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# 5 Things You Need to Know for Leading a Successful Large IT Modernization Project

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# Polling Question 2

Have you ever been involved in a modernization effort?

a) Yes

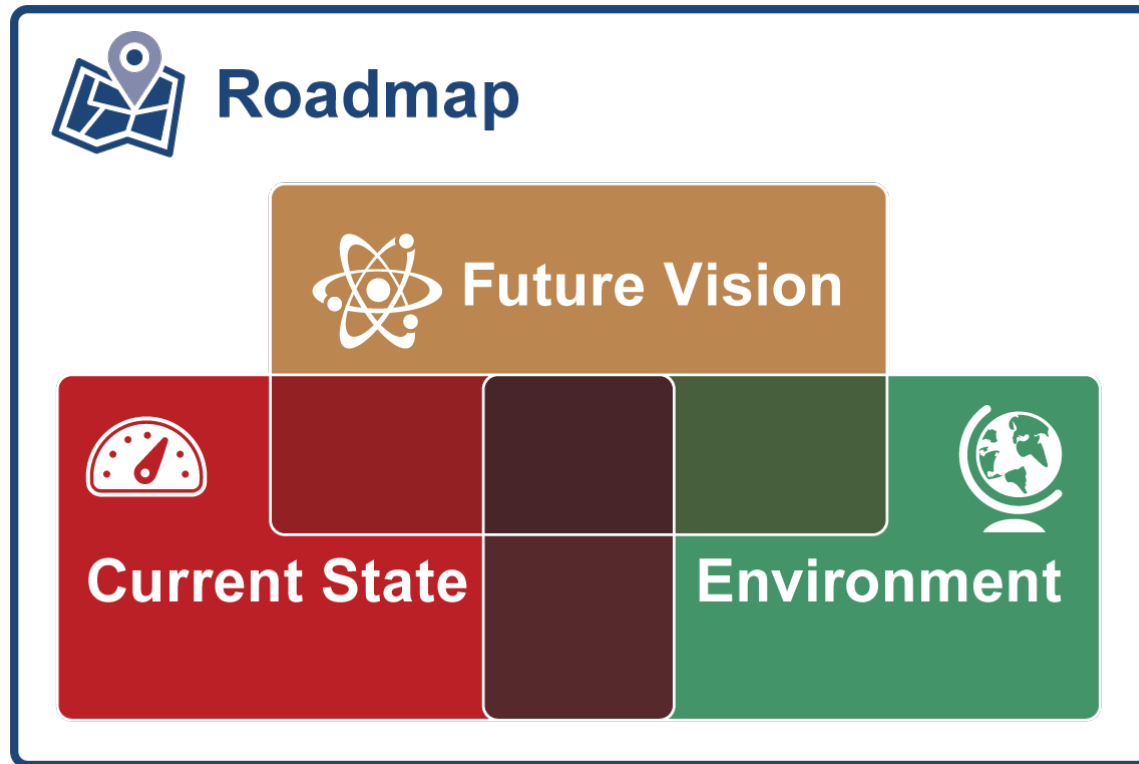
b) No

# Polling Question 3

On a scale of 1 to 5 can you rate the success of that effort? ( 5 being most successful)

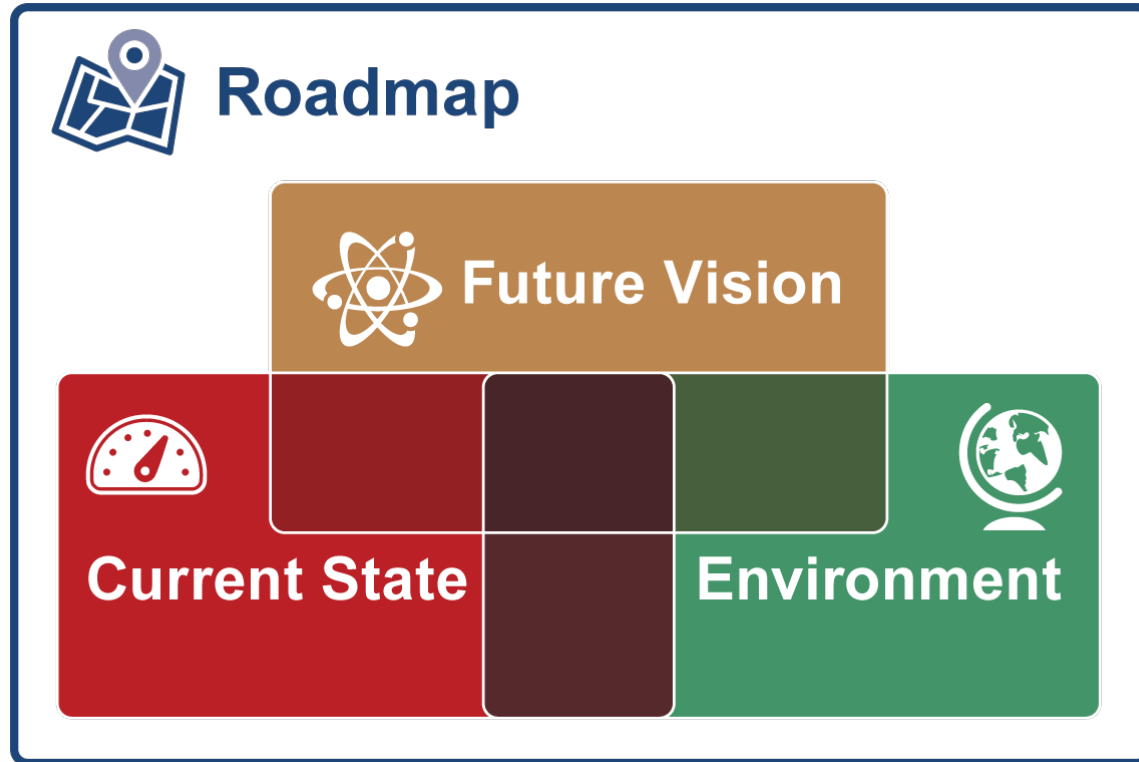
- a) 1
- b) 2
- c) 3
- d) 4
- e) 5

# Data Collection



- Know where you want to be
  - “Realistically”
- Know where you are
  - “Honestly”
- Know what you need
  - “Affordably”
- Know how to move forward
  - “Cautiously”

# Data Collection



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  - “Cautiously”



# Know where you want to be



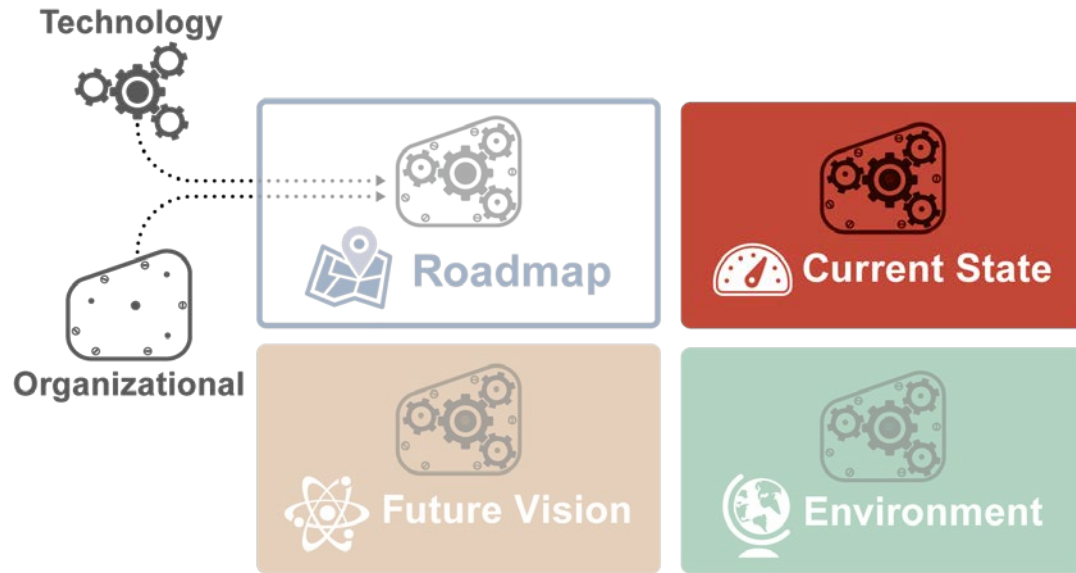
It is easy to list all the great cool things you want to use in the future

- Introducing new technologies. Such as service oriented or perhaps micro services
- Utilizing new hardware, such a multi core
- Ability to support fast and agile feature development

What factors hindered you in the past to always get what you needed?

- New technologies come have a learning curve
- Is there an agreement on the requirements
- Will modernized system require the business processes to change

# Know where you are



## Conway's Law

Organizations which design systems ... are constrained to produce designs which are copies of the communication structures of these organizations

Conway, Melvin E. (April 1968), "How do Committees Invent?", *Datamation*, 14 (5): 28–31, retrieved 2015-04-10

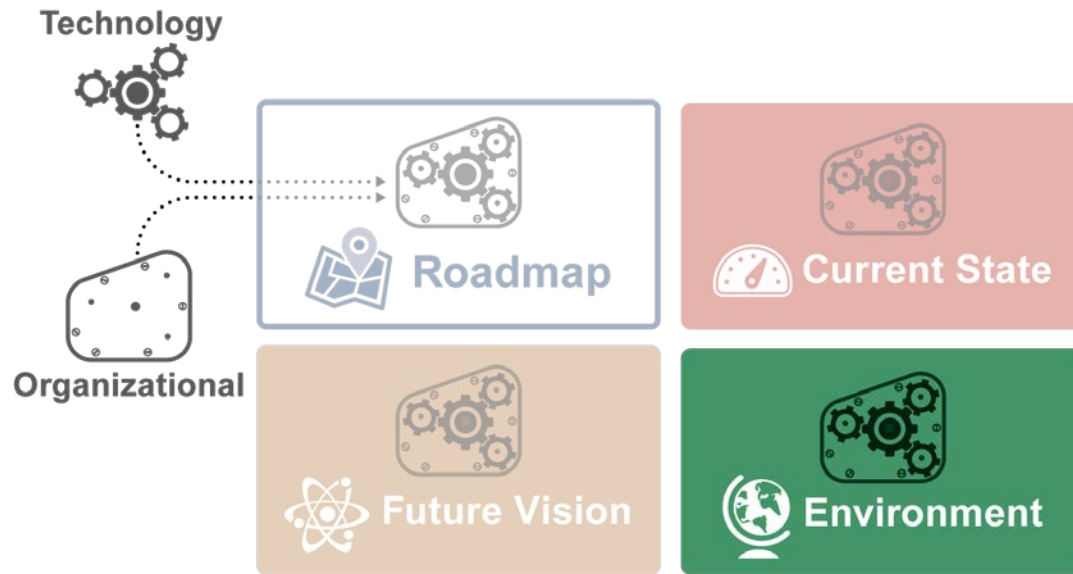
Determine which of the implemented solutions caused you to do the modernization.

- Old design principles, such as let the database run everything?
- Plethora of outdated technologies?
- Dependencies that inhibit scaling?

What went wrong in your organization that led to these issues?

- Skill set of your employees?
- Competition between “siloes organizations”?
- Prioritized funding decisions favoring new features?

# Know what you need



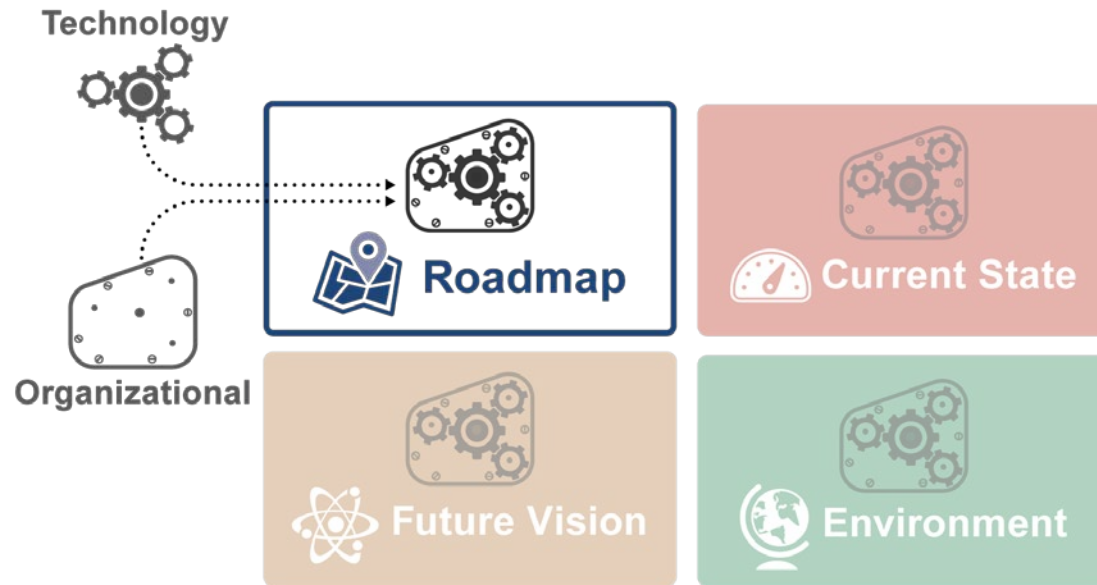
For the endeavor to be successful you need tool support and adjusted processes.

- Automated regression testing?
- Appropriate documentation / models?
- Synchronization of old data model with new data model

If you do not have that support now, what were the reasons?

- Right skill set of the people doing the modernization
- Necessary training in place
- Right contractors selection?
- Enforcement of essential principles?

# Know how to move forward



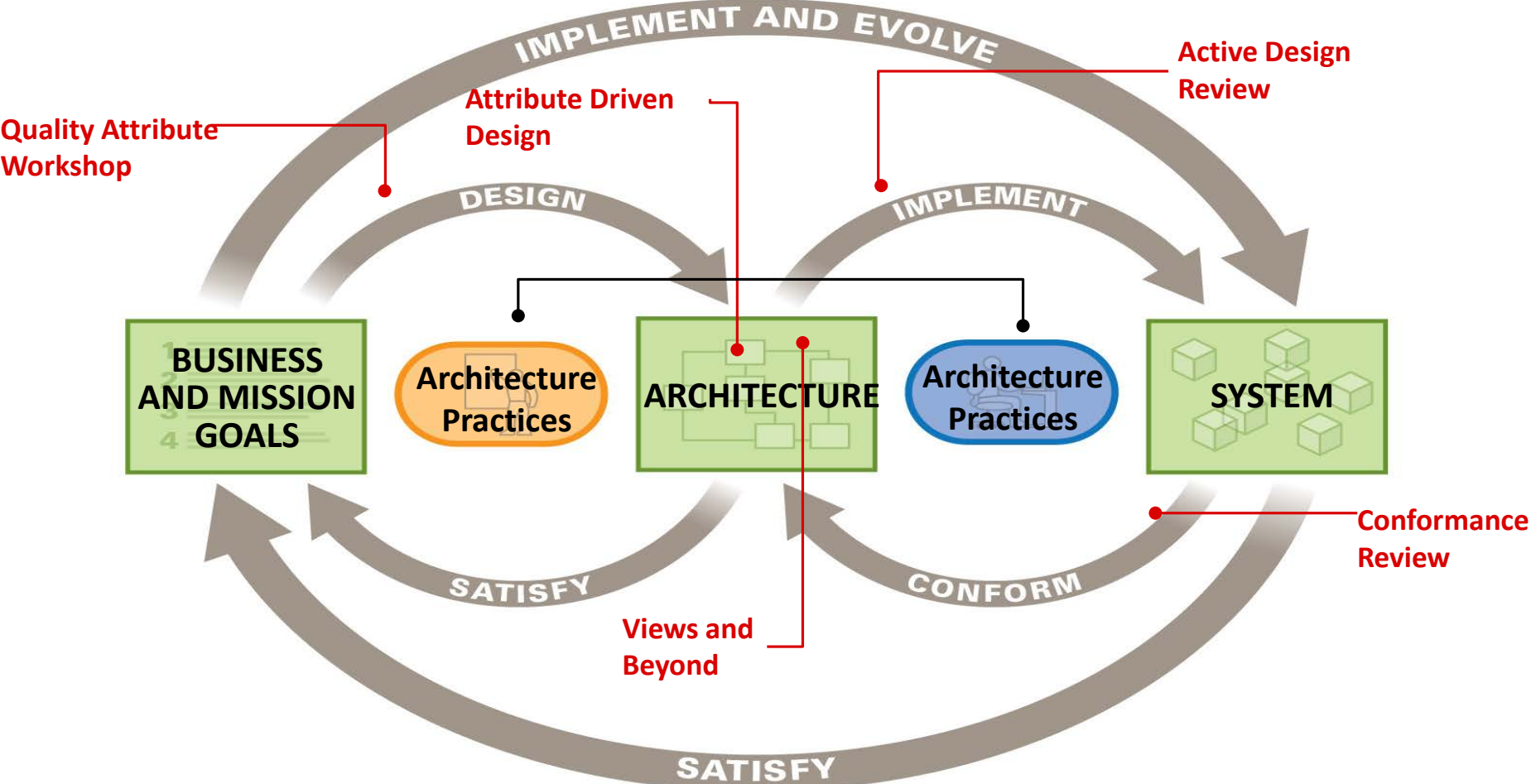
## Technical Roadmap

- Use of new technologies is risky.
  - plan for feasibility studies / Prototypes
  - off-the-shelf product integration
- Plan for backing out of a technology in case it shows to be inappropriate

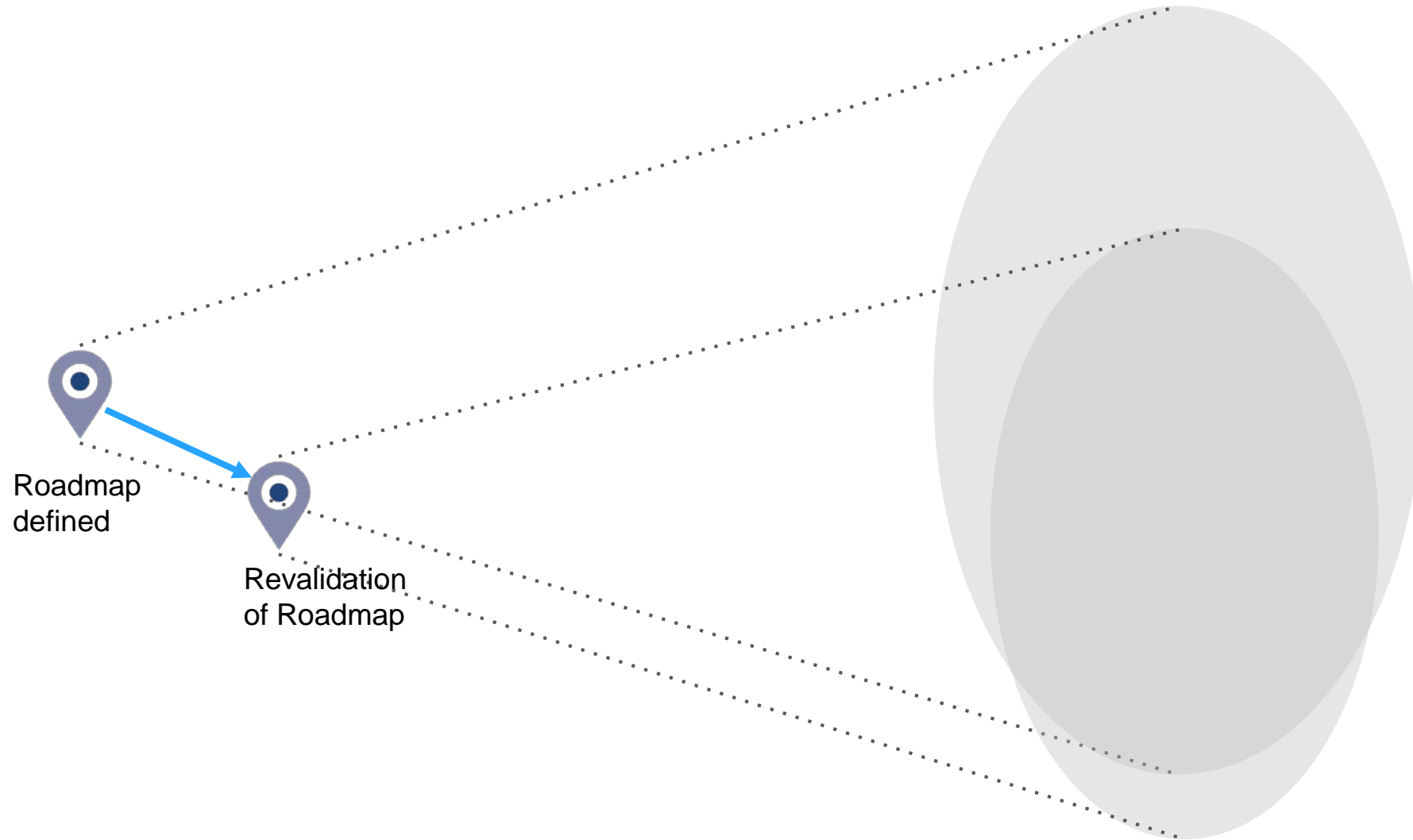
## Strategic roadmap supporting technical roadmap.

- Set up a steering group
- Set up the funding model
- Set up review boards
- Set up investment management

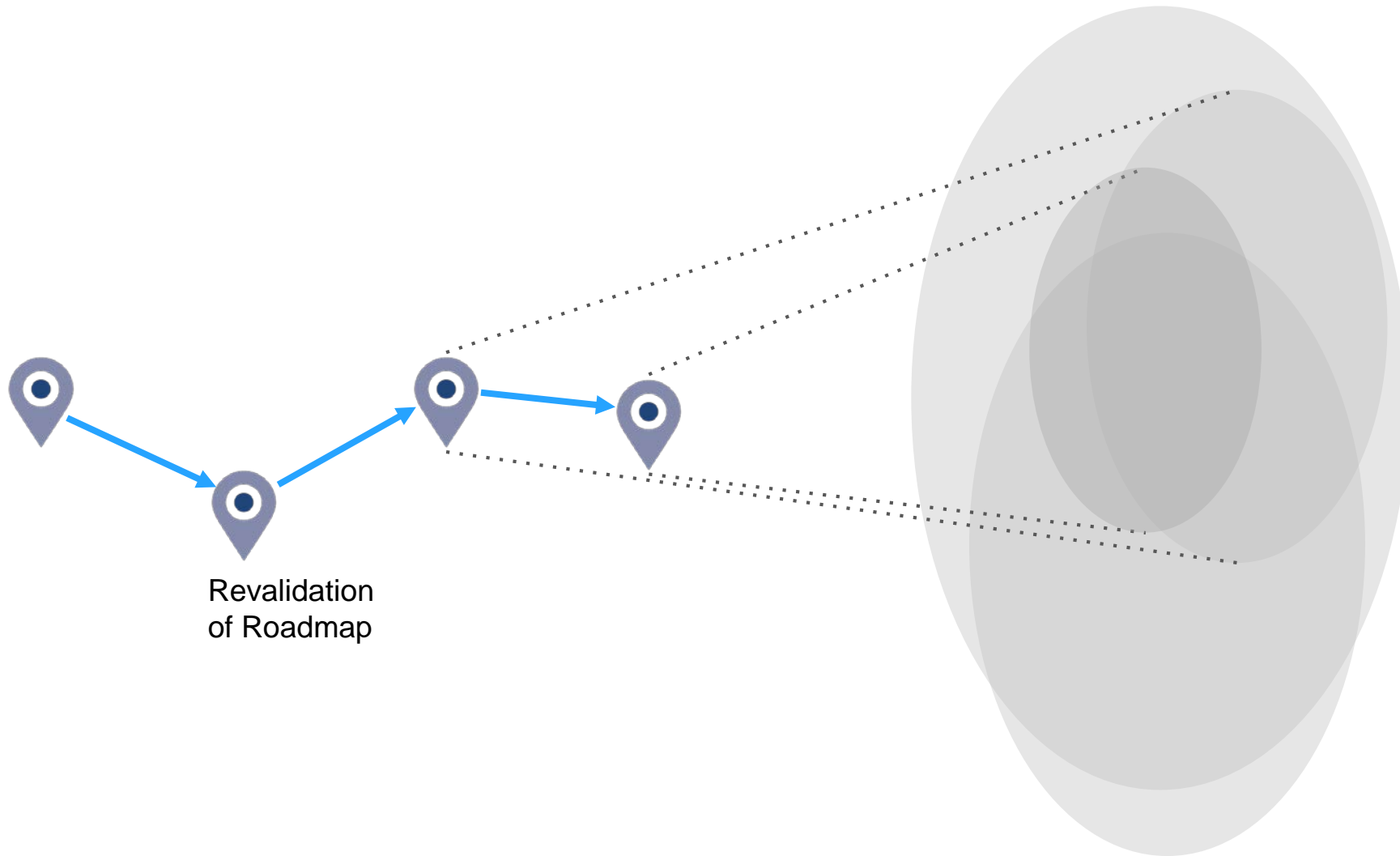
# Iteratively move forward



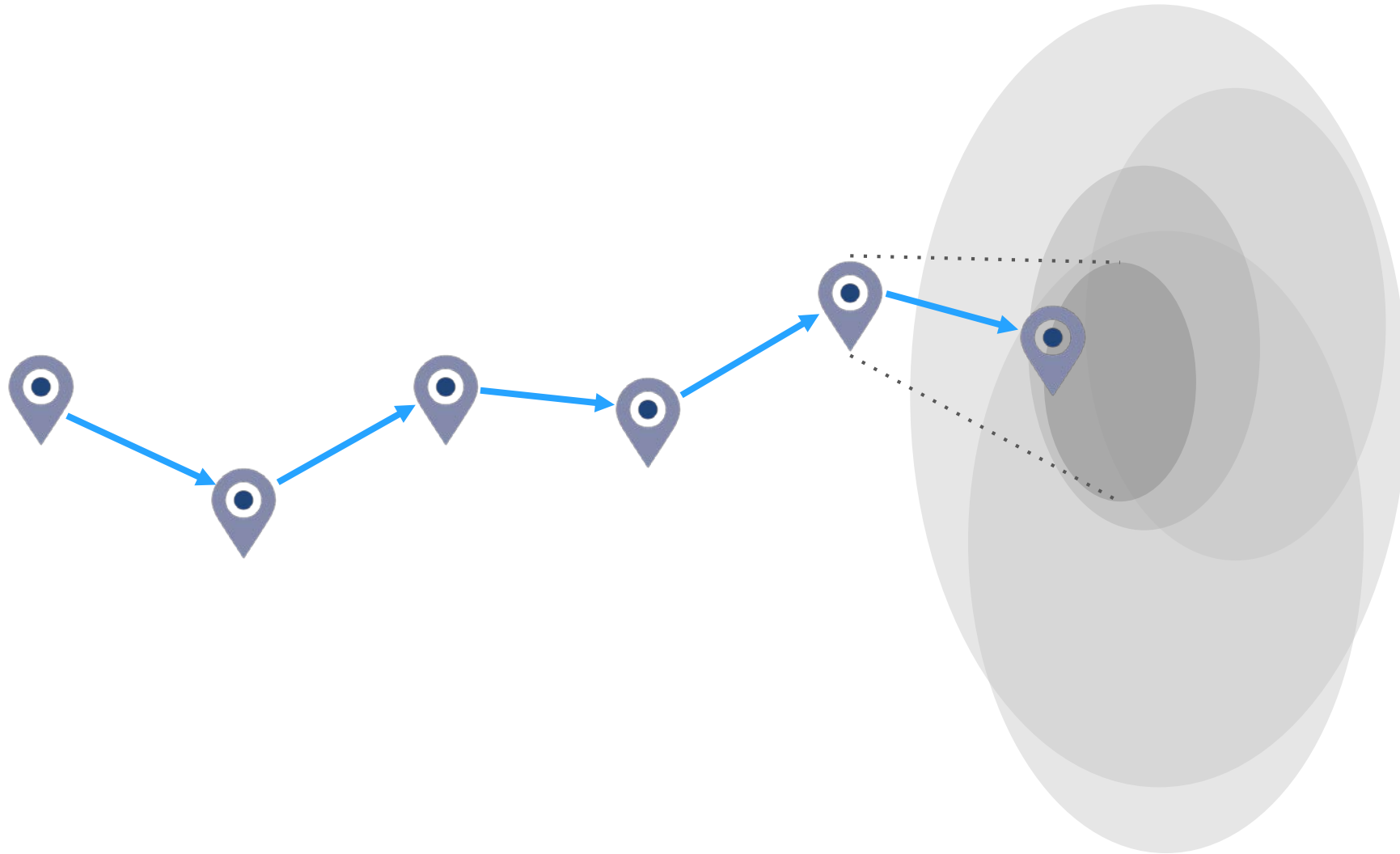
# Periodically Re-evaluate Roadmap



# Periodically Re-evaluate Roadmap



# Periodically Re-evaluate Roadmap





# Continuously Update the Modernization Artifacts

