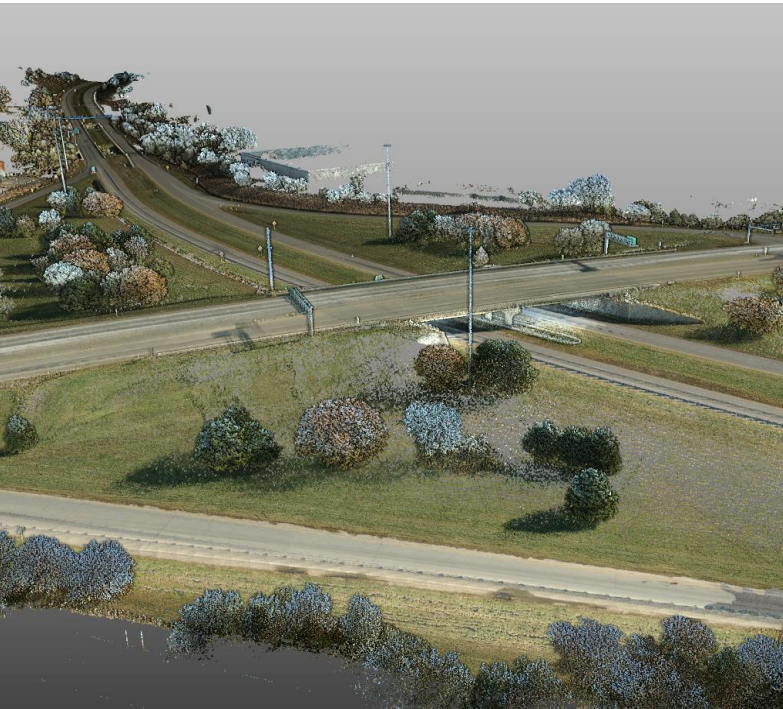
- ❖ ALTA/ACSM Surveys
- ❖ As-Built Surveys
- ❖ Boundary Surveys
- ❖ Construction Surveys
- ❖ GPS & Geodetic Surveys
- ❖ Right of Way Surveys
- ❖ Topographical Surveys
- ❖ Legal Descriptions
- ❖ Land Acquisition Descriptions
- ❖ Temporary and Permanent Easement Descriptions
- ❖ Horizontal and Vertical Control Networks





3D LASER SCANNING

- ❖ Terrestrial (fixed position) Scanning
 - ❖ Interior Building Scans
 - ❖ Facility As-Built
 - ❖ Topographic Surveys
 - ❖ Bridge Surveys
 - ❖ High risk environment surveys
- ❖ Aerial LiDAR
 - ❖ Mass volumetric Surveying
 - ❖ Large Scale topographic surveys
- ❖ Mobile LiDAR (Light Detection and Ranging)
 - ❖ Road and rail Surveys
 - ❖ Telecommunication and electric asset Surveys
 - ❖ Volumetric Analysis
 - ❖ Topographic Survey





AERIAL MAPPING

- ❖ Volumetric Analysis
- ❖ Aerial Photography
- ❖ Orthomosaic Imagery
- ❖ 3D Point Cloud Model
- ❖ Aerial Inspection

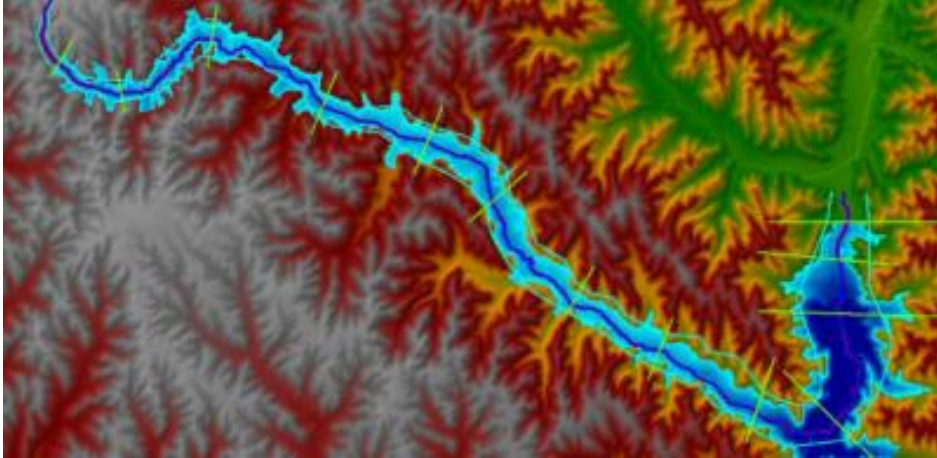




3D MACHINE CONTROL MODELING

- ❖ Heavy highway
- ❖ Runways
- ❖ Grading
- ❖ Parking lots
- ❖ Buildings
- ❖ Channels, etc.
- ❖ Locating and verifying horizontal and vertical control
- ❖ Setting more control for your network





GEOGRAPHIC INFORMATION SYSTEM (GIS)



- ❖ Geospatial Data Analysis
- ❖ Mapping and Cartography
- ❖ Asset Management and Spatial Database Management
- ❖ Environmental Analysis
- ❖ Data Visualization
- ❖ Imagery Analysis and Remote Sensing
- ❖ Site Analysis
- ❖ Zoning and Land Use Planning
- ❖ Infrastructure Planning
- ❖ Stakeholder Engagement
- ❖ Floodplain Mapping
- ❖ Watershed Planning
- ❖ Hydrology and Hydraulics
- ❖ Mixing Zone Studies





CONSTRUCTION CONTRACT ADMINISTRATION

- ❖ Our firm provides construction administration and construction observation services including acting as the Owner's Representative for various construction projects throughout Nebraska and Iowa.
- ❖ Our firm brings unique expertise and capabilities to each project, including an excellent track record in planning, design, construction contract administration, and full-time on-site construction observation services.
- ❖ During the construction phase of a project, we provide close supervision and related services to coordinate the project with the Owner, Contractor, and other stakeholders.





Winner of the ACEC
Engineering Excellence Award
The PLAYER'S CLUB

SECTION CORNERS
CORNER 1 - CONCRETE MONUMENT, WEST QUARTER CORNER OF SECTION 26
NE 33' TO WEST BRASS PLUG IN CULVERT WING WALL
EAST 48' TO TOP NUT OF FIRE HYDRANT
SOUTH 48' TO MAG NAIL W/ WASHER IN FENCE POST
NORTHING=06889.430'
EASTING=27049.936'

CORNER 7 - BRASS CAP, CENTER OF SECTION 26
SE 100' TO CURB, N 1/4 RIM OF WATER MANHOLE
WNW 434' TO 600 SPIKE IN EAST FACE OF POWER POLE
NW 432' TO 50' NAILS IN NE FACE OF POWER POLE
NORTHING=06906.072'
EASTING=27144.0125'

TABLE A NOTES
2. ADDRESS OF SUBJECT PARCELS:
PARCEL #1: 11911 DEER CREEK DR
PARCEL #2: 11999 DEER CREEK DR
PARCEL #3: 11998 DEER CREEK DR
PARCEL #4: N/A
PARCEL #5: N/A
PARCEL #6: N/A

CORNER 8 - BRASS CAP, NORTH QUARTER CORNER OF SECTION 29
NE 430' TO CROSSED 'N' IN TOP CAP
NW 430' TO SE CORNER OF TELEPHONE BOX



AWARD SPOTLIGHT





Society of
SAME
American Military Engineers



THANK YOU!

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Future-Proofing Facilities

Eric Lotz

National Federal Business Manager
(GSA, DHS, DOT) - Siemens



Future-proofing facilities

Critical Steps to Success

Presented to: SAME-Omaha Chapter

Date: 4/09/2024

AGENDA

1 Siemens Overview

2 Sustainability & Technology

3 Smart Power Systems

4 Q & A



Eric Lotz

**National Federal Business-Director
(Civilian Agencies)**

Siemens AG

Smart Infrastructure



Digital Industries



Mobility



Siemens Healthineers¹



Portfolio Companies



Siemens Advanta



Our comprehensive offerings

Electrical Products



Building Products



Electrification & Automation



Grid Software



eMobility



Regional Solutions & Services



Services

Global Business Services



Siemens Real Estate



Siemens Financial Services



Leader in digitalization, automation and electrification

¹ Publicly listed subsidiary of Siemens; Siemens' share in Siemens Healthineers is 75%

Key Takeaways: Critical Steps to Future Proofing



Siemens United – One Stop Shop

Global critical infrastructure expertise and innovation:

- Smart Infrastructure – Digitalization, Automation and Electrification
- Power systems and energy resiliency, clinical equipment and operations
- Solutions and advisory services – sustainability, resiliency and decarbonization
- Use cases per resilient adaptive climate concerns

Introduce – Design Phase

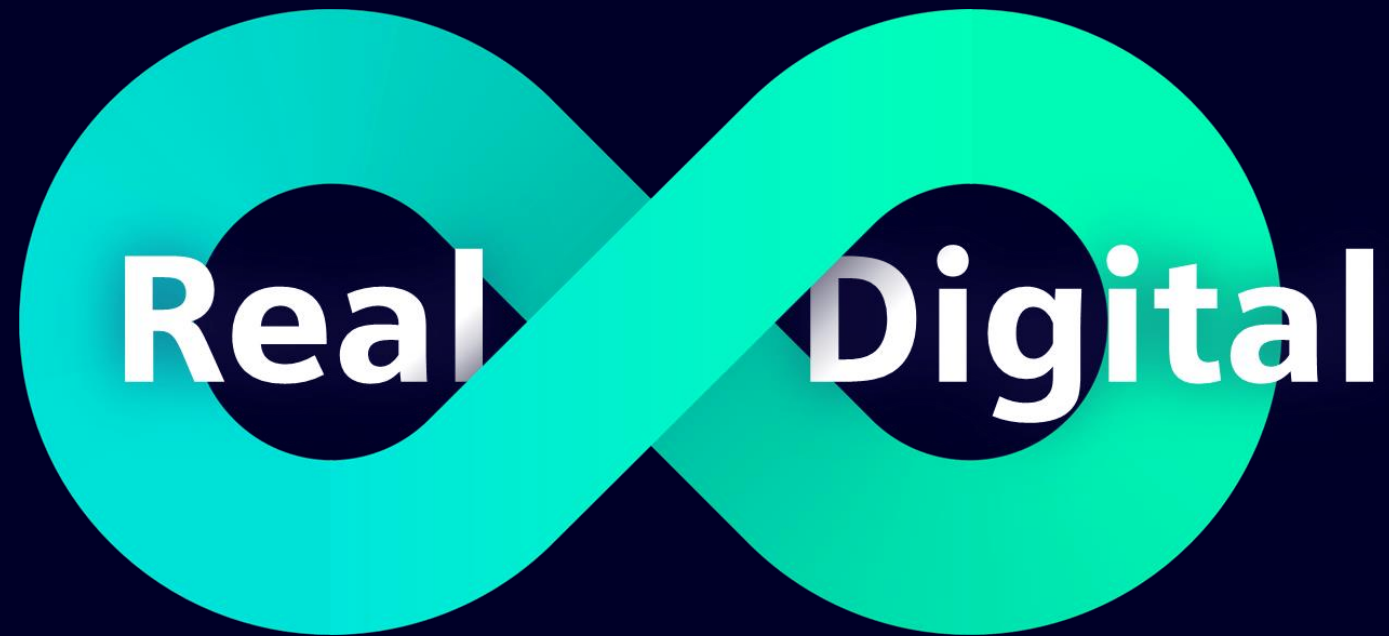
- Ensure future adaptability
- Realize all efficiencies
 - Cost
 - Infrastructure
 - System
- IDAC
- Pre-construction Services

Synchronize Milestones

- Lead times
 - Critical Infrastructure
 - Power Systems Gear
- Funding – coordinate with solution implementation

Technology drives sustainability

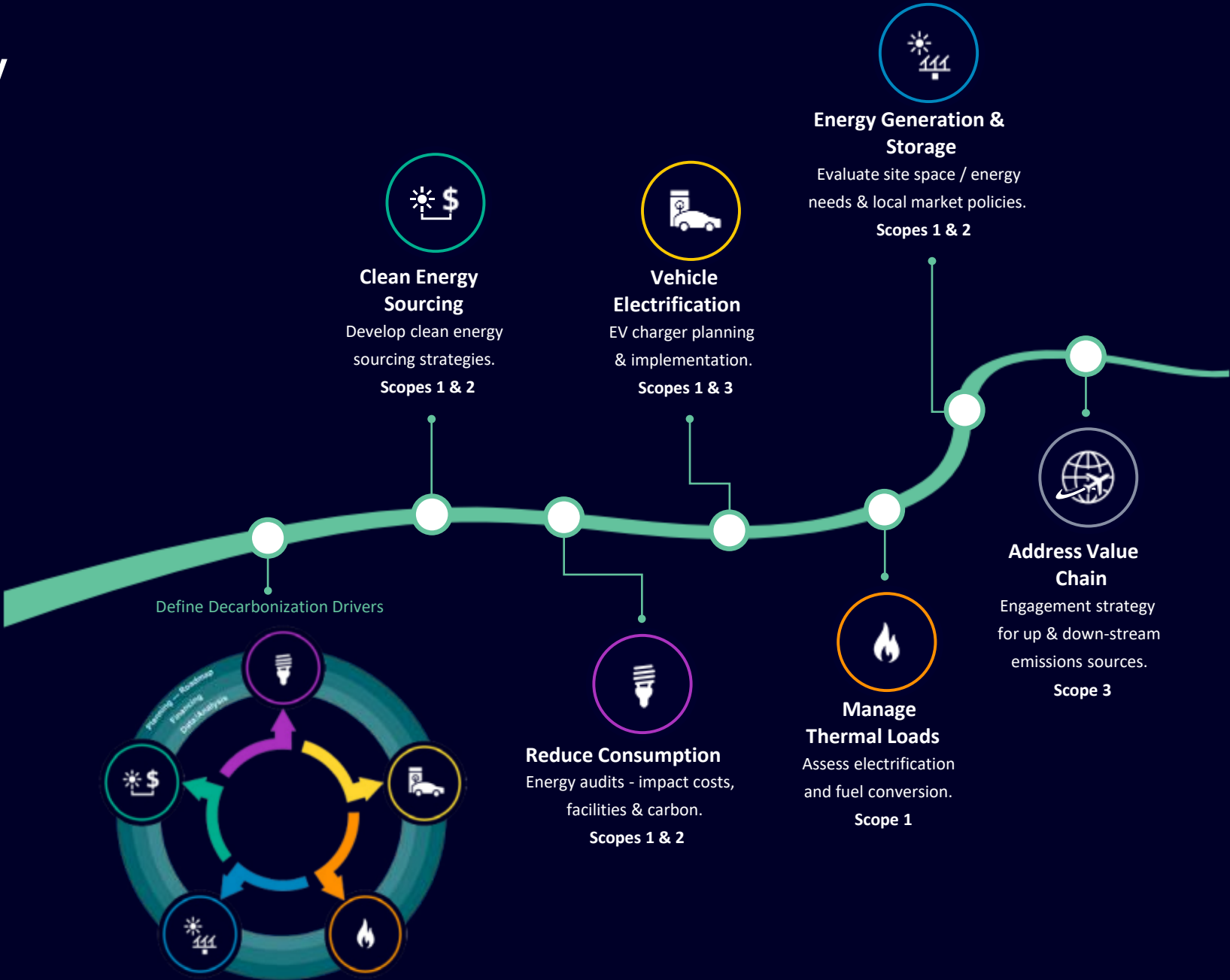
We combine the real and digital worlds to make our customers more competitive, resilient and more sustainable.



Sustainability value propositions

<p>Decarbonization, resource efficiency, and people centricity through all businesses</p>	 <p>Decarbonization & energy efficiency</p>	 <p>Resource efficiency & circularity</p>	 <p>People centricity & societal impact</p>
<p>Industry</p>	<p>Energy optimization and carbon footprint management across product lifecycle and supply chain</p>	<p>Optimal resource and material use, elimination of waste, reduced time to market and productivity</p>	<p>Ergonomics and safety in manufacturing and workflow optimization, product safety</p>
<p>Buildings</p>	<p>Building energy efficiency, sustainability consulting, modular solutions and services</p>	<p>Optimized asset performance, availability and lifetimes, building space utilization</p>	<p>Healthy indoor environments, fire safety</p>
<p>Electrification</p>	<p>Renewables integration and electrification in real and digital domain, eMobility</p>	<p>Optimized asset performance, availability and lifetimes, electrical asset protection</p>	<p>Access to reliable and resilient electricity, electrical safety</p>
<p>Mobility</p>	<p>Efficient public transport, e.g., high-speed, battery, hydrogen trains</p>	<p>Extended lifecycles from reparability, reusability, or refurbishment</p>	<p>Data-driven services for increased system capacity, availability, and reliability</p>
<p>Financial Services</p>	<p>Financing new clean technologies, new business models, and sustainable innovation</p>		

Path to Sustainability



Digital Solutions



SIEMENS



*How do I meet
our **emission
targets?***

Sustainability Manager



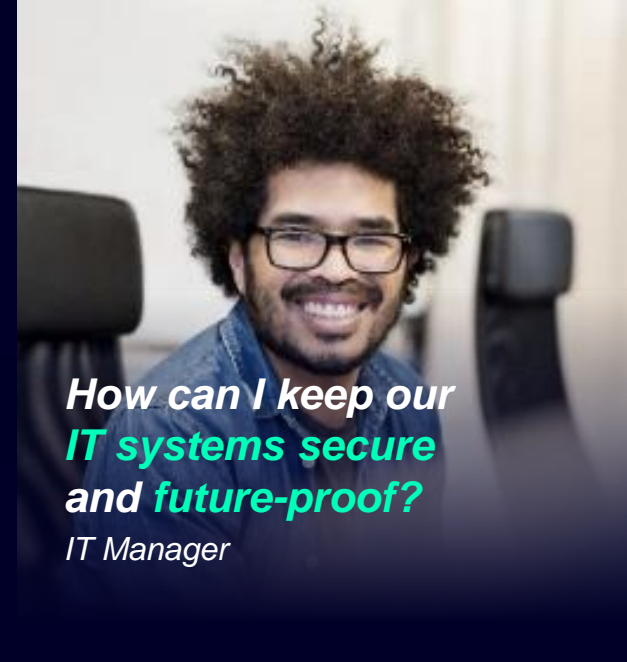
*How can I improve
operational efficiency
and reduce total costs?*

Building Operations/Technical FM



*How can I create a **secure
environment for
employees?***

Security Manager



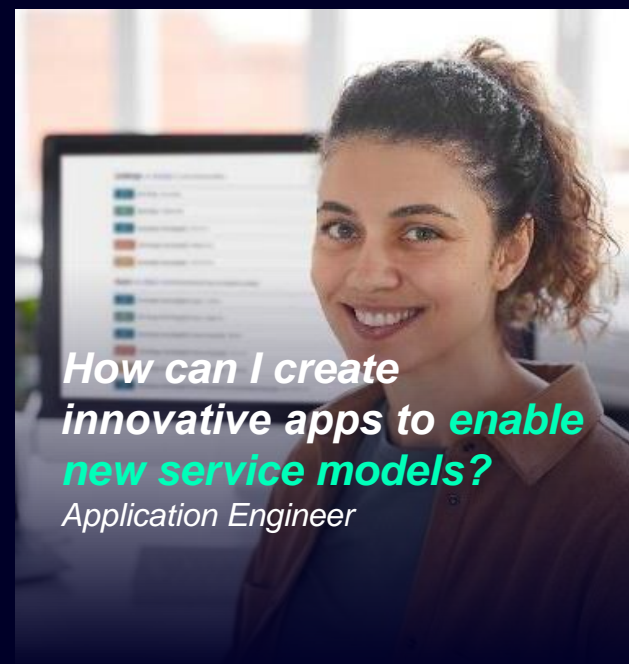
*How can I keep our
IT systems secure
and future-proof?*

IT Manager



*How can I deliver
our **services
digitally?***

(Digital) Service Provider



*How can I create
innovative apps to **enable
new service models?***

Application Engineer



*How do I **modernize
spaces and fix issues**
with aging equipment?*

Asset/Portfolio Manager



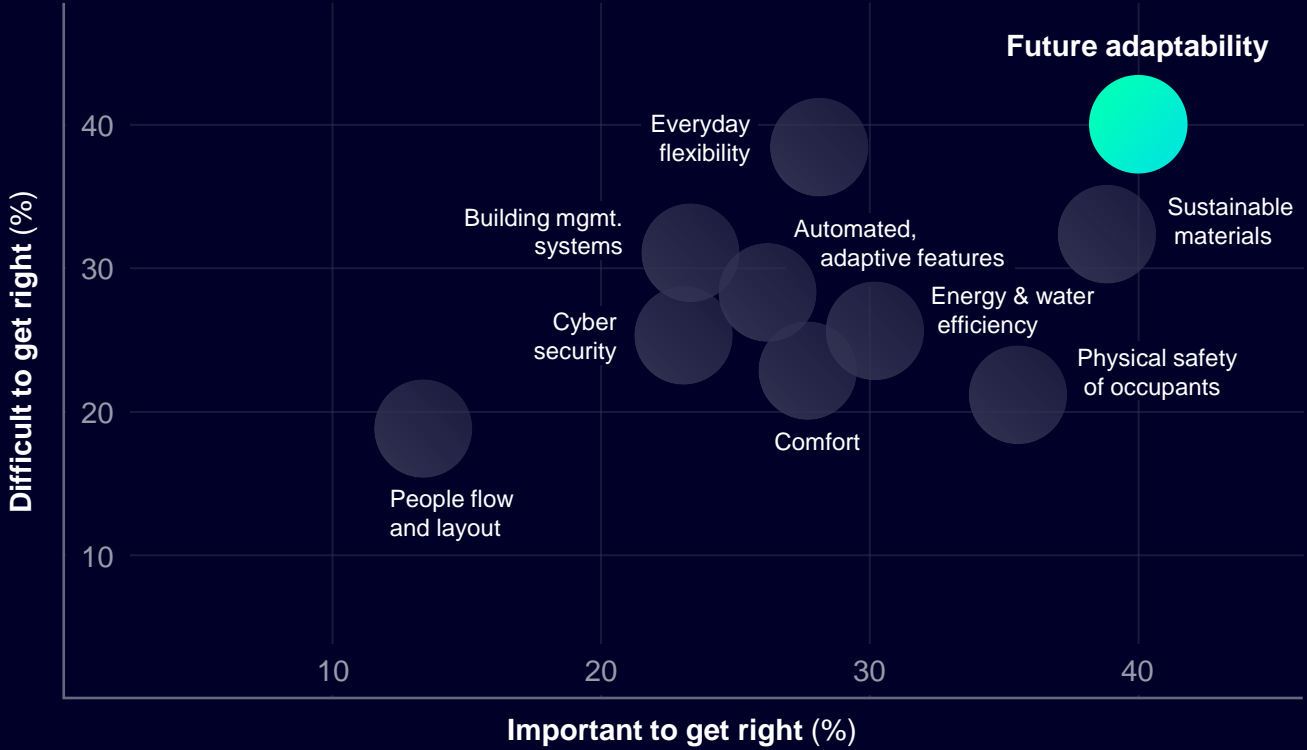
*How can I accelerate
the **digital transformation**
of our organization?*

CEO

Is your building future proof?

Future adaptability

is both the **most important** and **most difficult** area to get right in designing a new building or facility.



Future adaptability is both the most important and most difficult area to get right in designing a new building or facility. Respondents chose up to three factors to rate as the most important, and then from the same list, another three as the most difficult. Asked only of owners and/or operators of infrastructure in non-energy sectors (n=231).

Source: Siemens thought leadership report – A New Space Race (2021)

The Sea of Technology...





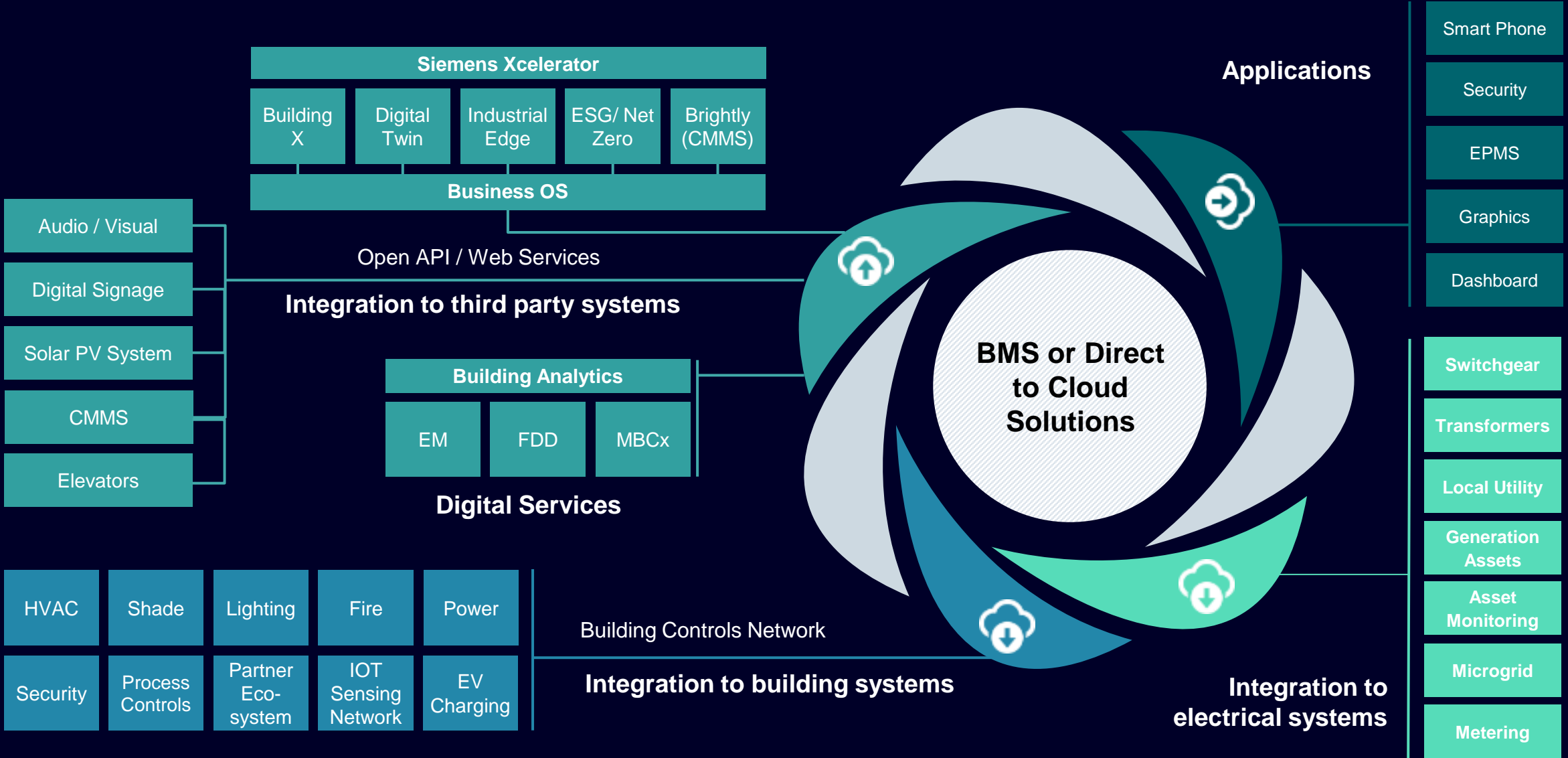
Building X

... combines the physical and digital worlds in a single source of truth to accelerate **Sustainability, Experience and Performance in buildings** with AI-enabled applications, open platform, and connectivity solutions.



Smart Building - Digitalization

Open Architecture – Scalable- Future Enabled



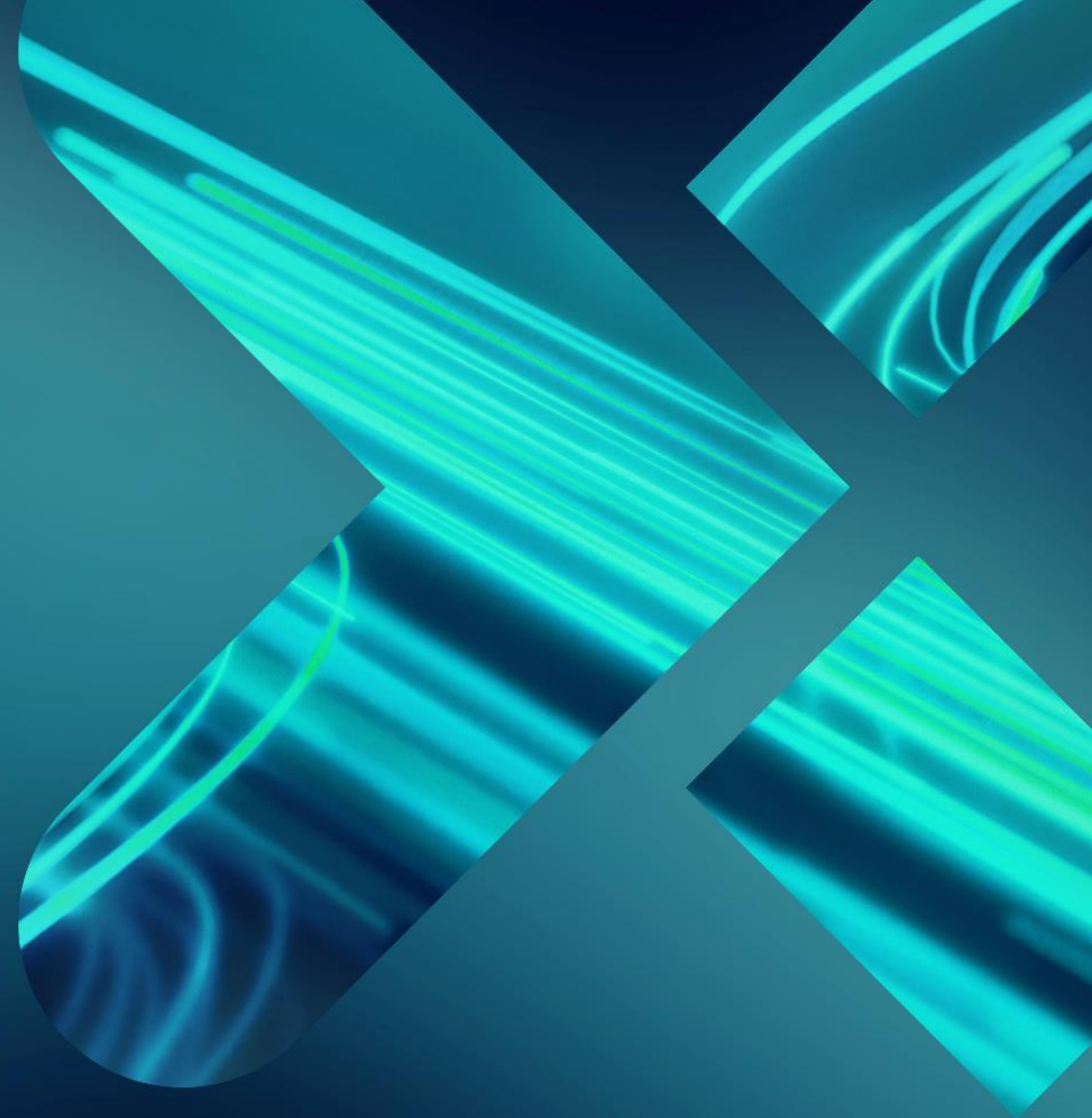
Smart Building Foundation



- Cloud
- Analytics
- Building Systems
- Connected Power
- Digital Grid

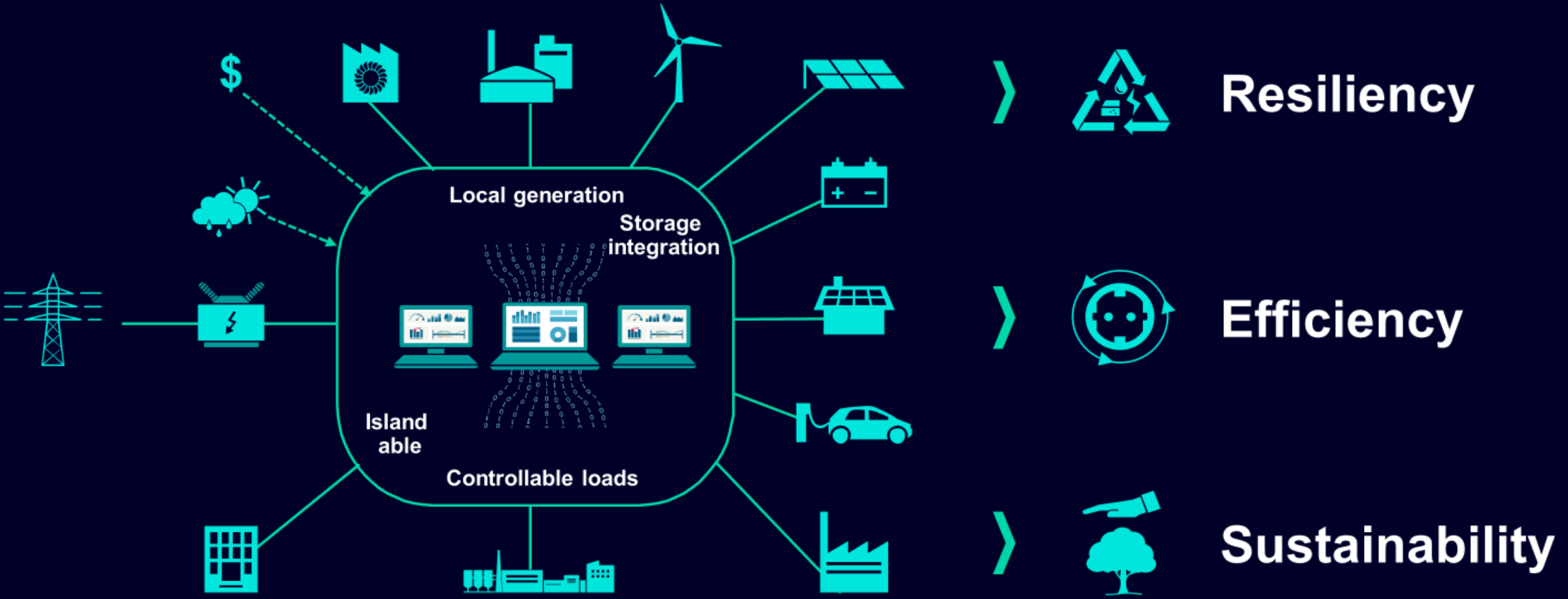
- Communication platforms
- Sustainability
- Cybersecurity

Power Systems Infrastructure



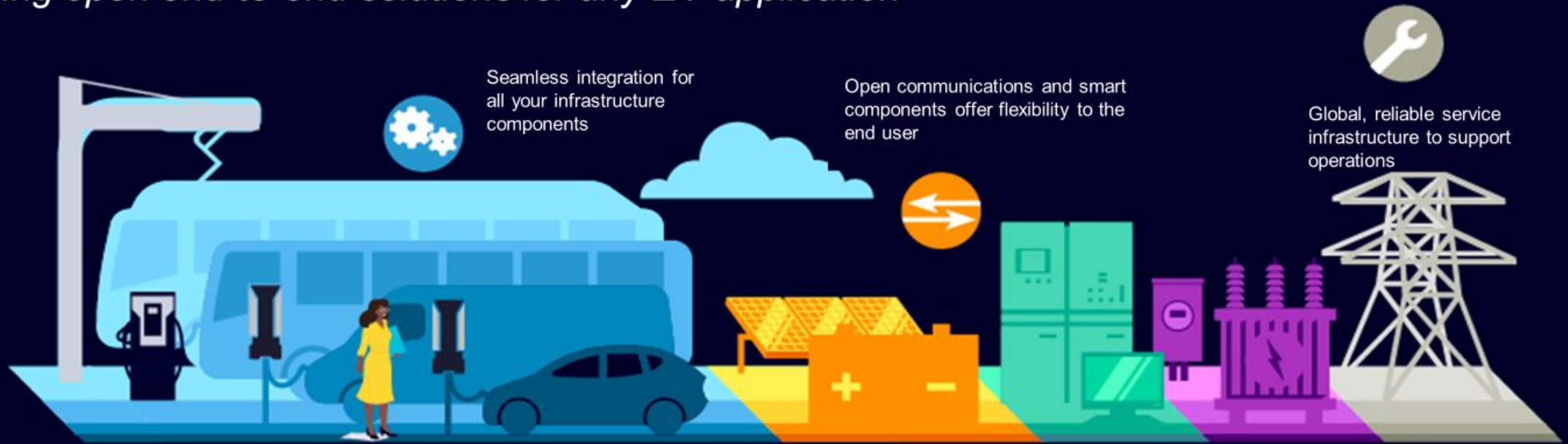
Decentralized energy systems and Microgrids

have three major value propositions to be quantified and monetized



Siemens PlugToGrid™

Supplying open end-to-end solutions for any EV application



Charging solutions of all power levels available



Design and build consulting available



Comprehensive charging as a service offering managing charging infrastructure



Global presence to incorporate advancements from all over the world



Design & build

- Large LD infrastructure deployment
- MD/HD depot
- Microgrid
- Greenfield/Brownfield projects
- Infrastructure expansions

EV chargers

- DC heavy-duty plug-in (SICHARGE UC)
- High powered pantographs
- AC level 2 (VersiCharge)
- DCFC level 3 (Ultra)

Make-ready equipment

- Power distribution equipment
- Simplifying installations with one vendor

Digital services

- Charger management / billing
- Building management systems
- Load management
- Scheduled charging
- Energy optimization

Asset services

- Onboarding
- Project Financing
- O&M management
- Maintenance and service contracts
- Warranty

Questions



Eric Lotz

**National Federal Business-Director
(Civilian Agencies)**

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Meeting Close

- Split Kitty Drawing
- PDHs available from the Omaha Post Website
 - ▶ <https://www.same.org/omaha/resources/>