I also like the AMI/SG journey slide.

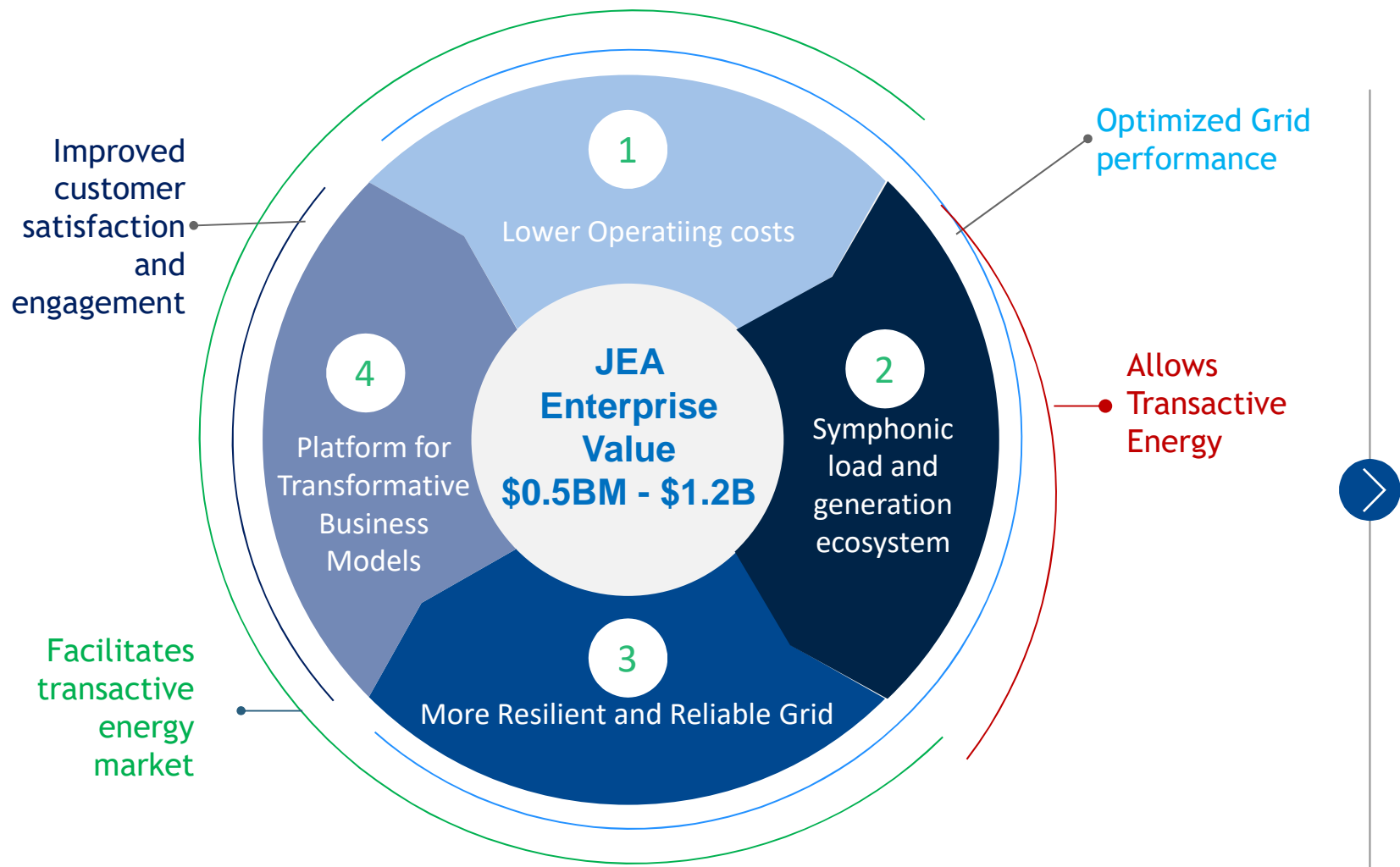Let me know if you need anything else or want to iterate on slides.

Tim

JEA Digital Grid Transformation Project (Discussion Guide)

July 1, 2019

Research indicates the value of a Digital Grid (to JEA) ranges between $0.5B and $1.2B in benefits from operational savings and from creating new business models/offerings[1]

Digital Grid Powers JEA's Transformation

Core System Operations:
- Receive work, complete work, initiate work and complete forms on devices
- Improved grid reliability, resilience, and DER hosting capacity
- Dynamically update assets and facilities data into devices to feed AI DSS algorithms
- Integrated Volt-VAr optimization

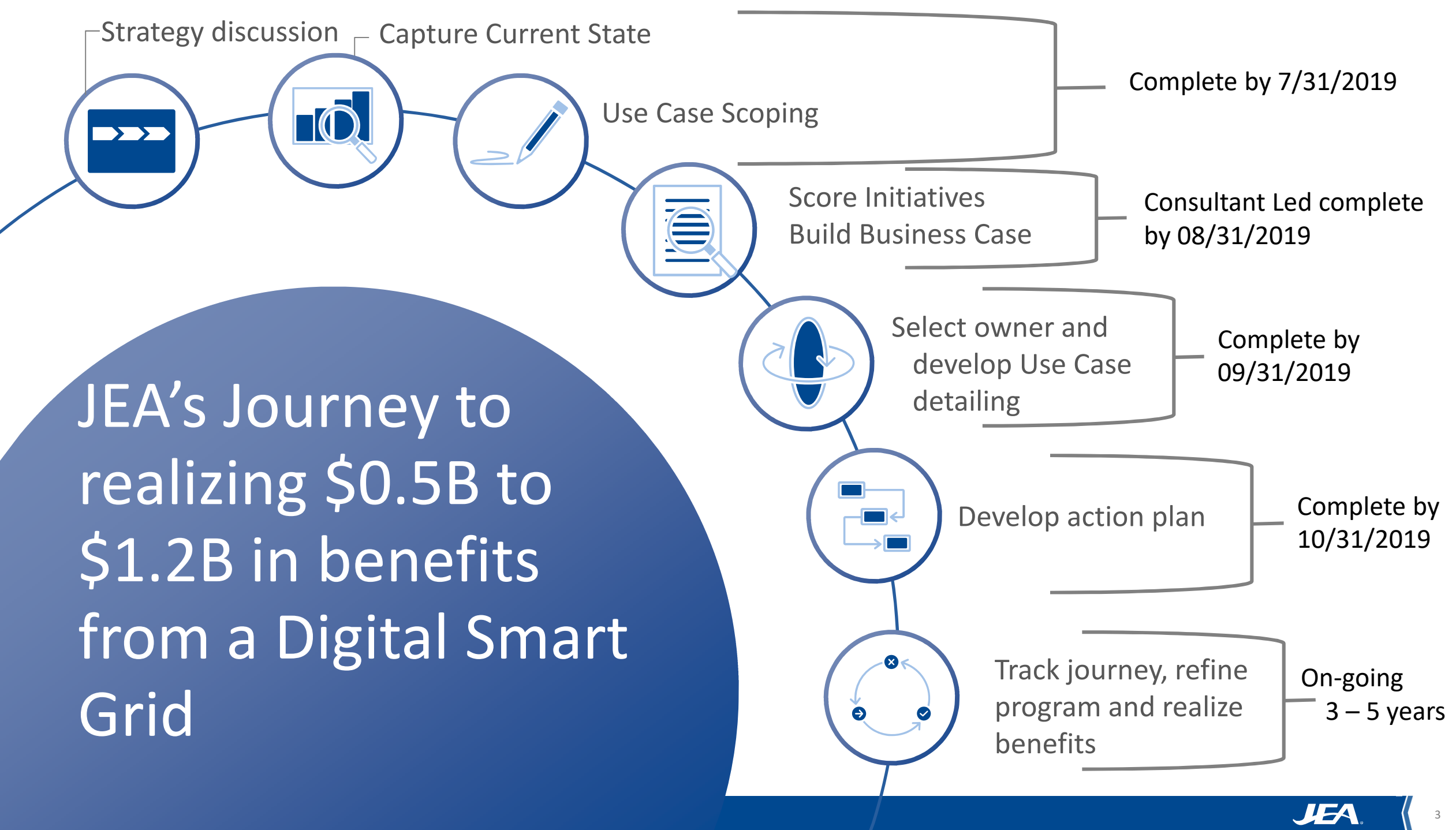**Intelligent Grid and Transaction Management:**
- Fewer unplanned outages/increased reliability
- Network will allow VPP access and transactional energy, dynamic load response, phase balancing, etc.
- New service offerings to clients like bilateral fast storage, transactive buildings, optimal restoration times and improved services

New Business:
- IoT to the home for energy management optimization
- Security services, low income high speed internet, enhanced social services, DERM's management, etc.

[1] Rand Corporation Study The Adoption of New Smart-Grid Technologies, 2015 quoting EPRI and SmartGrid Consumer Collaborative; Benefit range was estimated 2.6 to 6 times costs over a 13 year period.

Strategy discussion

Capture Current State

Use Case Scoping

Complete by 7/31/2019

Score Initiatives
Build Business Case

Consultant Led complete
by 08/31/2019

Select owner and
develop Use Case
detailing

Complete by
09/31/2019

JEA's Journey to realizing $0.5B to $1.2B in benefits from a Digital Smart Grid

Develop action plan

Complete by
10/31/2019

Track journey, refine
program and realize
benefits

On-going
3 – 5 years

Most Digital transformation efforts fail due to a misaligned understanding of what "*Digital*" means - nearly instant, free, and flawless ability to connect people, devices, and physical objects anywhere.[1]

Since the extent and speed of disruption varies, companies will need to calibrate their response.
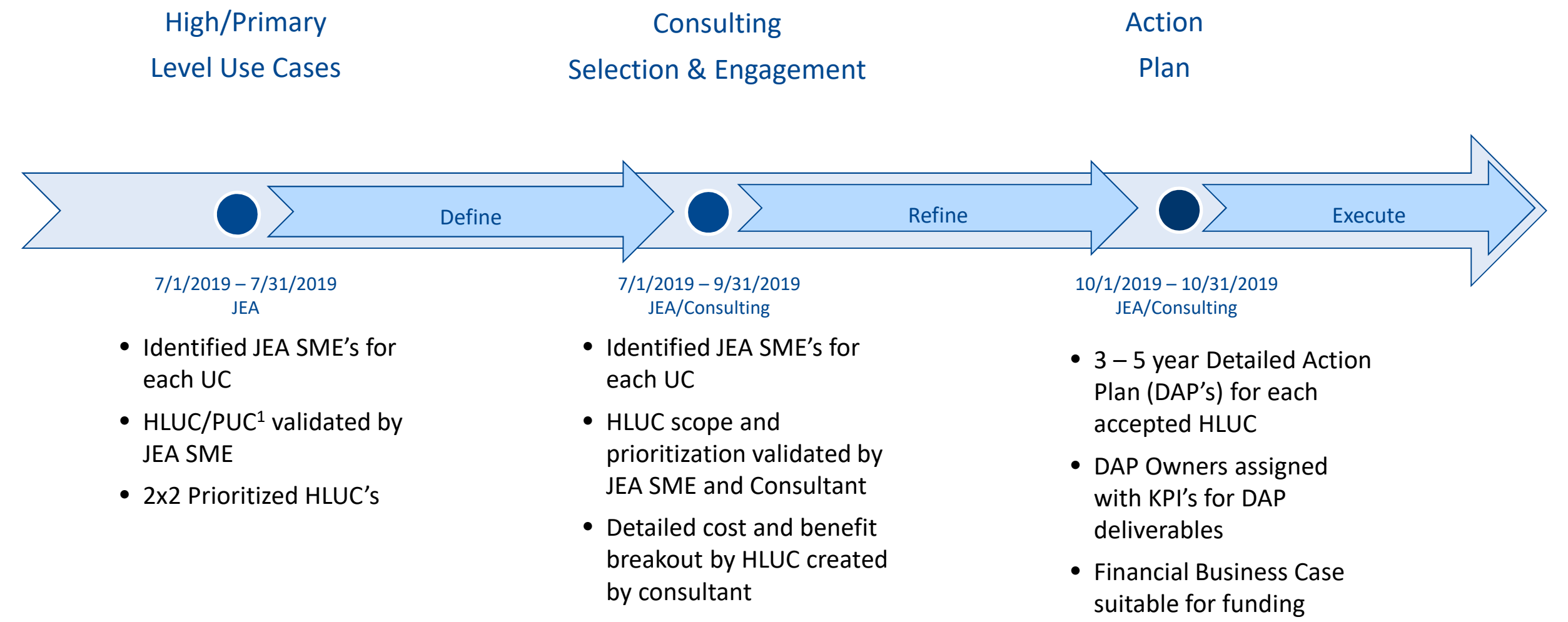

Degree of change (vertical axis) / **Pace of change** (horizontal axis)

Live in two worlds
These companies need to prepare themselves for big changes but cannot lose focus on their existing businesses in the short term.

Take bold steps
These companies (eg, those in media, retail) are faced with severe—and perhaps fatal—disruption unless they make big moves.

Make low-risk moves
These companies can cherry-pick simple plays but are relatively unaffected.

Build agility
These companies need to make rapid moves but cannot let the scope of these changes overshadow existing businesses.

McKinsey&Company

- Leadership must clearly define where, how and the speed at which they want JEA to go….

- Digital will destroy economic rent in the core, which requires a pivot to a new ecosystem

- Benefits realization requires a People / Process change in concert with the Technology

- Lastly, we live in an increasingly disruptive era. It is a way of life, survival of the fittest, not a once and done

[1] Taken from the McKinsey Quarterly January 2018, *Why digital strategies fail*". The #1 reason is fuzzy definitions.

The Digital Grid Team is currently working to define JEA's current state and detail High Level Use Cases

High/Primary Level Use Cases

Consulting Selection & Engagement

Action Plan

Define → Refine → Execute

7/1/2019 – 7/31/2019
JEA

- Identified JEA SME's for each UC
- HLUC/PUC[1] validated by JEA SME
- 2x2 Prioritized HLUC's

7/1/2019 – 9/31/2019
JEA/Consulting

- Identified JEA SME's for each UC
- HLUC scope and prioritization validated by JEA SME and Consultant
- Detailed cost and benefit breakout by HLUC created by consultant

10/1/2019 – 10/31/2019
JEA/Consulting

- 3 – 5 year Detailed Action Plan (DAP's) for each accepted HLUC
- DAP Owners assigned with KPI's for DAP deliverables
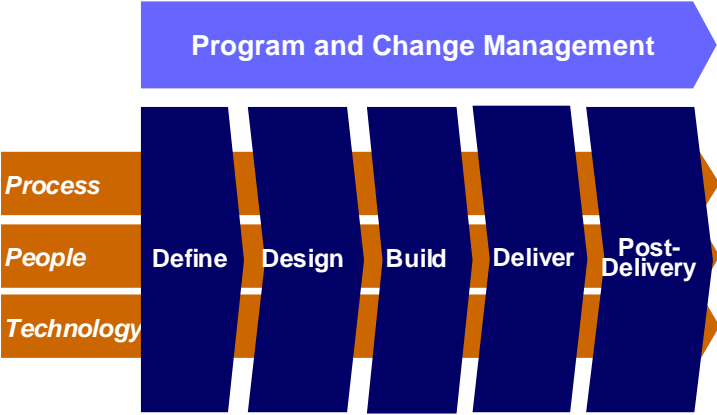- Financial Business Case suitable for funding

High Level Use Cases

Low Level Use Cases

[1] High Level Use Cases (HLUC's) and Primary Use Cases (PUC's) developed through JEA research from NIST 4.0 and InTeGrid's (https://integrid-h2020.eu/public-deliverables) Public Documents.

Appendix Slides

Every initiative must address P-P-T

Most change initiatives never reach their goals due to being singularly focused (e.g. technology solution ignoring people and process, or process change ignoring people and technology implications). We must view our initiatives holistically addressing how the people, process and technology implications integrate before launch.

Program and Change Management

|				
Process				
People	Define	Design	Build	Deliver	Post-Delivery
Technology				

Detailed Statement of what is critical with BHAG in achieving the strategy

How success will be measured and tracked

Performance level required or desired

Action initiatives necessary to achieve performance level

BHAG Objective Description	Measure	Target		Initiatives
Reduce energy costs across the enterprise to best in class levels; while improving customer comfort and meeting sustainability goals	Annual operating cost, life cycle capital cost of facility operations, store performance and customer comfort	Operating cost - 20%		Develop enterprise wide best practices
				Transition from "As-is" to "To-Be" practices
				Plan, act, do, check - recommissioning
		Life cycle cost - 10%		"True" value engineering
				Plan, act, do, check - SOP's
		Stakeholder Comfort + 10%		Test and balance air systems every 3 yrs
				Energy alarms tied into work order system
				Plan, act, do, check - Human Performance Program
		Operational compliance 99%		Plan, act, do, check – EMS utility meter tie in
				Plan, act, do, check - Performance management

Initiative Creation – How much change is needed?
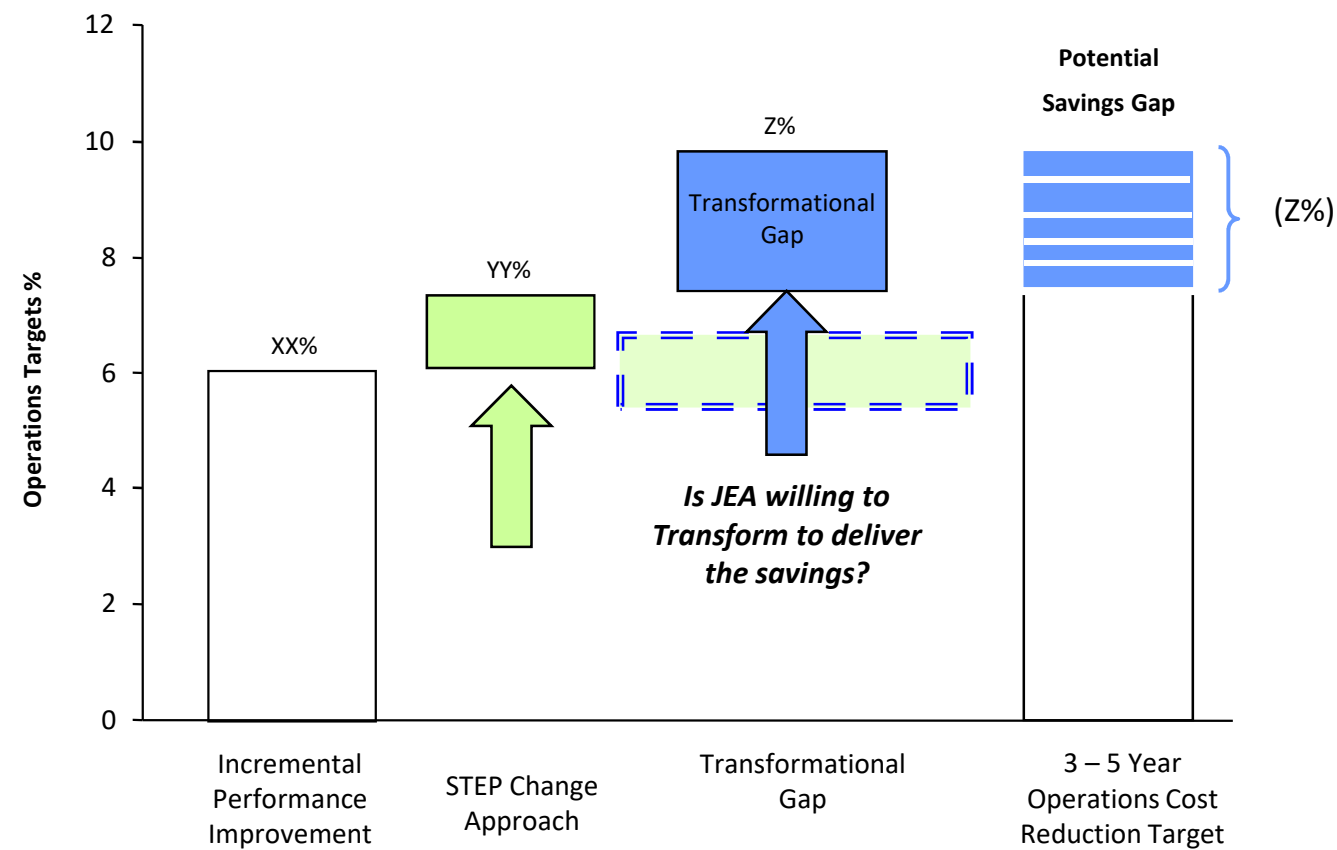
After the implementation plan is developed it should be broken into phases over time

Empirical evidence indicates several keys to success:
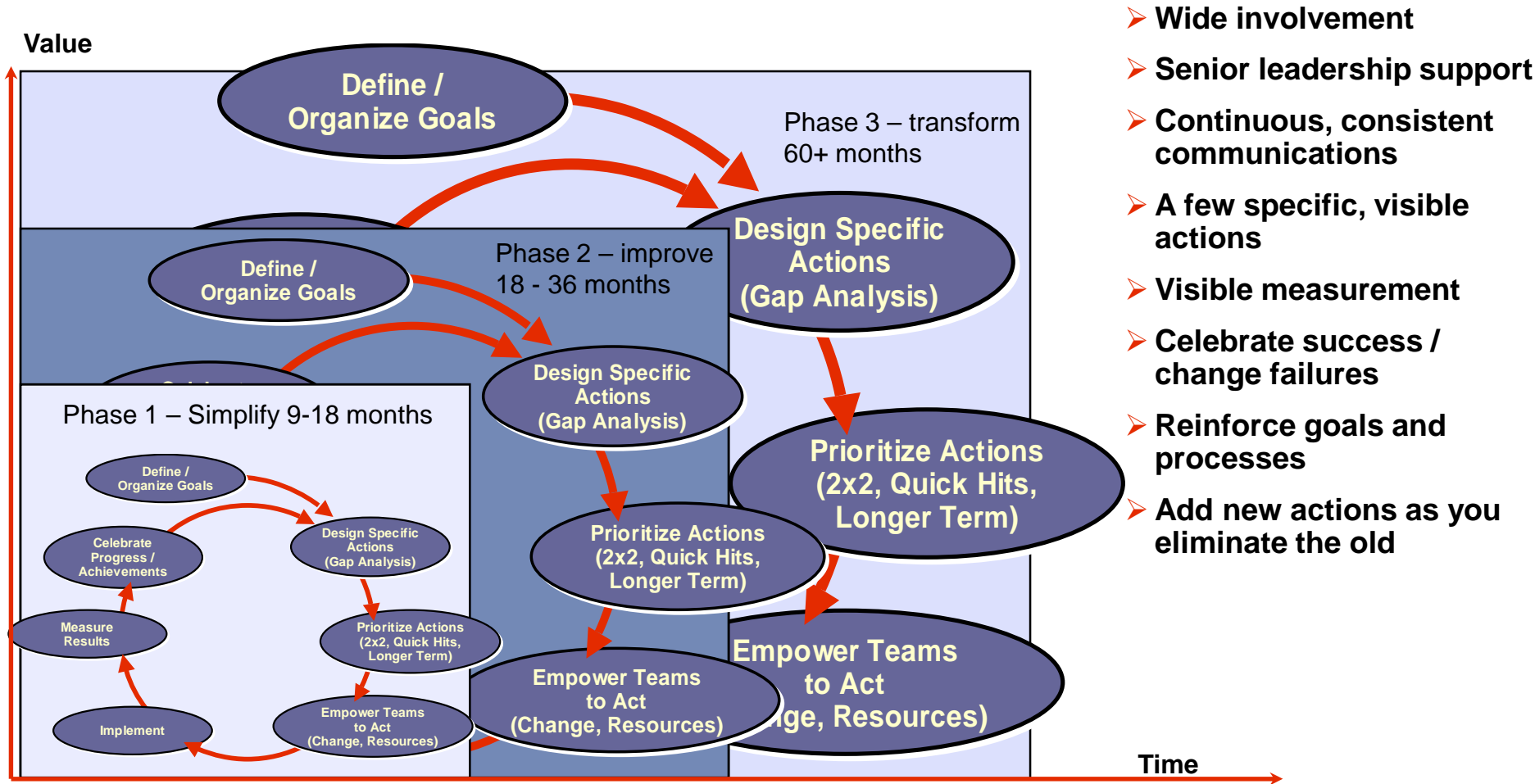
- Wide involvement
- Senior leadership support
- Continuous, consistent communications
- A few specific, visible actions
- Visible measurement
- Celebrate success / change failures
- Reinforce goals and processes
- Add new actions as you eliminate the old