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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?

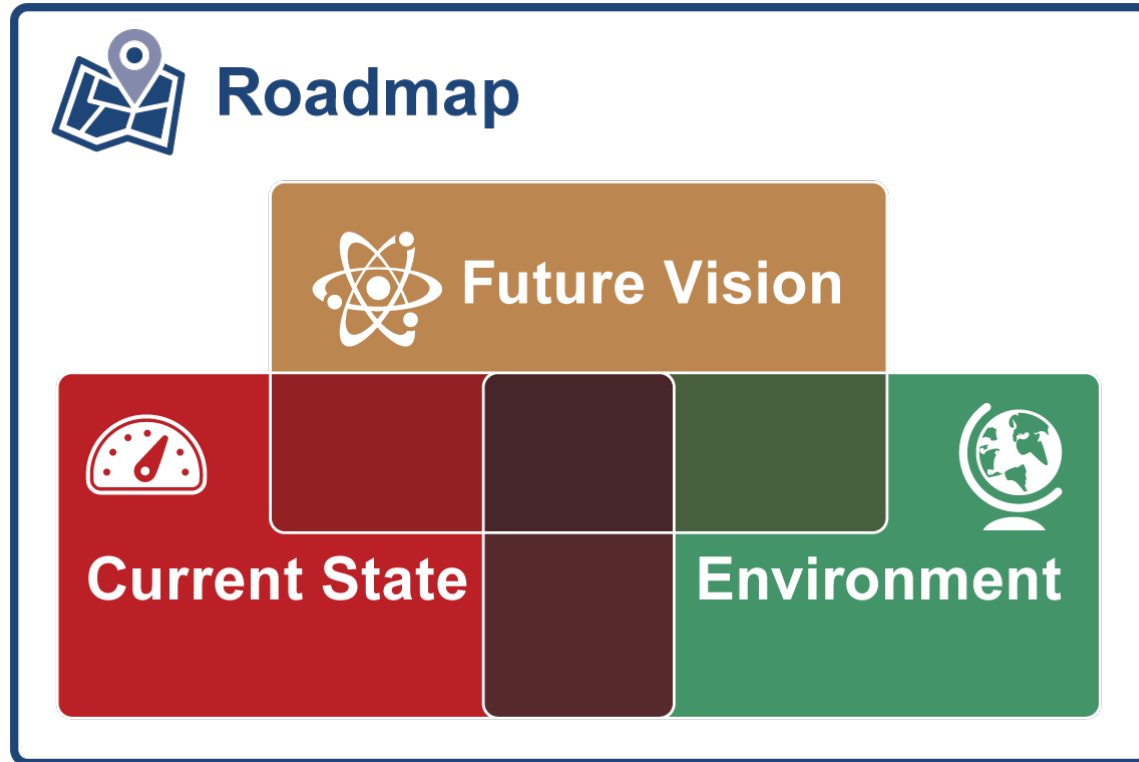
- a) Yes
- b) No

Polling Question 3

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

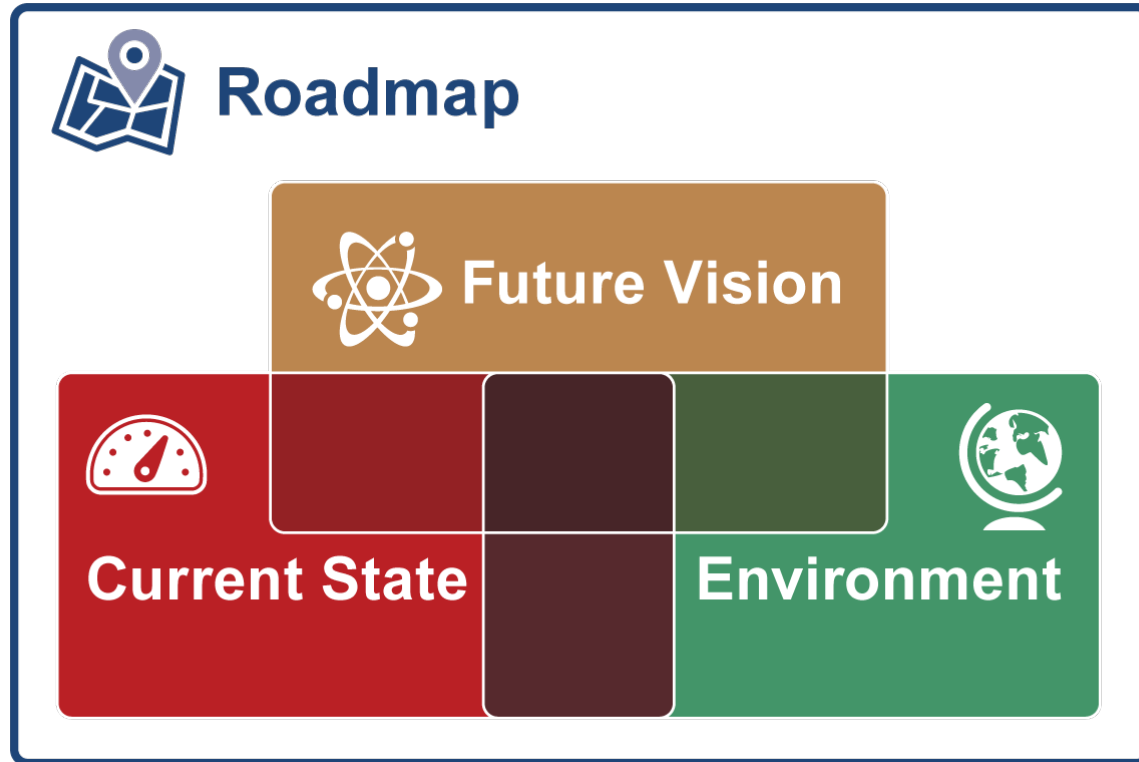
- a) 1
- b) 2
- c) 3
- d) 4
- e) 5

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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Know where you want to be



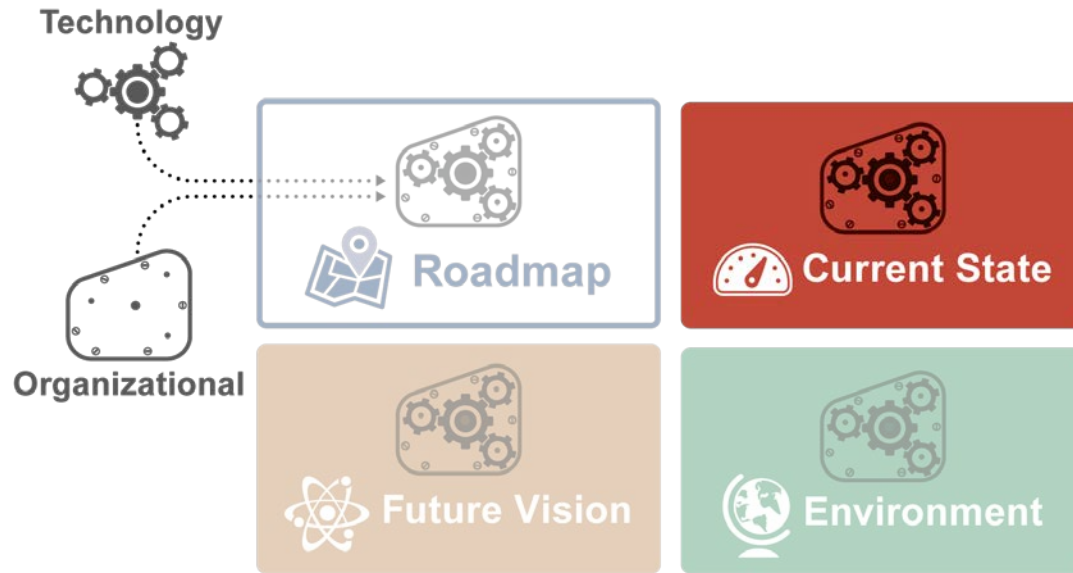
It is easy to list all the great cool things you want to use in the future

- 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

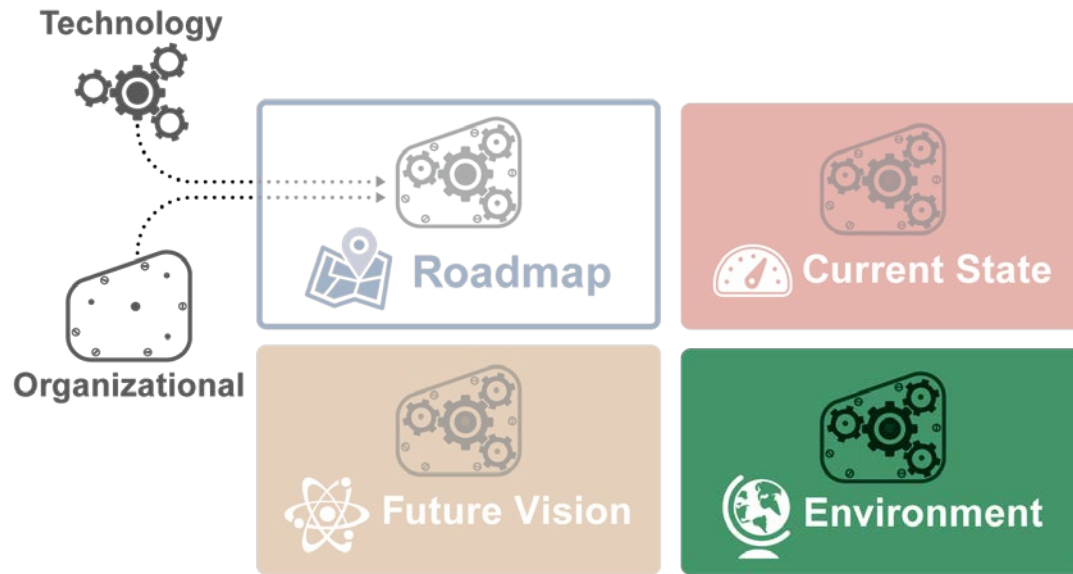
Determine which of the implemented solutions caused you to do the modernization.

- 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- Plethora of outdated technologies?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



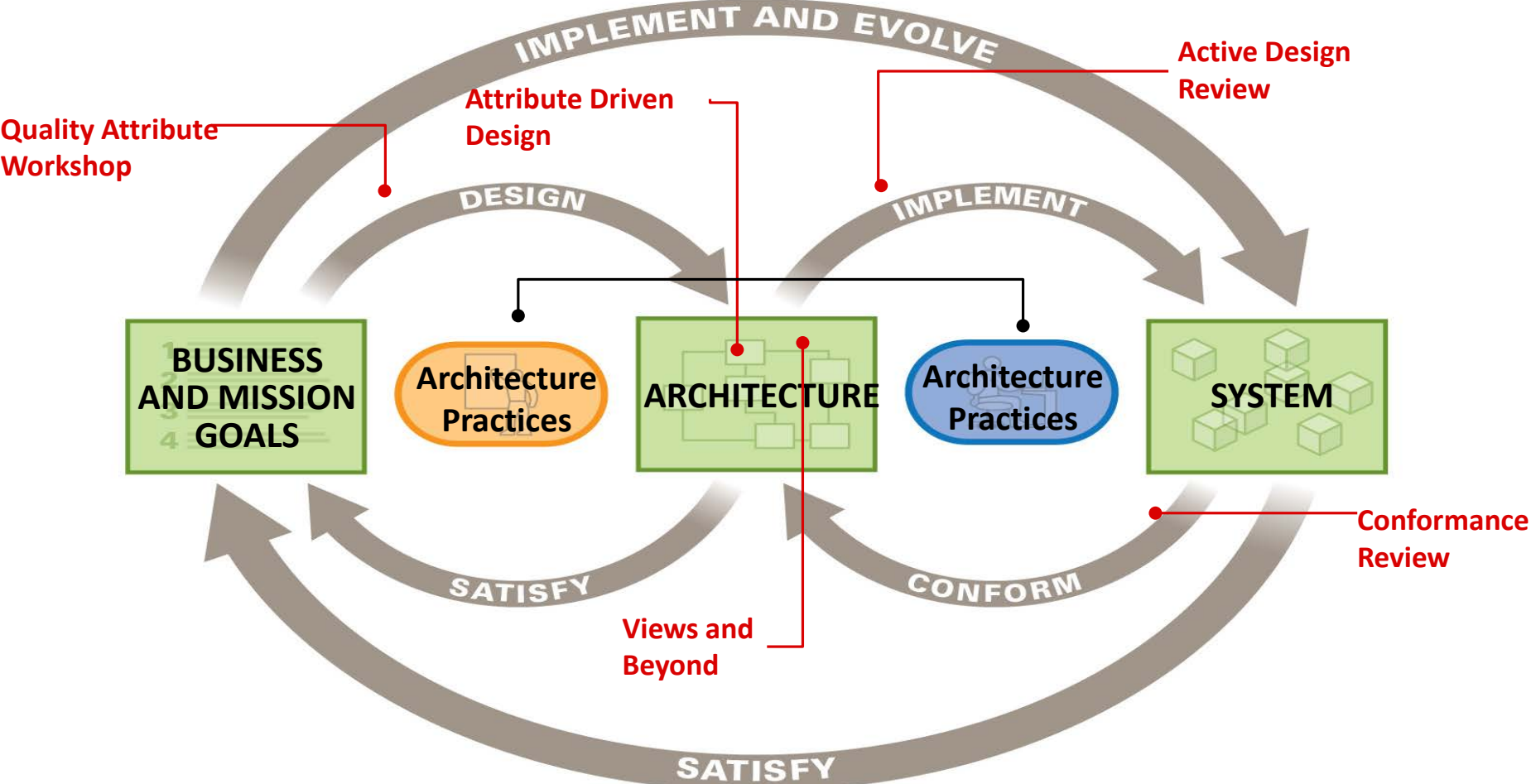
Technical Roadmap

- 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

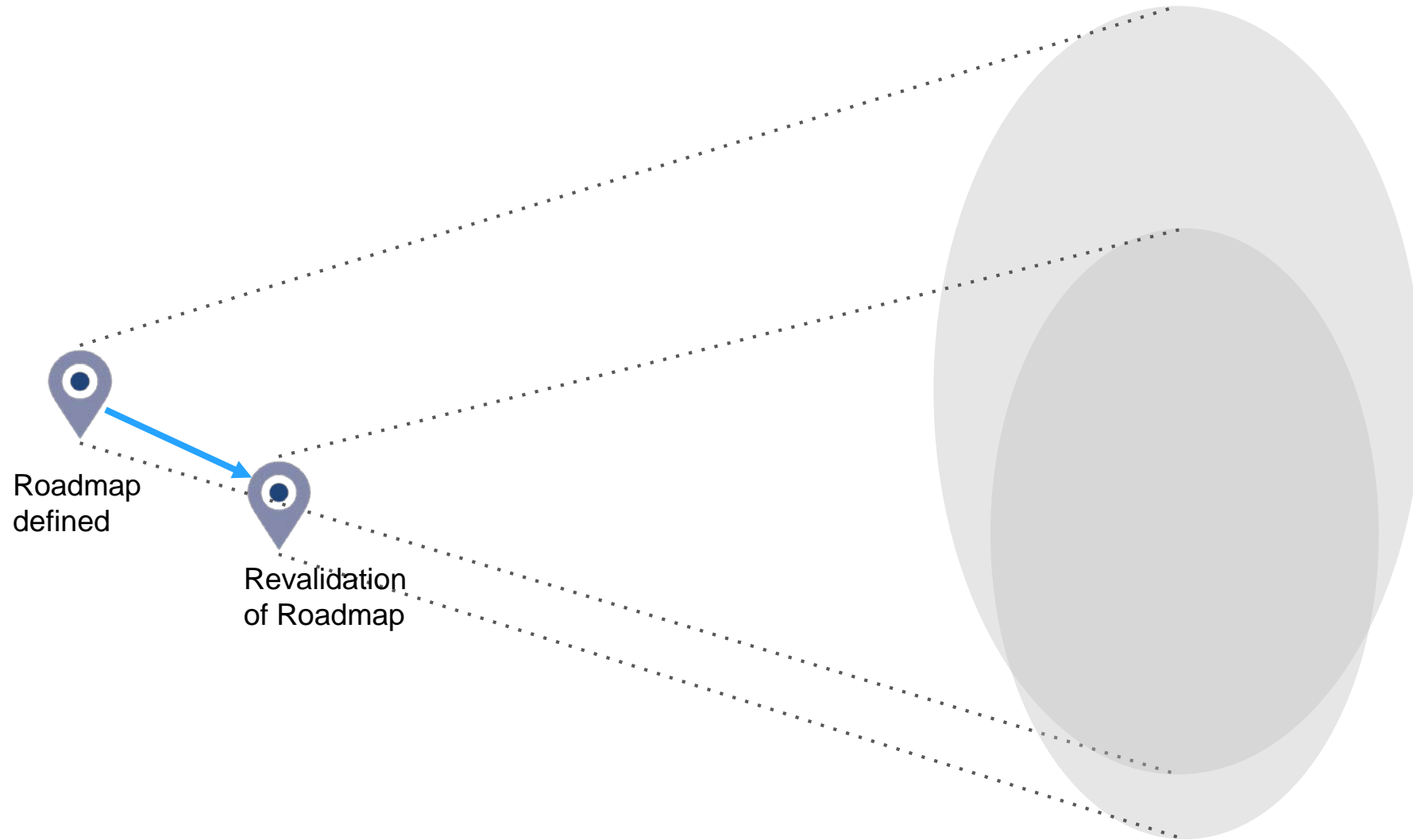
Strategic roadmap supporting technical roadmap.

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

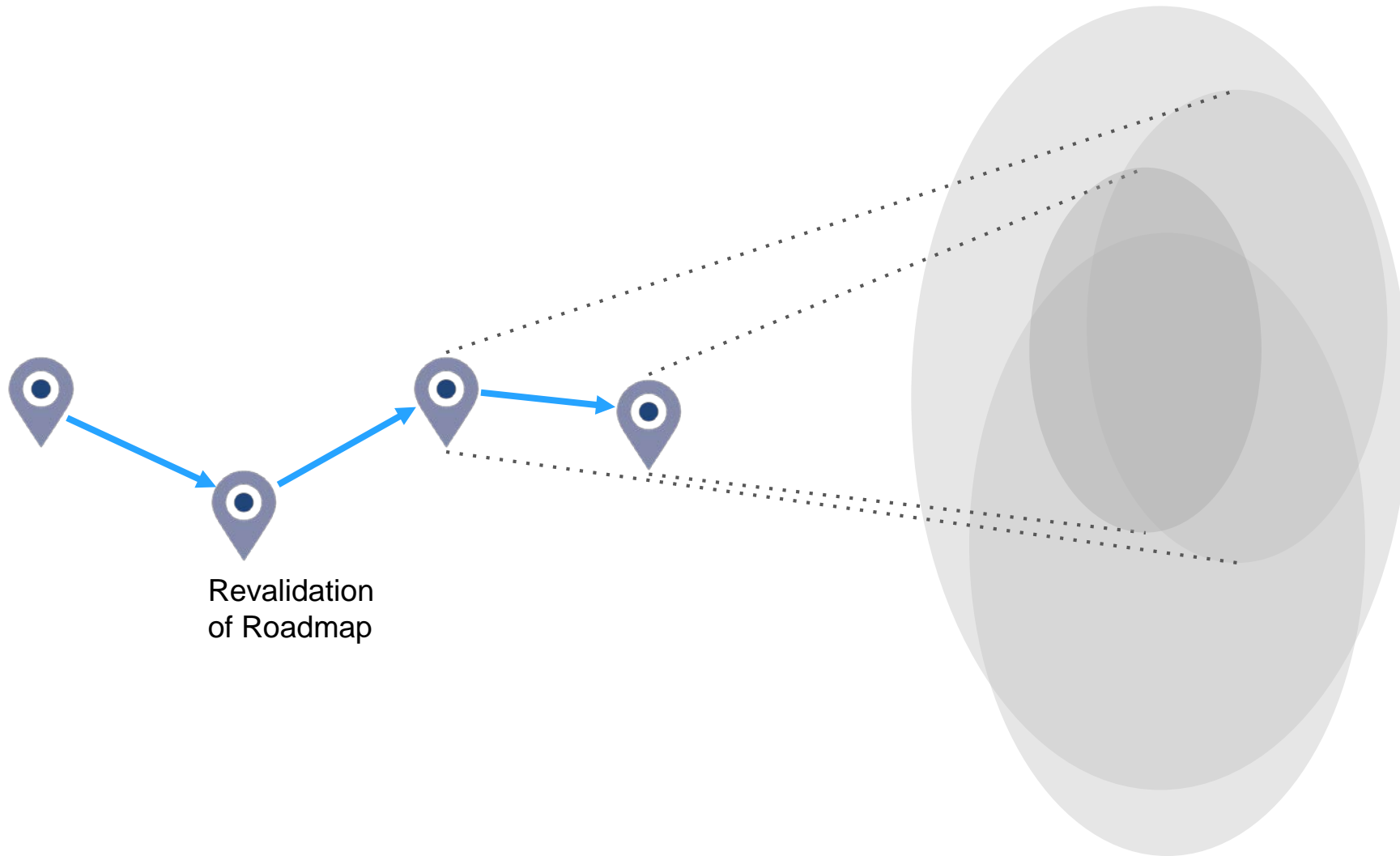
Iteratively move forward



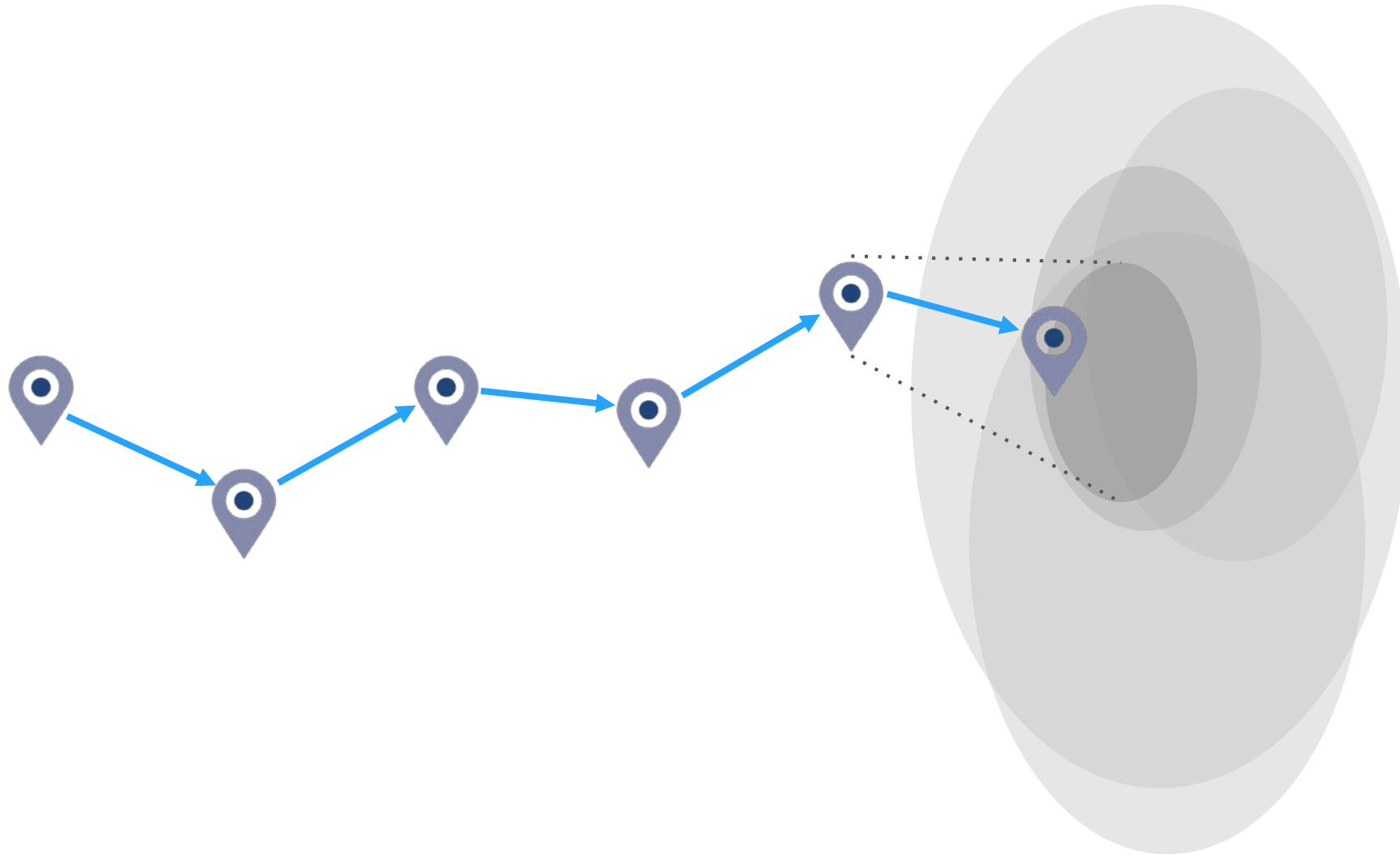
Periodically Re-evaluate Roadmap



Periodically Re-evaluate Roadmap



Periodically Re-evaluate Roadmap



Continuously Update the Modernization Artifacts

