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# Best Practices for Delivering Targeted and High-Impact Roadmaps

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Initiatives: [Enterprise Architecture](#)

To demonstrate the benefits and increase the use of roadmaps, enterprise architecture and technology innovation leaders must ensure they have a clearly defined audience, are focused on answering real questions, reflect the business context and deliver measurable outcomes.

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Documents Accessed: 98 of 140



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## Overview

### Key Challenges

- Roadmaps without a clearly defined and articulated primary audience (a person, role, group or functional team) will have a significantly less direct impact on business and technology changes.
- Roadmaps that aren't developed and scoped based on the questions that stakeholders are or should be asking have reduced value to stakeholders and can result in wasted efforts.
- Enterprise architecture (EA) practitioners that create roadmaps that focus on business or technology as if they are separate entities are setting unrealistic expectations and

plans. Roadmaps must account for existing and emerging business and technology disruptions.

- The business value of a roadmap can only be recognized if that measurable business value is explicitly defined and tracked. Additionally, roadmaps must demonstrate the path to a better future state.

## Recommendations

Enterprise architecture and technology innovation leaders building a world-class EA discipline should:

- Ensure that the EA team remains focused on the primary audience by writing the name of the audience on the roadmap deliverable so that others realize that it was created with a specific target audience perspective in mind.
- Pin down the challenge or opportunity key stakeholders face by determining the type of deliverable needed, as well as the scope and focus for the roadmap.
- Integrate components of their business outcome statement in roadmaps by including business strategy, disruptive trends, executive concerns, future state and, most importantly, target business outcomes.
- Engage stakeholders and get agreement on both the overall business outcomes for the roadmap end state and incremental business outcomes, including their timing (for example, quarterly vs. annually).

## Introduction

A roadmap is a graphical representation that is used to illustrate the milestones, deliverables and investments required to manage change to a future state from the current state over a specific period (see Note 1). As such, roadmaps should be critical, well-used deliverables to help business and IT leaders make effective investment decisions, to guide the coordination of complex projects, to provide insight to help strategic planning, and to help inform business and IT operations. However, we often find that a gap exists between the overly complex and technically orientated bottom-up roadmaps that EA practitioners have traditionally created and the business-outcome-driven needs of business and IT stakeholders. A Gartner survey of attendees of a roadmap webinar shows that 14% of organizations do not have or use roadmaps, and another 34% use only tactical roadmaps.

## Clarify Who, What and Why

The interest in roadmaps remains high, but it is also highly distributed over strategic and tactical topics and audiences. During the past year, Gartner has responded to more than 8,268 inquiries on roadmaps across all of Gartner research. These client inquiries spanned a wide breadth of Gartner research agendas (more than 22 agenda topics), with the top five interests in roadmaps in postmodern ERP strategies, IT operations transformation, supply chain strategy, analytics and BI strategies.

The top roles that were submitting these inquiries include CIOs (1,448), enterprise architects (945), application management (330), infrastructure and operations management (436), supply chain management (438), and program and portfolio management (279).

Of the total 8,268 roadmap inquiries, slightly more than 3,800 were not associated with any specific vendor or vendor products. In a review of these inquiries, many had to do with higher-level strategy planning around cloud, analytics and ERP.

Effective roadmaps illustrate the business strategy, capture enterprise response to disruptive forces, address critical concerns of stakeholders, help stakeholders drive toward the desired future state and are laser-focused on outcomes (see Figure 1). As organizations increase focus on innovation, roadmaps also highlight opportunities to leapfrog the competition. If your roadmap does not show these relationships, do you have a roadmap or a laundry list?

### Figure 1. Simple Roadmap

Source: Gartner (November 2018)

The challenge for many EA practitioners is that they desire to create a “one-size-fits-all” roadmap that meets the needs of many different stakeholders, which of course is not possible. How can EA practitioners ensure they are creating deliverables that are valued and provide high-impact business outcomes? The answer is create roadmaps that are targeted, focused on real issues and opportunities, and tied to measurable business outcomes.

In this document, we explore some of the best practices we find organizations employing to ensure that their roadmaps are being used to make investment decisions and are highly impactful to stakeholders.

## Analysis

### Identify the Primary Stakeholders Who Will Use the Roadmap Deliverable

*Roadmaps with a clearly defined and articulated primary audience (a person, role, group or functional team) will have a significantly higher direct impact on business and technology changes.*

The value of EA is in providing signature-ready and actionable deliverables that help drive investment decisions, informing cost-cutting decisions, guiding resource allocations and guiding decisions not to invest (see [“Stage Planning a Business-Outcome-Driven Enterprise Architecture”](#)). As part of the business-outcome-driven EA approach, we have defined five types of deliverables, including measurable, actionable, diagnostic, enabling and operational.

EA leaders must ensure roadmap deliverables have a target audience in mind and can be immediately used for decision-making purposes. EA leaders must ensure that roadmaps are useful and high-impact by clearly defining the primary target audience (see Figure 2).

**Figure 2. HR Roadmap for Diversity and Inclusion**

Source: Gartner (November 2018)

The primary audience for a roadmap may be a person, a role, a group or a functional team. Determining the primary target audience drives EA practitioners to ensure roadmaps are created in a way that speaks to the primary audience so that the audience effectively leverages that guidance. For example:

- A roadmap for a product manager working on a new payment system might include the features and functions that are needed over time, as well as how these features connect with other applications and technologies.
- A roadmap for a CIO might illustrate how different IT functions support cybersecurity over time, including how cloud, blockchain or IoT may be leveraged.
- A roadmap for a business leader seeking to optimize their end-to-end supply chain might leverage business capability models or journey maps to illustrate how the business will evolve and how supply chain partnerships and business models may need to change.

EA leaders must recognize that other audiences may also leverage these roadmaps. However, this may be “through” the primary audience or “additive to” the primary audience. Secondary audiences may request a version of the roadmap for their needs. These types of additional views should be encouraged. However, they should be taken on as a version of the roadmap targeted at a different primary audience.

### **Actionable Recommendations**

EA leaders must:

- Identify the primary audience (person, a role, a group or a functional team) for any roadmap before creation.
- Write the name of that audience on the roadmap deliverable to ensure that the EA team remains focused on that primary audience and so that others realize that it was created with a specific target audience perspective in mind.
- Focus on using models, structure and language that speaks directly to the primary audience in a way that the audience can understand and leverage the deliverable for improved decision making.

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Consider secondary audiences that may also view this deliverable. Be open to creating additional views of a deliverable, as needed, that address the needs of additional stakeholders.

## Define the Questions (Opportunities or Challenges) That the Roadmap Is Intended to Address

*Developing and scoping upfront a roadmap based on the questions that stakeholders are or should be asking will increase its value to stakeholders and dramatically reduce wasted efforts.*

First, understand the primary target audience, then understand the questions the audience needs to have addressed. These questions may be opportunities, challenges or both, and they may have to do with technology and business. Consider using scenario planning to improve business and IT strategy resiliency as a structured way for your organization to think about the future (see [“Four Techniques EA Can Use to Make Smarter Strategic Decisions”](#)). Understanding the questions that the primary stakeholder is asking is critical for:

- **Determining the type of deliverable.** Is the stakeholder seeking a roadmap that illustrates the EA team’s recommended actions, including investments, adoption of new technologies or business processes, and increases/decreases in funding? In this case, enterprise architects must recognize that stakeholders are looking for signature-ready actionable deliverables. This means the roadmap must provide a recommended course of action that the stakeholder could approve.
- **Defining the scope and the focus for the roadmap.** If an IT leader is asking how the IT organization can support cloud infrastructure as a service (IaaS) during the next five years, regarding reliability and scalability, then the focus for the roadmap on the technology, the time frame and the attributes are clear. If a CIO is asking what the options are for changing these business processes to support new digital business models during the next five years, then the focus for the roadmap may be related to creating multiple scenarios for how specific business processes might be changed.
- **Driving the story that the roadmap is telling.** One of the significant differences between a roadmap and other deliverables is that a roadmap addresses a question over a period of time, rather providing a point-in-time answer. This means a roadmap tells a story. Knowing the question and intended audience helps guide the story that needs to be told. For example, a roadmap for a CIO illustrating organizational change toward supporting

bimodal IT operations might show new teams forming, new business processes being put into place, and so forth. In another example, a roadmap for an I&O leader illustrating a core system will show technologies being phased out and in, and integration and deliverables needed for migration.

While in the ideal world the target audience would tell the EA team the questions it needs to have answered, in many cases, the audience may not have the questions identified. In this case, a best practice is to deduce the question that you believe the stakeholder is or should be asking, and present this back to the stakeholder (see [“Deducing Business Strategy Is a Unique Opportunity for EA Practitioners to Both Drive Execution and Gain Credibility”](#)).

A further best practice is to present this draft question with a mock-up of what the roadmap might look like, to see if that resonates with the stakeholder.

### Actionable Recommendations

EA leaders must:

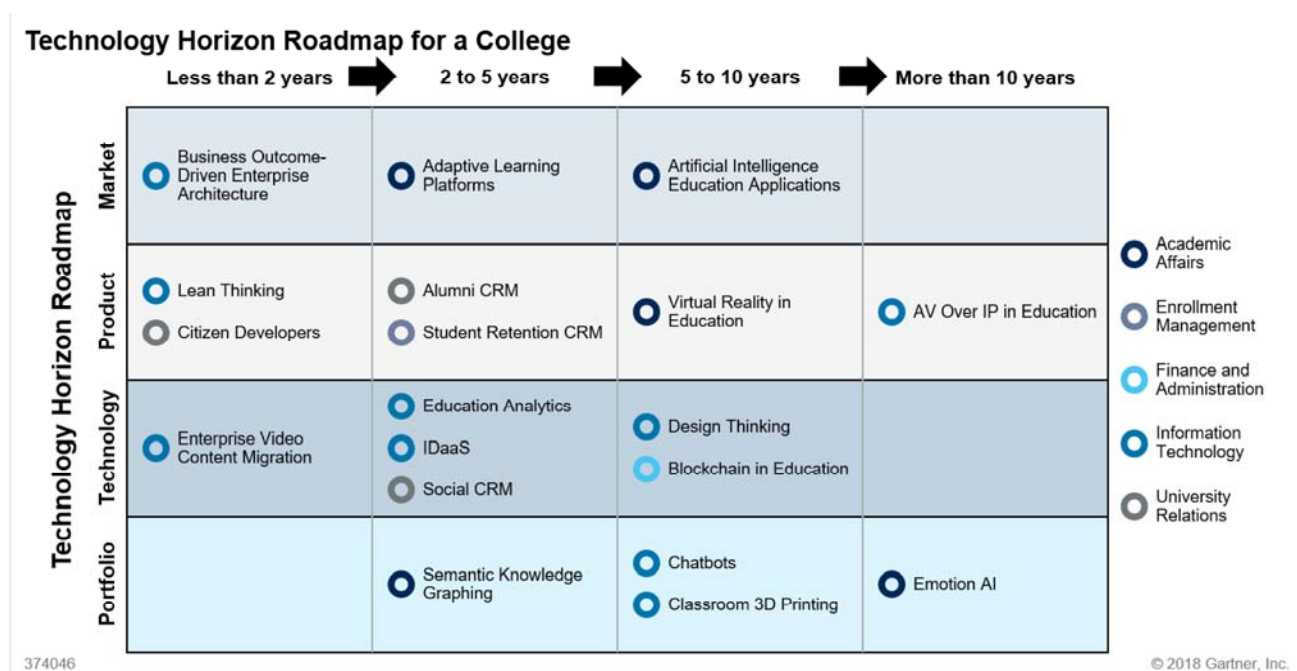
- Determine the type of deliverable needed, along with the scope and focus for the roadmap by ascertaining the questions (challenges and opportunities) that the stakeholder is facing (see [“Classify Roadmap Styles to Guide Roadmap Development”](#)).
- Write down the focus question as a real question. For example, “What are the business process and information changes needed to support our new customer engagement model?” Consider writing the question or questions on the final deliverable to ensure that the EA team remains focused and so that others realize that it was created with a question or questions in mind.
- Address the question your stakeholder is asking or should be asking by creating a stalking horse of a roadmap.
- Prioritize answers the roadmap seeks to address from the stakeholder’s viewpoint. Furthermore, be careful not to overload a roadmap with extraneous information, so it becomes unfocused, overcomplicated or overwhelming for the target audience. The most effective roadmaps focus more on the big picture than task-specific details.

### Define the Roadmap Within the Context of the Business, and Broader Business and Technology Disruptions

*EA practitioners who create roadmaps that focus on business or technology as if they are separate entities are setting unrealistic expectations and plans. Roadmaps must account for existing and emerging business and technology disruptions.*

EA leaders must help guide business and IT decisions by always thinking about the longer-term business strategy and direction, the future state, and business outcomes, and then guiding business and technology changes in the short term (see [“Use Enterprise Architecture to Orchestrate the Delivery of Business Outcomes”](#)). EA leaders must not only understand the answers to the question(s) the stakeholder is asking, but also provide roadmaps in the context of the future state of the business (strategy and direction). EA leaders must understand the disruptive technology and business trends that are or could impact their organization and integrate these into their roadmaps (see Figure 3).

**Figure 3. Technology Horizon Roadmap for a College**



Source: Gartner (November 2018)

Because roadmaps are used to guide investment decisions, including new capabilities and cost-cutting, any roadmap should be balanced and viewed relative to its impact (or lack thereof) on the business strategy and operations (see [“Toolkit: Business Outcome Statements Deliver Value to Your Business and Guidance for EA”](#)).

Most enterprises invest substantial time and energy into robust roadmaps that Gartner refers to as written once, read never (WORN) – an oxymoron since they never are used enough to become worn. A good strategy inspires the hearts and minds of people and



engages them to drive better business outcomes. However, this requires EA practitioners to do two things. First, ensure that roadmaps are communicated upward within your organization. This can be accomplished by incorporating into deliverables consumed by business stakeholders, such as strategy on a page (see [“Industry Vision: How to Create a One-Page Industry Strategy”](#)). Second, determine other stakeholders who can benefit from understanding roadmaps, such as PMOs who plan multiple years into the future to anticipate changes on the horizon (see [“How PMO and PPM Roles Will Change in the Digital Business”](#)).

## Actionable Recommendations

EA leaders must:

- Ensure roadmaps reflect the broader context of the future-state business strategy and operations.
- Reflect your business outcome statement in your roadmaps by integrating business strategy, disruptive trends, executive concerns and the future state.
- Understand the microeconomic and macroeconomic trends that are affecting your organization. Look for opportunities to bring these into roadmaps — particularly for roadmaps with senior business or IT leaders as the primary audience.
- Define a clear communications plan for the roadmap. Understand who the stakeholders in the communication are and the key messages that need to be delivered. Identify the channels that are most effective in communicating the strategy.

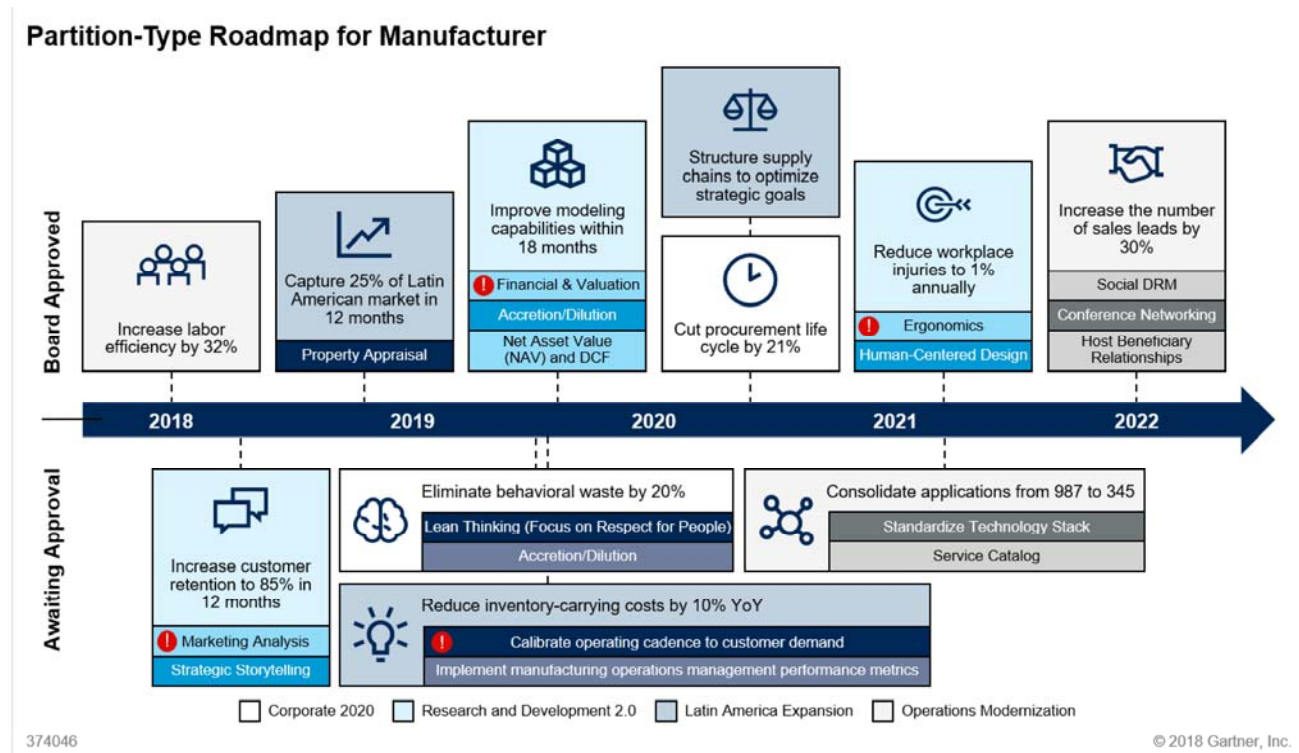
## Define Specific Measurable Business Outcomes for Change Initiatives That Are Illustrated by a Roadmap

*The business value of a roadmap can only be recognized if the measurable business value is explicitly defined and tracked.*

The best way to track and measure the impact of a roadmap is to define specific business outcomes for change initiatives that are illustrated by a roadmap. A business outcome is a statement of a specific business benefit result that is measurable, achievable within a specified time frame, and supportive of the business strategy and objectives. A business outcome is expressed as a change occurring with a specific short- or long-term time frame (see [“Toolkit: Business Outcome Statements Deliver Value to Your Business and Guidance for EA”](#)).

Roadmaps may reflect several business outcomes along the way. Ensure business outcomes are based on the stakeholders' business goals, have incremental checkpoints and that these metrics are tracked (see Figure 4).

**Figure 4. Partition-Type Roadmap for Manufacturer**



Source: Gartner (November 2018)

Incremental checks should be used to evaluate necessary changes to the roadmap and its execution. Is there a change in the business context or external disruptions that affect achieving the target business outcomes? Are there technology, resource, information or business changes that affect achieving the target business outcomes? Has the stakeholder changed the question or goals due to business or technology changes? Roadmaps must reflect business reality, so incremental checkpoints will ensure the roadmap remains useful and valuable.

### Actionable Recommendations

EA leaders must:

- Define overall business outcome metrics for the change initiatives that are illustrated by a roadmap, as well as for interim or incremental business outcomes that are illustrated by a roadmap.

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Collaborate with stakeholders and gain agreement on both the overall outcomes for the roadmap end state and incremental outcomes, including their timing (for example, every six months).

- Include milestone checks on the outcomes as an integral part of the roadmap, and schedule reviews with stakeholders to check on the progress.

## Use a Roadmapping Tool to Capture Changing Strategies and Innovation Opportunities

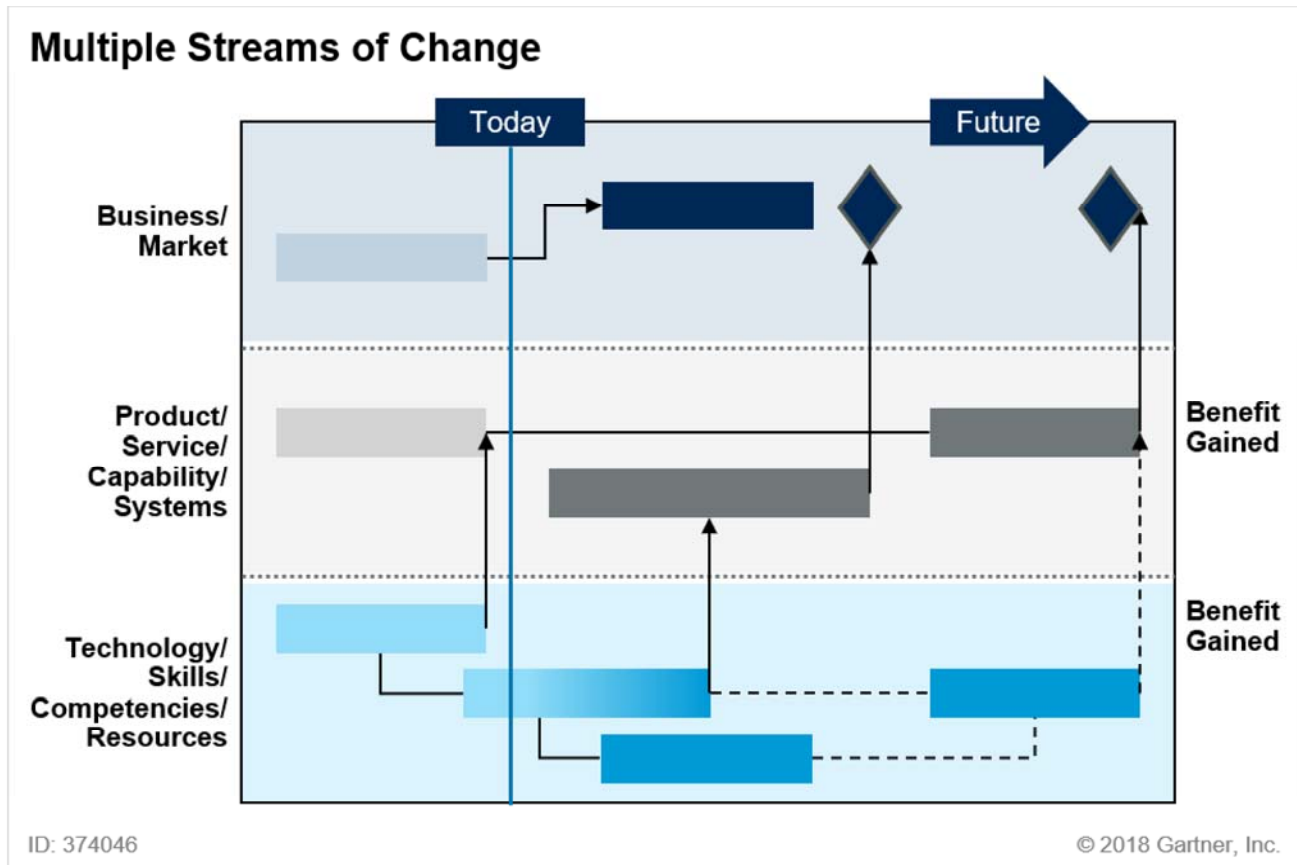
Strategy and innovation roadmapping tools allow EA and technology innovation leaders to visually depict the relationship between strategy, innovation and the state of execution over time. The graphical nature of the interface and its ability to dynamically illustrate complex interrelationships and interdependencies — given supporting analytical lenses — make the use of strategy and innovation roadmapping tools powerful. <sup>1</sup> Static models do not lend themselves to dynamic change or updates. EA and technology innovation leaders need support for a rapid change to roadmaps, which always comes as time moves forward and other conditions and assumptions about the original roadmap change.

Roadmapping tools may also extend themselves to supporting nodal maps of ecosystem relationships, but not all vendors may support this functionality. <sup>2</sup> Roadmaps may also include market, economic, social, environmental and political trends that could impact the ability to execute on a roadmap. <sup>3</sup> For example, a solution roadmap for a government organization might illustrate impacts caused by changes in elected officials, demographics or tax revenue. A private-sector organization that is creating a three-year roadmap as part of its digital transformation might include economic trends influencing its organization, customers and partners. <sup>4</sup>

As Gartner has defined for years, “the scope of the enterprise architecture includes the people, processes, information and technology of the enterprise and their relationships to one another and the external environment.” This definition can be seen illustrated in various roadmapping constructs as evidenced in a seminal paper on the subject. <sup>5</sup>

As such, Gartner recommends that these visualizations account for potential market changes (pricing, consolidations, technology innovation and market shifts) and other nontechnology variables that might influence future funded or unfunded change. This is in keeping with past evolutions of roadmapping and, unlike static representations, allows the user to represent different states of opportunities relative to different metadata associations (see Figure 5).

**Figure 5. Roadmap Relationship and Interdependencies of Multiple Streams of Change**



Source: Adapted from EIRMA

Making modifications from the original European Industrial Research Management Association (EIRMA) multiple layer formats,<sup>6</sup> Figure 6 shows a simple set of interdependencies within, and across, multiple streams of change. As indicated by the red line, there's only one in-flight project depicted. Delivered projects, now assets, precede the red line, and future projects (a solid line indicating they are funded, dotted lines showing unfunded) predict future courses of action and opportunities.

**Figure 6. Roadmap Mashup of Capabilities, Assets, Projects and Future Plans**

Source: Adapted from EIRMA

For those with a tool, this depiction in Figure 6 is quickly possible. Beyond this view, the ability to rapidly and dynamically recast the state change relative to other metadata attributions provides higher value than static views. For example, consider that the leadership team of a financial services organization asks for a view of business capabilities mashed up against assets, projects and plans. Tools in this space will allow for that on-screen, and immediate, visualization. This is not possible without a tool. Figure 7 illustrates yet another view that roadmapping tools can recast quickly. <sup>7</sup>

**Figure 7. Market, Product and Technology Roadmap for a Software Product Company**

Source: Gartner (November 2018)

“A fool with a tool is still a fool.”<sup>8</sup> To underscore the need for a roadmap tool, EA and technology innovation leaders must be able to tell the story of how the tool will support decision-making processes. Such use cases can be seen as a technique to tell the story about how roadmapping is used to aid in planning for the future, engaging with in-flight projects, and understanding the fitness of current-state assets relative to projects and plans.<sup>9</sup>

### Actionable Recommendations

EA leaders must:

- Engage stakeholders with this class of tool to provide an engaging visual representation of the state of change relative to plans, in-flight efforts and existing assets, given strategic goals, strategies, missions, and objectives.
- Capture changing strategies and innovation opportunities using strategy and technology innovation roadmapping tools in support of the decision-making processes of leadership teams.
- Engage leadership teams in making smarter innovation decisions, adding robustness to the innovation planning process, supporting in-flight projects and aiding in the fitness assessment of current-state assets in business terms, rather than technical terms.

### Evidence

<sup>1</sup> [“Market Guide for Strategy and Innovation Roadmapping Tools”](#)

<sup>2</sup> [“Best Practices for Modeling Business Ecosystems”](#)

<sup>3</sup> [“Massively Disruptive Events Require a Nonlinear Approach to Enterprise Architecture”](#)

<sup>4</sup> [“Exploiting Economic Architecture to Drive Digital Business”](#)

<sup>5</sup> [“Developing a Technology Roadmapping System,”](#) Portland International Center for Management of Engineering and Technology. (Subscription necessary.)

<sup>6</sup> [“Don’t Get Stuck in Complexity: Coping With Strategic Complexity in the Context of Product Generation Engineering,”](#) ResearchGate.

<sup>7</sup> [“Market Guide for Strategy and Innovation Roadmapping Tools”](#)

<sup>8</sup> [“Perestroika, Fashion, and the Universal Glue,”](#) American Review of Respiratory Disease.

<sup>9</sup> [“Storytelling for Enterprise Architecture: How to Influence and Persuade Leaders of EA Value in Decision Making”](#)

## Note 1

### Definition of a Roadmap

A roadmap is a graphical representation that is used to illustrate the milestones and deliverables required to manage change to a future state from the current state over a specific period.

A roadmap:

- Uses time as the primary dimension
- Shows milestones and the deliverables that are needed to occur over time to achieve the future state
- Uses a level of abstraction appropriate for the audience and the intended purpose
- May also show additional influencing factors

### Recommended by the Authors

[Create Roadmaps That Support Decision Making and Communicate Strategy Effectively](#)

[Classify Roadmap Styles to Guide Roadmap Development](#)

[Best Practices for Delivering Targeted and High-Impact Reference Architectures](#)

[Market Guide for Strategy and Innovation Roadmapping Tools](#)

[Culture Crush: Design Your Roadmap for a Culture of Innovation](#)

[IT Instigators: Design Your Roadmap for Proactive IT Innovation](#)

[Storytelling for Enterprise Architecture: How to Influence and Persuade Leaders of EA Value in Decision Making](#)

### Recommended For You

[Five EA Strengths that Combat “Wicked Problems”](#)

[2020 Resolution for EA Leaders: Reexamine Your Business Architecture Practices and Ambitions](#)

## Stop Trying to Prevent All Architectural Risks (and Do This Instead)

### 3 Traits of Successful EA: Metrics, Skill Gaps, and Disbandments

### Coordinating Product Line Decisions (CeruleanMoon\*)

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