

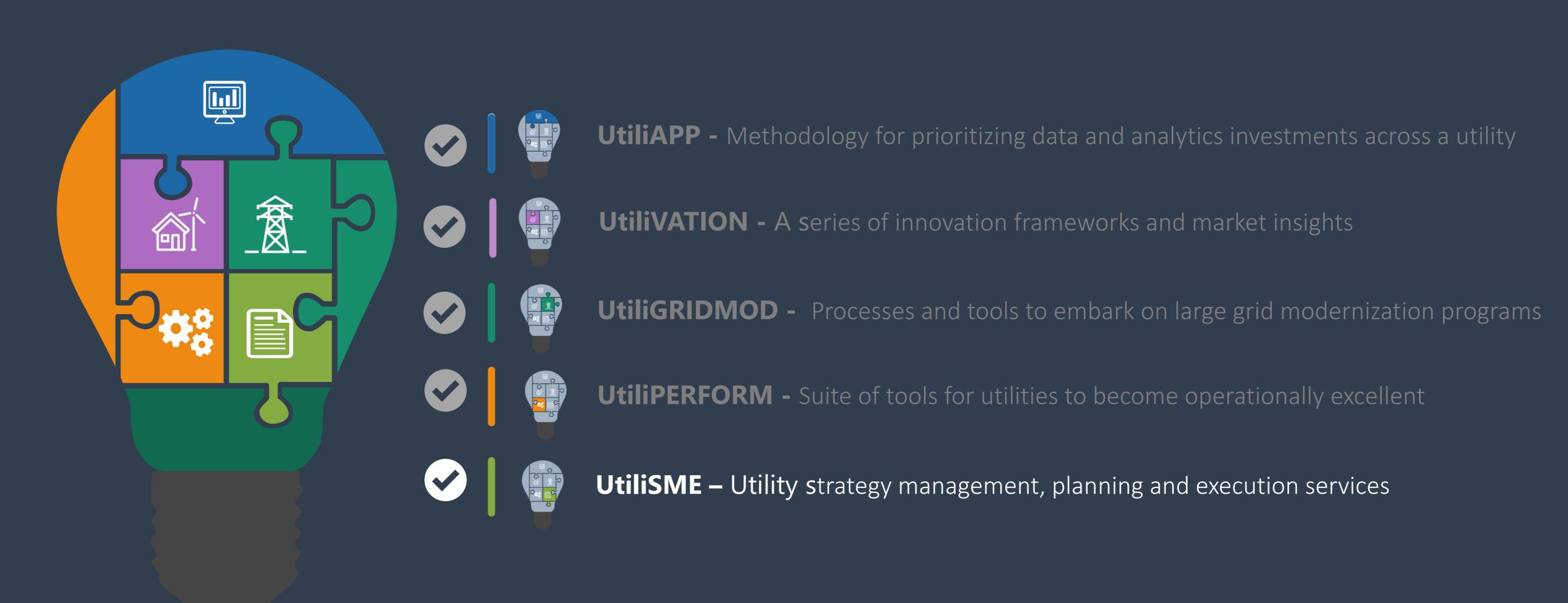
Utility Strategy Strategy Mark

Strategic Planning | Technology Strategy | Market Assessments



Our Proven Utility Tools and Resources to Manage the Transition

Focus on UtiliSME







UtiliSME – Strategy Management and Execution Leading strategic planning, management and execution approaches



Overview – UtiliSME is a proven strategic planning methodology that identifies opportunities, creates direction, manages stakeholder expectations and aligns resources. As strategic planning is as critical as ever within the industry we also employ scenario planning and quantitative analysis to ensure that our clients strategies built with the least regrets.

Overview



Approach



Approach – By conducting a thorough current state assessment up front and creating a robust set of goals, we will help utilities begin the planning process in a holistic and comprehensive manner. From there, we work collaboratively to develop strategic options and initiatives to ultimately provide a structured and comprehensive planning process with clear actionable outcomes.

Tools – Across the entire strategic planning and implementation lifecycle we employ proven tools such as benchmarked KPIs, vision and mission creation processes, workshop facilitation and breakout group session planning, rigorous NPV and sensitivity analysis playbooks and example roadmaps and sequencing guides.





Outcomes – The creation of an effective and compelling strategic planning can bring large scale financial and organizational benefits to a utility. It can also ensure that a utility effectively manages the pace of regulatory and technology change in the least risk manner.



The Changing Utility Landscape

Trends and strategies are emerging across the power sector

Evolutionary trends.....

Policy & Regulation

- Energy security, reliability, and resiliency goals
- Local and global environmental concerns over air emissions
- Global energy access imperatives

Revenue and Markets

- Flat or declining load in the U.S., EU, and Japan
- Increasingly diverse participation in power markets
- 60% of grid assets will need replacement this decade

Business Model Innovation

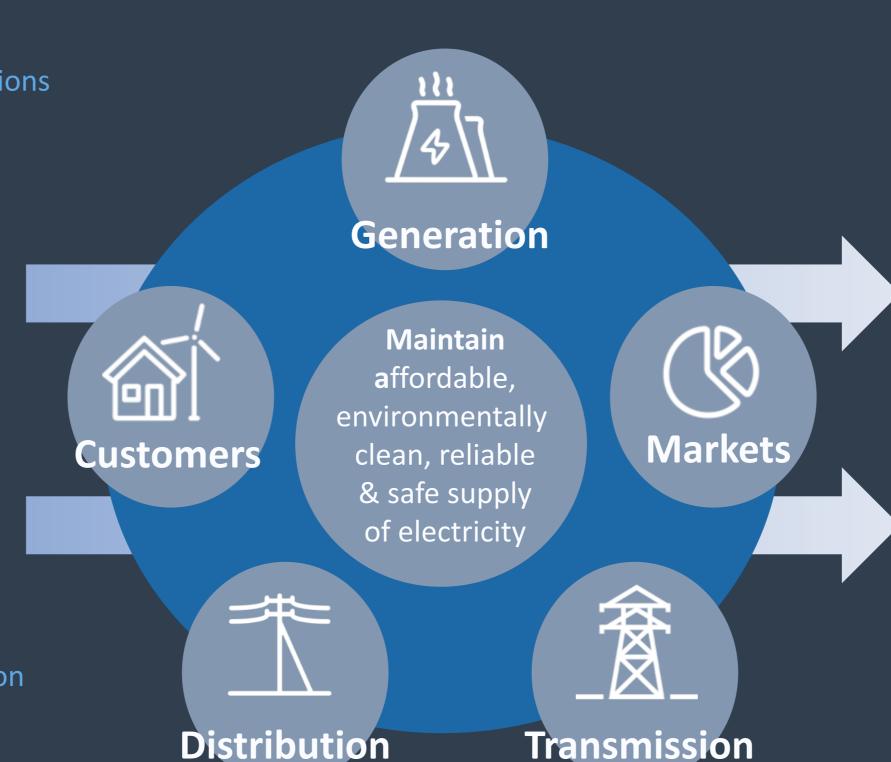
- New business models emerging at the grid edge
- Increased interactions with other sectors

Technology Innovation

- Renewable energy cost reductions
- Innovations in data, intelligence, and system optimization
- Increasingly digital operations environments

Consumer Behavior

- Evolving customer engagement
- The rise of the energy "prosumer"



..... Emerging Strategies

Policy & Regulation

Regulatory proactiveness and innovation

Revenue and Markets

 Use of granular of data on power system performance for investment / DER decisions

Business Model Innovation

- Shifting of capital to strategic grid asset investment
- Decisions on asset ownership v services

Technology Innovation

- Investment in use cases relating to DERMS & DMS
- Partnering with the market and fostering innovation
- Leveraging corporate venture arms

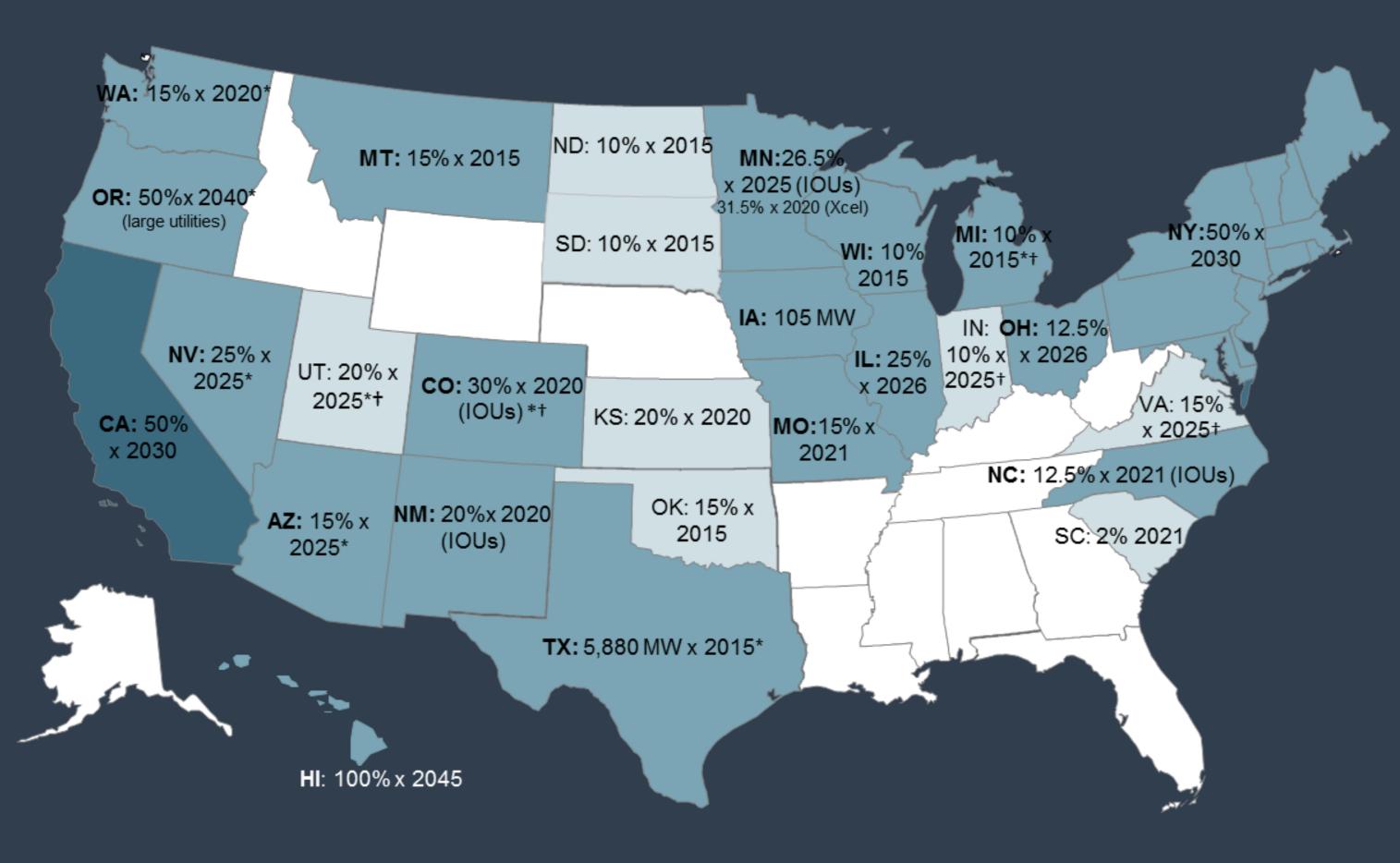
Consumer Behavior

- Increasing engagement with customers
- Working with other industries and creation of connected home strategies
- Developing strategies on how customers participate in energy supply and demand



Policy and Regulation – Driving Utility Transformation

RPS, Net Metering and Energy Efficiency State targets are impacting utilities



Renewable portfolio goal

Renewable Portfolio Standards

29

29 States + Washington DC + 3 territories have a Renewable Portfolio Standard (8 states and 1 territories have renewable portfolio goals)

Net Metering

41

41 States + DC, AS, USVI, & PR have mandatory net metering rules

Energy Efficiency

26

26 States

Have Statewide Energy Efficiency Resource Standards (or Goals)

Utility of Future Regulatory Reform

11

11 States

Have initiated regulatory proceedings around the Utility of The Future e.g. REV in NY

www.dsireusa.org / August 2016



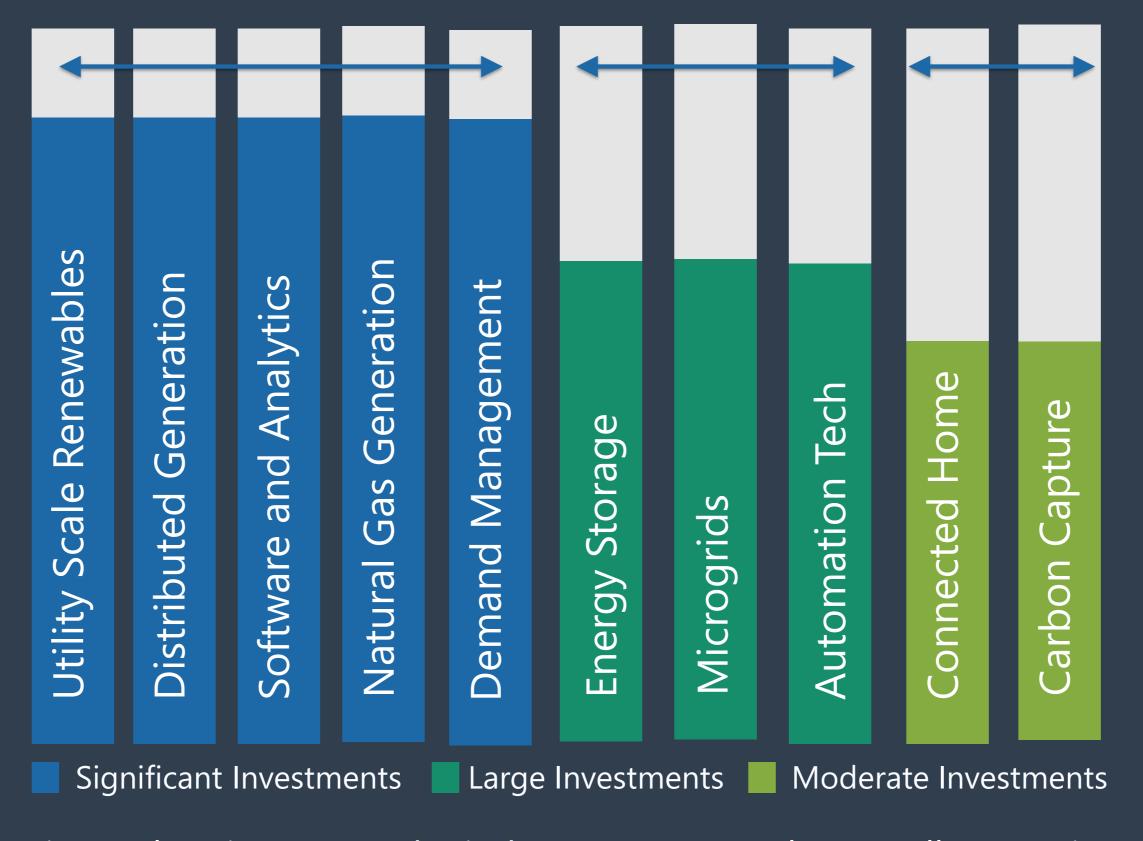
Renewable portfolio standard

New Technologies - Utilities are Increasing Investment

Investment patterns are emerging on both sides of the meter

Driving Factors

- Grid security and business continuity
- Grid modernization and energy delivery
- Clean energy and fuel diversity
- Customer focused solutions
- Environmental policy adoption and fleet transition



Uncertain **Factors**

- Pace of technology change
- Ongoing regulatory uncertainty
- Increasing competition behind the meter
- Increasingly engaged customer segments
- Capability development

The pace of technology investment is accelerating across the industry. For example, as well as pursing a grid edge investment strategy through its corporate venture arm, Exelon plans to invest \$25bn on critical infrastructure, smart grid technology and other reliability and customer service improvements at its utilities over the next five years to benefit its 10 million electric and gas customers. Across the country we are seeing similar large technology investments being made by power companies.



The Importance of Utility Strategic Planning Today

Strategy has never been as critical for the power sector as it is today. From corporate strategy to planning for pointed strategic issues and opportunities, utilities face a host of uncertainties to manage.

Select Drivers

- Capacity Requirements
- Regulatory Requirements
- Integration of Renewables
- Market Design Changes
- Accelerated Grid Modernization Efforts
- Increased Proliferation of DG and DR / Efficiency Programs
- Customer Satisfaction

Strategic Planning Investment Decisions and Trade-offs

Grid Modernization & Maintenance

- Life cycle asset management
- Communications Infrastructure
- Sensor Network and Network Automation

- Life extension programs
- DER and Bulk Renewable Mgmt.

IT and Business Infrastructure

- Business Model & Process Optimization
- Network Operations Centers
- •IT Initiatives

 Data Infrastructure, virtualization, management and applications

Strategic Imperatives and Innovative Investments

- Energy storage
- Innovative R&D
- Grid data and analytics innovation
- Options to deal with retirement of generation assets
- Creating a smart operations centre

Select Constraints

- •Rate case development
- New business model / revenue
- Internally Generated Funds

analysis

- Internal Capability Requirements
- Technology acceleration



Strategic Planning – Vision Alignment

Our Approach is centered on achieving the development of five key areas

Indigo utilizes a thorough and proven strategic planning process that contains all the critical elements of creating an effective strategic plan, including industry overlays, opportunities and lessons learned. From vison and mission through to implementation planning our process will ensure the right outcomes are achieved. In addition, our scenario planning framework, will also ensure that Utilities are employing the least regrets strategy in today's market.

Vision & Mission

Compelling mission and vision formation that captures aspirational direction and purpose for utilities

Strategic Goals

Creation of goals that are specific, measurable, achievable, relevant & time bound

Strategic Initiatives

Initiative identification and business case development to ensure strategy and tactics align

Metrics and KPIs

Measures that align the organization and ensure that benefits realization is central to the overall plan

Implementation Plan

Detailed implementation planning, including, costs, resources, schedules and governance planning



Components of Strategic Planning

We work with utilities over a series of workshops and through detailed analysis to create holistic, measurable and market leading strategic plans

Environmental Scans and Outreach

- **Key Questions Addressed:** What industry trends are being observed and where do we believe the industry is headed? What key challenges and opportunities specific to the utility will arise as a result of the expected industry developments?
- **Key Deliverables -** Scenario Planning, External and Internal Outreach and Environmental Scan, List of challenges and opportunities

Current state and future ambition

- **Key Questions Addressed:** What is the Utilities current strategic focus? How does the Utilities focus and performance compare to industry best practices? What should the utility look like in the future in order to respond to the identified challenges and opportunities, and how does it compare to existing vision, mission and goals?
- Key Deliverables Gap Analysis, List of challenges and opportunities, Vision, mission and strategic goals

Short-term goals and targets

• **Key Questions Addressed:** Which short- and medium-term goals should be established in alignment with the overall strategic ambition? Which key performance metrics will let us know if we are on track to achieve our strategic ambition and tactical goals?

• Key Deliverables - Industry best practice analysis, Defined tactical goals and performance targets

Strategic initiatives and Implementation Planning

- **Key Questions Addressed:** How do our existing capital portfolio support the revised strategic ambition and tactical goals? What other investments should be considered in order to achieve the tactical goals? How should we implement and communicate the plan? How should we measure progress?
- Key Deliverables Portfolio of strategic initiatives to enable strategic ambitions, KPI's, Implementation plan







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