

3 Steps to Creating Enterprise Architecture Services

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FOUNDATIONAL This research is reviewed periodically for accuracy.

By Analyst(s): Philip Allega

Initiatives: [Enterprise Architecture Function](#); [Digital Innovation and Enablement Function](#)

With EA practices evolving into internal management consultancies, enterprise architecture and technology innovation leaders must offer stakeholders a portfolio of services. Here, we describe how to create EA services, tell stories that vet them and identify the metrics that demonstrate success.

Additional Perspectives

- [Summary Translation: 3 Steps to Creating Enterprise Architecture Services](#)
(11 January 2022)

Overview

Key Findings

- A lack of clarity as to how enterprise architecture supports other disciplines to make smarter business decisions hampers the understanding of EA's value proposition.
- A focus on solution delivery and technical architecture diminishes the impact EA can have in an organization.
- Enterprise architects often struggle with engaging stakeholders, defining EA value metrics and creating use cases to support EA tool investments.

Recommendations

EA and technology innovation leaders looking to develop and offer a portfolio of services to organizational stakeholders should:

- Select the value proposition they want their EA practice and services to deliver to IT and/or to the non-IT entities inside and outside their organizations.

- Use the supplier, input, process, output and customer wireframe to define how the role will use the discipline to help others make smarter decisions.
- Use storytelling to vet the appetite of target consumers of each EA service, selecting those for which they have strong support to be part of the next chapter of their EA program.

Introduction

Enterprise architecture (EA) leaders must provide a clear linkage between the services they provide and benefits derived by others in the consumption of these services. In [Predicts 2021: Enterprise Architecture Designs the Composable Organization](#), Gartner advised EA and technology innovation (TI) leaders to “Develop EA services that can appeal to a wider range of stakeholders and ways of working, particularly product and fusion teams.” This advice builds on previous years of research and the recognition that EA services help leaders communicate the work they perform to deliver the EA value proposition. In [Evolve Enterprise Architecture Into an Internal Management Consultancy](#), we explored numerous EA services that support consumers of the service.

Gartner research revealed this technique at EY as early as 2012 ¹ and at adidas in 2017. ² The concepts of EA services are not new; however, they are not yet commonplace. We posit that the techniques espoused in this research will aid practitioners in creating EA services that bring clarity to the value proposition that both the discipline and the role can deliver.

Gartner defines an EA service as the defined package of work activities and deliverables that EA teams provide to consumers of that package that consumers agree they need from EA.

Just because the development of EA services can be defined doesn't mean that this is the goal of this exercise. Figure 1 outlines the approach we will take in this research to develop a portfolio of EA services. It is in the last step that the reader will learn how to validate that the EA services that were created meet the definition.

Figure 1: Three Steps to Creating EA Services

Three Steps to Creating EA Services

Source: Gartner
716506_C

Gartner

Analysis**Step No. 1: Select the Value Proposition**

When John Zachman introduced the discipline of EA in 1987, he illustrated the interconnections and interdependencies of business entities, processes and location to the underlying technologies. ³ In his seminal work, he noted that, “What you think architecture is depends on what you are doing.” In the article, he references a table that describes what each person may think of “architecture,” as seen through the needs of his or her role. This conclusion will resonate with many practitioners, as they’ve struggled to demonstrate the value of what they can provide to, and do for, others.

Gartner client inquiries concerning EA services reveal discussions concerning the value proposition of EA with regard to the services provided to business and IT stakeholders. ⁴ Conversations have also included questions as to when to expand EA service definitions beyond solution delivery support alone.

Rather than returning to the original work from Zachman, we find that using the wireframe of Gartner’s I&T operating model serves as a backdrop to define the value proposition of EA. This wireframe covers the spectrum of using the EA discipline to manage the IT estate through to the business’s consumption of technology to realize its own value. ⁵

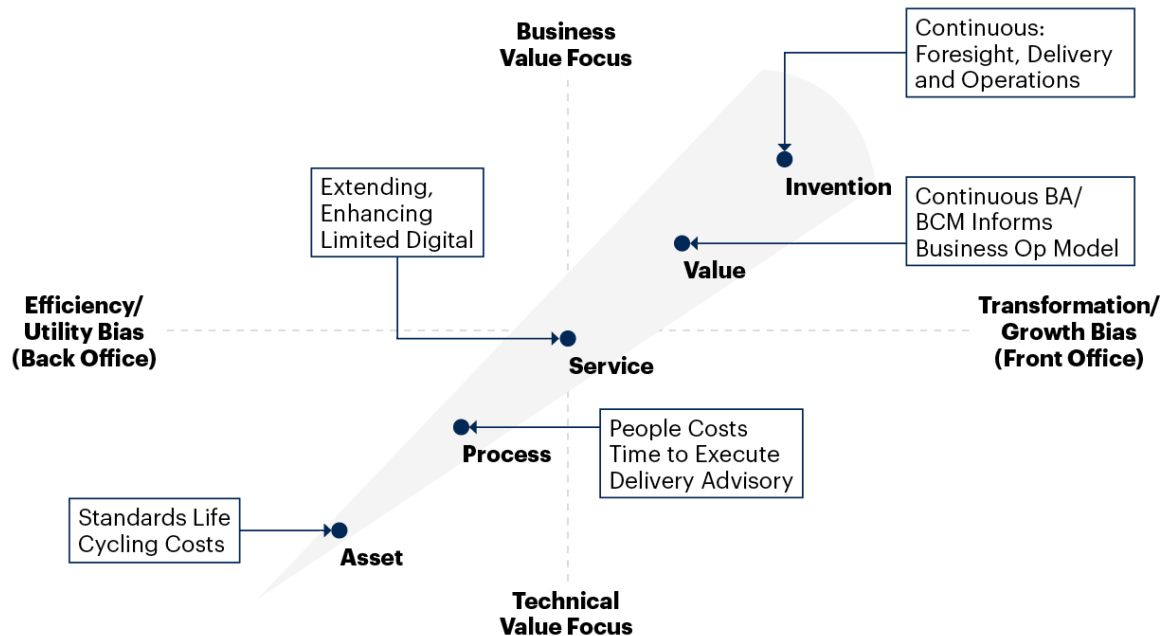
Actions:

- Determine which value proposition EA might deliver in support of Gartner’s I&T operating model value cone (see Figure 2).
- Explore how your EA discipline, and supporting people, may deliver value against the value proposition of IT cost management (see Figure 3). ⁶

- Consider examples, and develop your own.

Figure 2: Mapping Gartner's I&T Operating Model Value to EA Support

Mapping Gartner's I&T Operating Model Value to EA Support



Source: Gartner
716506_C

Gartner

A simple way to interpret this wireframe is:

1. The focus on IT estate management is in the lower left corner of the model.
2. The focus on the consumption of IT by the business is in the upper left of the model.

The examples in the boxes are just that — examples. They are not meant to be comprehensive, but meant to stoke the reader's imagination to link the value propositions in the model to all of the value propositions indicated on the value cone in Figure 2. Table 1 provides a brief description of the linkages in Figure 3.

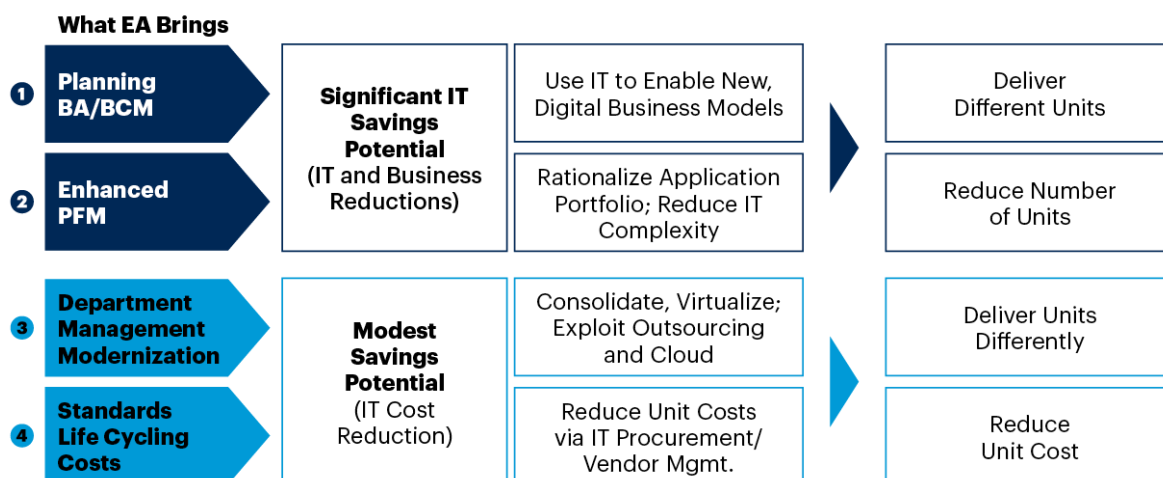
Table 1: Explanation of EA Concepts Mapped to I&T Operating Model Value

(Enlarged table in Appendix)

<i>I&T Operating Model Value</i> ↓	<i>Map to Supporting EA Concepts Explained</i> ↓
Asset	Management of assets, from the view of the EA discipline, includes the creation of standards (e.g., a classification schema that may range from evaluation to decommission). Life cycling infers that such standards will predict time frames as to when their standards classification may change, such as when end of life (EOL) and end of support (EOS) milestones are identified. Cost considerations may be a further set of attributes that can be financial, but can also include people skills or other forms of costs.
Process	Internal IT processes that EA aids frequently include solution delivery. Regardless of the methodology employed, the discipline may offer guardrails (e.g., standards, principles, reference models and patterns) that have been created in advance of the delivery effort. The ability to use these guardrails may have people or cost implications or serve to speed up delivery teams toward production. Risk compliance support may be another focal point, although not noted in Figure 3.
Service	This word is placed at the crossroads of the value and bias axes. It's at this point that the EA discipline may be asked to extend beyond value to the management of the IT estate and onward into the consumption of technology by the business itself. In turn, this may extend and enhance a team that had previously been focused on management of the IT estate. Innovation decisions concerning investments in digital technology may be an opportunity to add value at this point.
Value	It's here that the scale of impact increases. At this level of value, Gartner sees the use of EA to capture business capability models (BCMs) within the business architecture (BA) to differentiate and monitor the changes in the business operating model itself. ⁷
Invention	At this level, the value proposition of EA is in linking continuous foresight, delivery and operations assessments. This allows the EA discipline to assist in identifying and assessing probable disruptions. In turn, this enables the leadership team to develop strategic responses to successfully bring their organization into the future. ⁸

Source: Gartner (November 2021)

Figure 3: A Traditional View of Delivering Value From IT and How EA Provides Support

A Traditional View of Delivering Value From IT and How EA Provides Support

Source: Gartner
716506_C

Gartner

This view, although focused on the deployment of various techniques to support cost management, provides further inspiration for the value proposition that EA can provide. On the left, we see the use of standards, life cycling and cost predictions to support the lower goals and activities. As the value proposition extends toward the business's consumption of technologies, we begin to see portfolio management techniques at work,⁹ in addition to planning activities supported by BA and BCM.

Figure 4 suggests ways that EA can be applied to deliver value, depending on the bias and focus along the displayed axes. This is not meant to be an exhaustive or prescriptive list; rather, it is meant to inspire and help determine the value proposition that the discipline of EA may be asked to deliver, or capable of delivering, within the organization (e.g., both IT and the wider business).

Figure 4: Mapping Sample Low-Hanging Fruit Opportunities for the Enterprise Architect to Help

Mapping Sample Low-Hanging Fruit Opportunities for the Enterprise Architect to Help



Source: Gartner
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Step No. 2: Use SIPOC as a Wireframe

Understanding the value proposition aids EA leaders in determining what EA services they wish to provide. At this juncture, the question raised concerns who will receive the value should work be performed to deliver it. In short, this is a return to John Zachman’s work in 1987, noted in the Introduction to this research.

Lack of clarity as to how the role and discipline support others to make smarter decisions hampers understanding of EA’s value proposition. This remains a pervasive challenge for many engaged in the discipline of enterprise architecture. ¹⁰ Engaging in the supplier, input, process, output and customer (SIPOC) wireframe, modified slightly here, ¹¹ helps EA leaders gain clarity about who they will help, when and within which decision-making processes the consumer believes he or she will yield value.

The original Six Sigma definition of the acronym SIPOC was supplier, input, process, output and customer. Rather than customer, we propose consumer. Our reasoning is that the consumer engages in the consumption of EA deliverables.

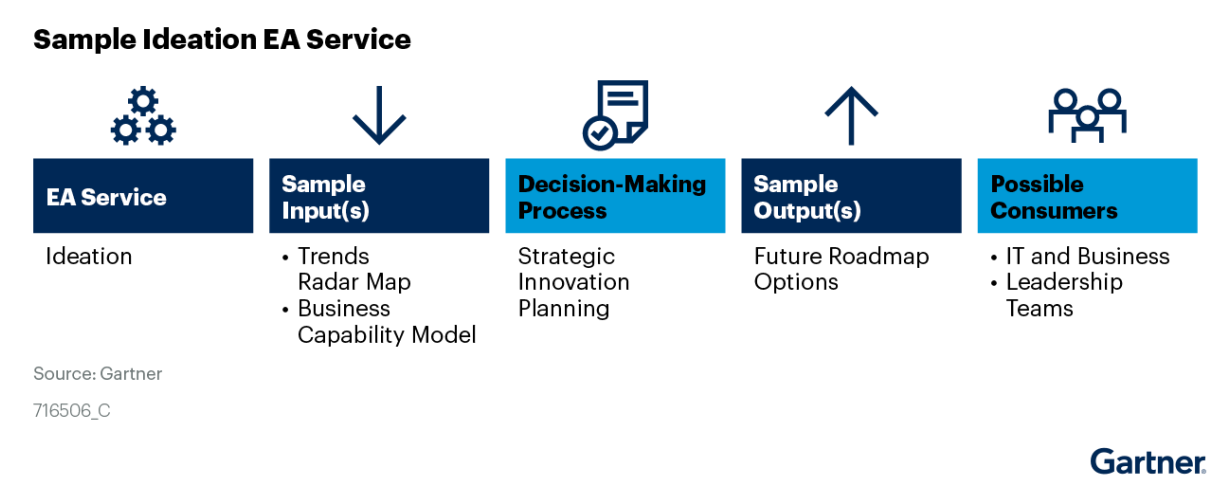
Actions:

- Use the value propositions from Step No. 1 to identify the services you'd like to provide that will deliver value to the consumer.
- Assume that you are the "S"upplier to deliver the "IPO" to the "C"onsumer and name the service you create using this wireframe (capitalized words relate back to the SIPOC framework).

- Formalize your service definition and extend it with the following structure:
 - **A name or tag line.** “Innovation” of “future-state planning” conveys the highest level of abstraction about what the service will help the target consumer yield value from the EA team’s assistance.
 - **A description of the service.** A further explanation of what this will do, for whom, when and how it will deliver value should be condensed into this abstract synopsis of the service being offered.
 - **A list of input deliverables.** This should be a list of which deliverables will be provided to the target decision process. The timing as to their creation and maintenance should be accounted for within the description of the service process.
 - **A decision process.** This should describe how both the EA role and the deliverables are to engage a decision process (e.g., the steps, who, when, how) to help make a decision on the basis of inputs from the EA team and others, where applicable.
 - **A list of output deliverables.** This should be a list of which deliverables will be provided to consumers as a result of engagement with the target decision process. The timing as to their creation and maintenance should be accounted for within the description of the service process.
 - **A list of target consumers.** This should be a list of the consumers who engage with inputs from within the decision process itself.
 - **A list of possible decisions.** This should be a list of the types of decisions that might be made as a result of engaging with the process and the input deliverables.
 - **A list of possible business outcome value metrics.** These are quantitative metrics that capture the value received as a result of the decisions made by consumers as a result of engaging in the decision process.
 - **Identification of a qualitative survey technique for the consumer.** Use the Net Promoter Score (NPS) or a satisfaction survey (at minimum annually) to gain feedback on the perception of the value received by the consumer.

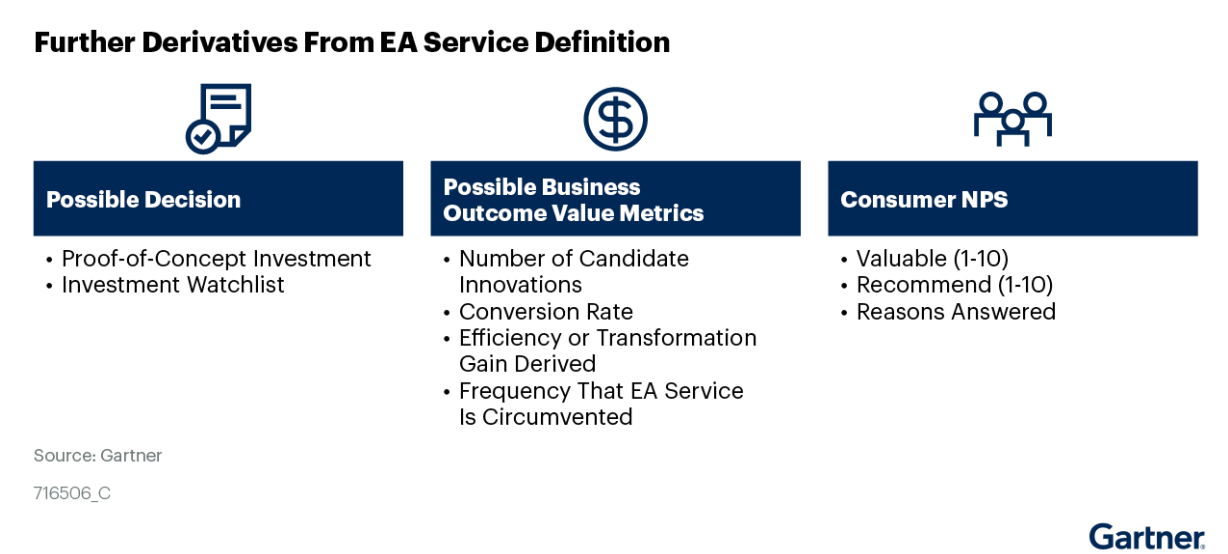
In Figure 5, we can see a simple name applied to the service, but the focus is on the target consumers and the decision-making process that will consume the deliverable. The value is not in the deliverables, listed as inputs and outputs, but in their consumption. Note that the name below could equally have been “innovation,” “disruption mitigation” or “future-state planning.” The choice of the name is determined by what you wish to convey to the target consumers.

Figure 5: Sample Ideation EA Service



Furthermore, this allows the practitioner to illustrate further benefits and potential metrics to the service, as noted in Figure 6.

Figure 6: Further Derivatives From EA Service Definition



Step No. 3: Engage in Storytelling

The last step focuses on gaining and maintaining support for an EA service. This includes storytelling, stakeholder engagement, capturing value metrics and use cases to support EA tool investments. Gaining approval for the consumption of the EA service gives approval for the creation and maintenance of the associated visual models and metadata to aid consumers in their decision-making process. The first step is in gaining approval by vetting the appetite of the proffered service to the target consumers.

Storytelling (see [Storytelling for Enterprise Architecture: How to Persuade Leaders of EA's Value in Decision Making](#)) is the simple technique to assess the level of acceptance or resistance by stakeholders when offering support. The voice-of-the-customer technique used by adidas in [Product Management of EA Activities \(adidas\)](#) illustrates that not all services offered will be accepted.

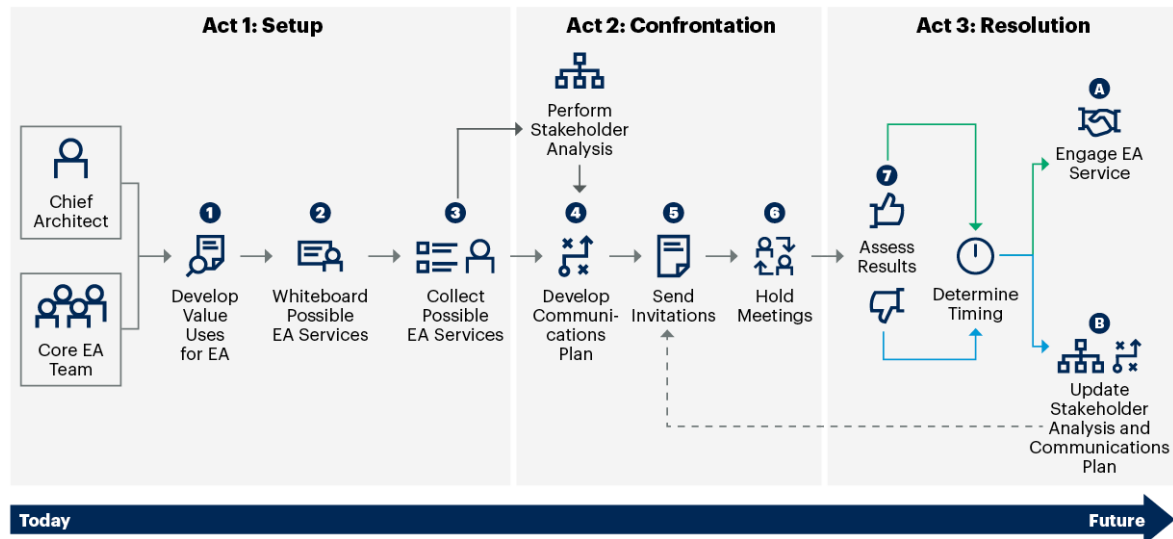
Actions:

- Expand EA service definitions beyond solution delivery support alone to vet the appetite for additional value-adds from the EA team.
- Use storytelling, stakeholder management and communications planning to engage target consumers of EA services (see Figure 7).
- Engage in the EA services that are supported by the target consumers.

Figure 7: Storytelling the EA Service Development Story

Storytelling the EA Service Development Story Three-Act Narrative Structure

— Approved — Deferred



Source: Gartner

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Gartner

In Figure 7, the numbered steps should be self-explanatory. The story we see in this figure is the story of creating the story of the services that will deliver the value propositions identified. The concepts are further explored in [Storytelling for Enterprise Architecture: How to Persuade Leaders of EA's Value in Decision Making](#) and not repeated here for brevity.

Inquiries during the past 12 months have further refined techniques to reflect the concept of the service ¹² when discussing it with others:

- A simpler storyboarding technique to visually share the story of value to be provided to the target audience (i.e., the “C” in the consumer of SIPOC).
- Another visualization of service tagline, the “S” in supplier and the “C” in consumer as indicated in the SIPOC wireframe.

Figure 8, below, illustrates a simpler storyboarding technique shared with target consumers to vet their appetite for the service.

Figure 8: Different Services Mean Different People

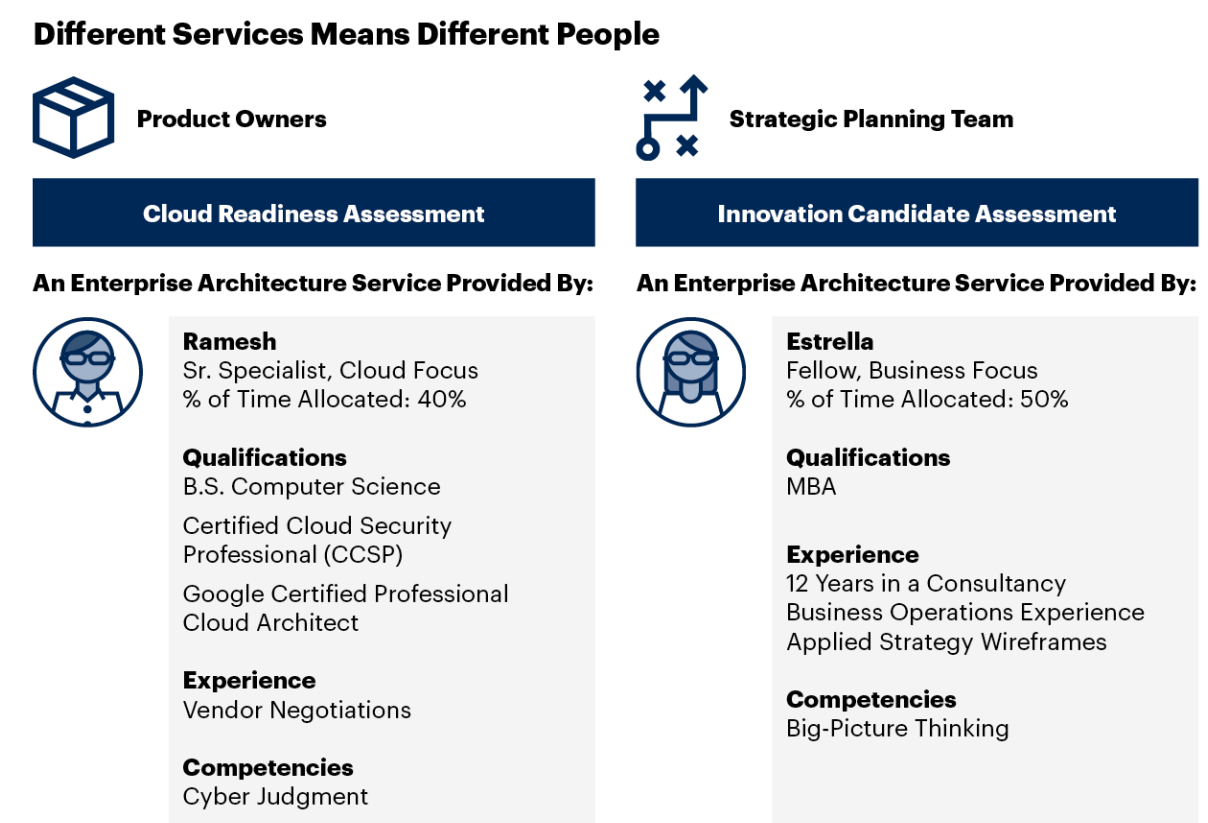
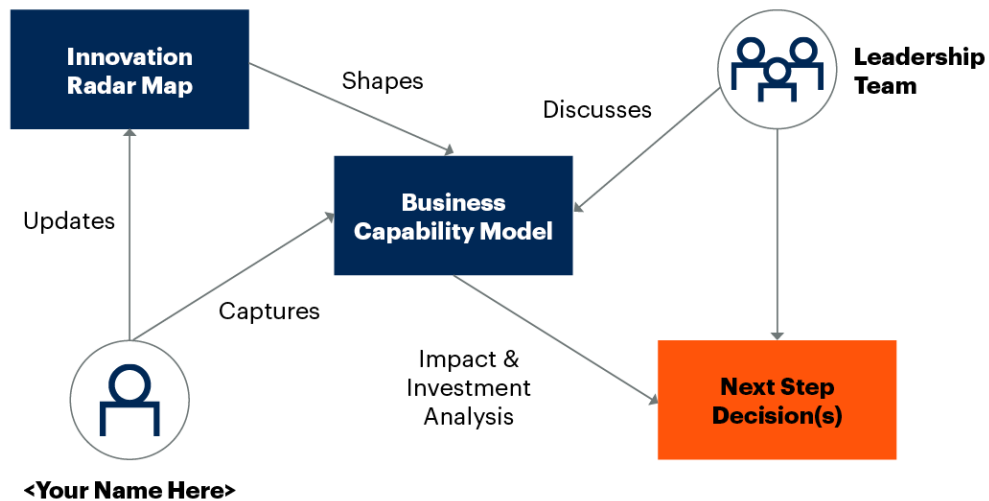


Figure 9: Simple Storyboarding to Vet Target Appetites

Simple Storyboarding to Vet Target Appetites



Source: Gartner (2021)
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Gartner

This storyboard uses simple constructs to illustrate a flow of a service over time. This version is shown left to right, suggesting a passage of time. Some cultures may prefer a right-to-left flow. The construct of an icon to represent a person, or people, is used. The graphic illustrates that the person, or people, are to be named. Arrows, with action words or phrases, are also used on the graphic to link a person, or people, to a box or to indicate what passes between boxes. The box may contain a deliverable, inflection or decision point.

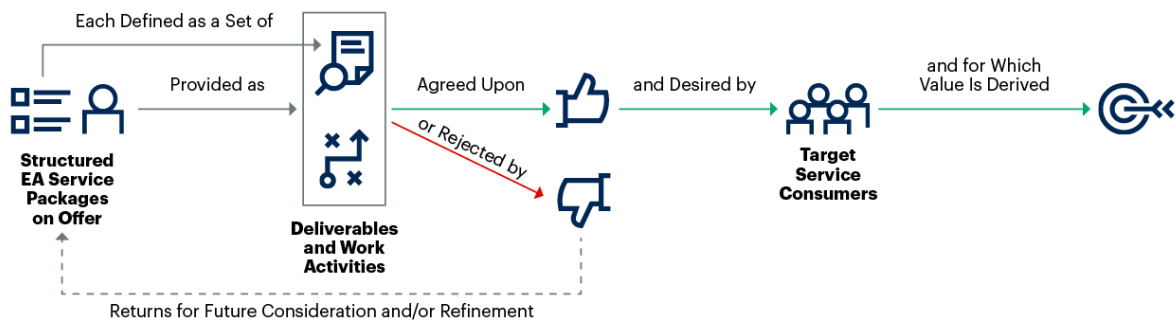
A positive point shared with Gartner concerning the use of such a graphical storyboard is its use when shared simultaneously, online, with distributed teams. The elements can be placed within a productivity tool that enables remote users to work on multiple storyboards and review them together. This supplants prepandemic techniques with whiteboards in conference rooms.

Developers of such storyboards should take no more than 30 minutes to storyboard their use cases and deliver the flow to target consumers within one minute, at best, and no more than 15 minutes, at worst. The acceptance or rejection of the service helps determine whether it will be supported by the target consumer. In turn, this gives the supplier the permission to engage in the service.

Each EA service candidate developed must be vetted with the target consumers before becoming an EA service. The services that are created, but not selected, may return for further consideration as a candidate in the future, but should not be attempted as part of the current EA function. Figure 10 underscores this point.

Figure 10: How to Determine Whether an EA Service Is a Service

How to Determine Whether an EA Service Is a Service



Source: Gartner

716506_C

Gartner

Evidence

¹ [Offering EA as a Service \(Ernst & Young\).](#)

² [Product Management of EA Activities \(adidas\).](#)

³ See [A Framework for Information Systems Architecture](#). IBM Systems Journal. Volume 26, No. 3. Page 276. 1987.

⁴ Inquiry from 27 October 2019 to 26 October 2020, where the core topic of the inquiry concerned EA services (n = 421).

⁵ [Embrace the Value-Optimized I&T Operating Model for Enterprisewide Competitive Advantage and Growth.](#)

⁶ [Toolkit: Gartner's Ideas for IT Cost Optimization.](#)

⁷ For more information on the delivery of this value proposition, see [Leveraging Digital Product Management for Digital Business Transformation and Optimization.](#)

⁸ [Backcast the Enterprise's Next Future State Vision.](#)

⁹ [How to Assess the Fitness of Your Application Portfolio](#).

¹⁰ Diverse academic articles on EA continue to press this point. From ResearchGate, see [A Conceptual Framework for Enterprise Architecture Design](#), [The Benefits of Enterprise Architecture in Organizational Transformation](#) and [Institutional Perspectives on the Process of Enterprise Architecture Adoption](#).

¹¹ For more on this technique, and additional links, see the [SIPOC page](#) on Wikipedia. For our purposes, Gartner has changed the “C” from “customer” to “consumer” in this acronym to gain clarity about who is consuming the service to make smarter decisions with the help of EA.

¹² Inquiry from October 2020 to October 2021, where the core topic of the inquiry concerned “EA Services” with analyst “Philip Allega” (n = 158).

¹³ For more information about EA skills and competencies, beyond qualification and experience, see [Enterprise Architecture Skills and Competencies That Drive Digital Business Success](#) and [Toolkit: Architecture Talent Diagnostic](#).

Document Revision History

[3 Steps to Creating Enterprise Architecture Services - 15 May 2020](#)

Recommended by the Author

Some documents may not be available as part of your current Gartner subscription.

[Predicts 2021: Enterprise Architecture Designs the Composable Organization](#)

[Evolve Enterprise Architecture Into an Internal Management Consultancy](#)

[Offering EA as a Service \(Ernst & Young\)](#)

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[Embrace the Value-Optimized I&T Operating Model for Enterprisewide Competitive Advantage and Growth](#)

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