

IT Optimization Series:

Application Rationalization Guide

V1





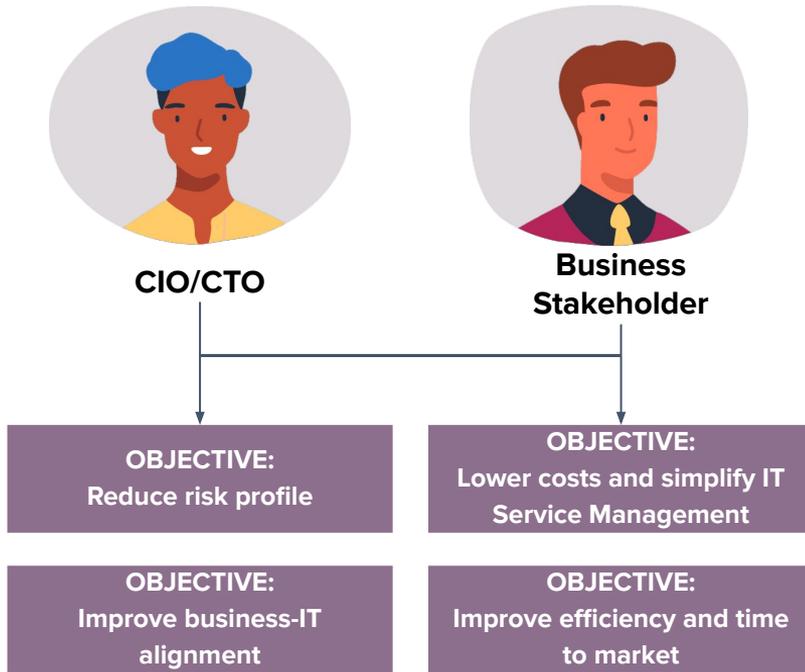
The IT Optimization Series

IT Optimization is a series of steps you undertake to gain immediate benefits through streamlined operations, lower costs and increased agility during changing business conditions.

The IT Optimization series contains 4 separate but intimately connected use case guides

1. **Application Rationalization** - Reduce complexity and IT Risk while improving overall efficiency and service delivery through the elimination of unnecessary functional overlap.
2. **Cloud Migration** - Ensure the most effective IT environment possible, maximizing effectiveness in cost, performance, and security.
3. **Application Modernization** - Application modernization is the process of taking legacy applications and modernizing their platform infrastructure, internal architecture, and/or features.
4. **Post Merger Integration?** - Post merger integration is the process of combining two (or more) entities and their assets, people, tasks, and resources to create the most value for the future enterprise by realizing efficiencies and synergies.

Objectives and Outcomes



Over time organization's application portfolios grow. This growth often happens organically and unchecked leading to duplicate functionality and IT over spend. Using this guide organizations will be able to examine their IT Application portfolio and identify consolidation opportunities—to realize both efficiency gains and a reduction in overall IT spend. Ardoq's customers typically realize a 10% reduction in portfolio spend within the first 12 months and identify rationalization opportunities quicker than through conventional Application Rationalization initiatives.

Application Rationalization reduces complexity and IT Risk while improving overall efficiency and service delivery through the elimination of unnecessary functional overlap.

Application Rationalization enables IT organizations to focus on delivering efficient IT Service to the business and simplifying service delivery through the removal of duplicate functionality.

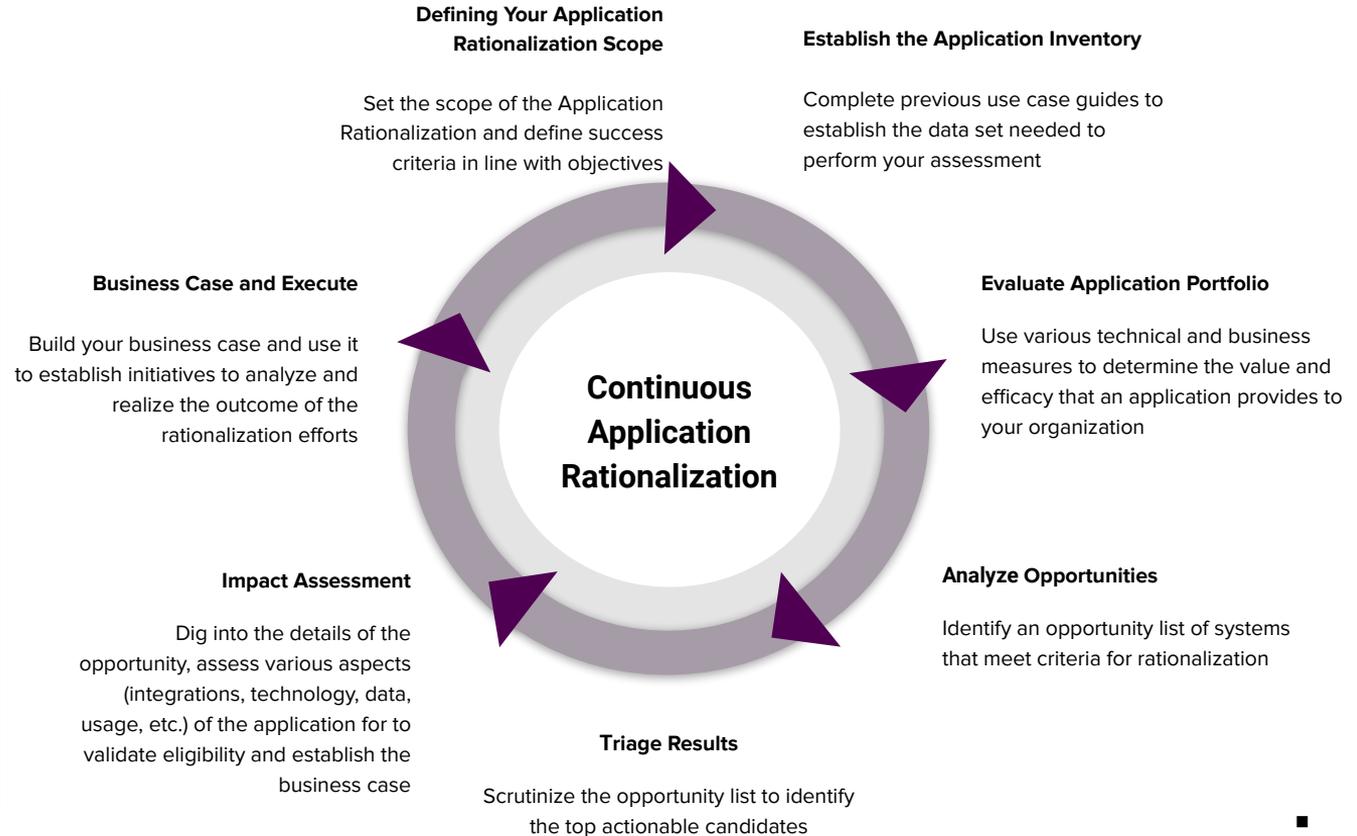
By identifying Application Rationalization opportunities and reducing the overall IT portfolio organizations can redeploy resources that would needlessly be tied up. These resources can be directed towards creating real business value

Application Rationalization as a Continuous Process

Ardoq views Application Rationalization as a continuous exercise that can be automated to deliver constant value to your organization.

To get started with application rationalization, this guide will walk you through the process of identifying potential candidates for consolidation in your application rationalization initiative and how to automate that approach using Ardoq.

This guide is the foundation for continuous application rationalization.



Define Your Application Rationalization Scope

Scoping your initiative will focus your efforts and help you demonstrate value by focusing on quick wins and demonstrating value and efficiency.

To get started, document your Application Rationalization scope in a format that suits your enterprise. This way, you can ensure your initiative focuses on what matters to your organization. It also provides an opportunity to review the effectiveness of your application rationalization once the iteration or initiative is complete.

This Use Case Guide focuses the scope of application rationalization on eliminating misaligned applications or consolidating applications that realize the same capabilities. Consolidation is where organizations streamline their application portfolio to remove situations where multiple applications realize the same business capability. Both our metamodel and guide can be adapted to your organization's unique goals and objectives.

Scoping Questions

The questions below are examples that may assist in scoping your application rationalization initiative:

1. Which applications can be removed from my organization with minimal impact and what are my potential savings?
2. Are we effectively realizing the capabilities in our organization?
3. How well do applications satisfy technical and business requirements?
4. What areas of my organization have the highest application function overlap?

Your organization may identify additional factors that can assist in scoping your application rationalization. It is important to capture this information also.

Important Links

[How to Document Your Organization's Architecture and Realize Value Quickly](#)



Measure Success Using Metrics

An important part of delivering application rationalization is measuring the outcome. Take some time to consider how you would like to measure the outcome. These measurable outcomes should be added as components in the Metrics workspace and reflected in the metrics dashboard. Metrics can measure short, medium, and long-term objectives. Your success criteria should be measurable and focus on the initiative's positive impacts on your organization.

There are 3 key areas to consider when identifying metrics in Ardoq:

- **Data Quality and Completeness** - More accurate and complete data used to inform decision-making
- **Business Value** - Measure realization of market and operational performance objectives
- **Productivity** - Improvements seen by EA operating more efficiently

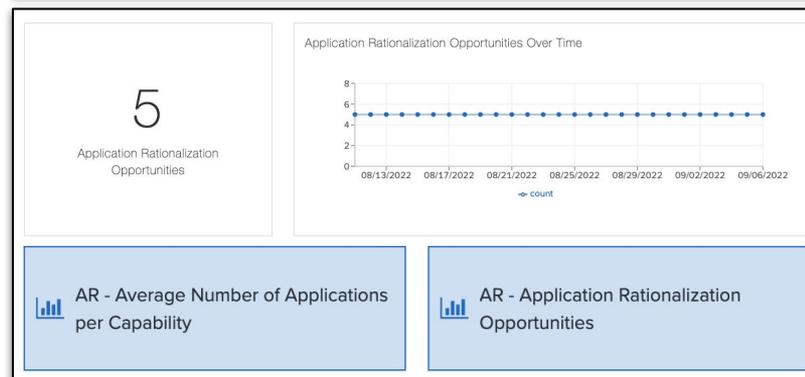
In the **Metrics Workspace** of the Use Case bundles, you can find some sample metrics to help you get started. However, as every implementation of Ardoq is unique, it will be up to you to identify which metrics are relevant for you to track.

Metrics don't have to be perfect or comprehensive. It is more important and valuable to start and then refine over time.

Important Links

[Building & Using Dashboards](#)
[From Business Question to Dashboards](#)
[Product Training](#)

Metrics Dashboard



Example Indicators of Success

- Lowered Application Portfolio total cost of ownership (TCO)
- Reduction in maintenance costs associated with the Application Portfolio
- Reduction in the number of applications leading to a reduced cybersecurity and information security risk profile
- Reduction in the average number of applications per capability



Establish your Application Inventory

Where to Begin

To establish your inventory, Application Rationalization leverages data from other use cases, supplemented with additional data on the application component. To make an effective data-driven decision about which applications to rationalize Ardoq recommends first completing the prerequisite use cases.

Quick Start

Organizations without existing data in Ardoq that want to quickly get benefit from Application Rationalization should focus on one Capability or Business Area, then complete use cases purely focused on that scope. They can then build out across all capabilities and the organization as needed.

Prerequisites

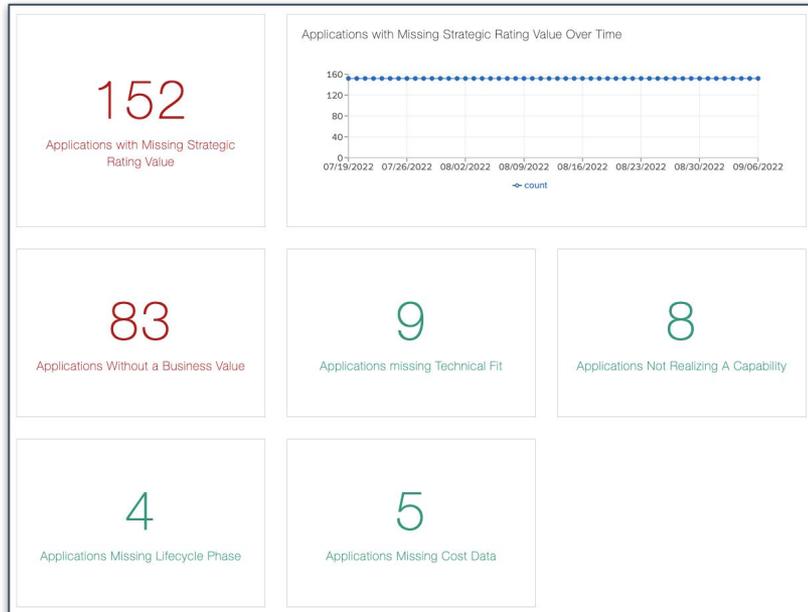
Essential Use Cases	Completed
Application Lifecycle Management	<input type="checkbox"/>
Business Capability Realization	<input type="checkbox"/>
IT Lifecycle Management	<input type="checkbox"/>
IT Cost Management	<input type="checkbox"/>
Application Hosting	<input type="checkbox"/>
Optional Value-Add Use Cases	
Application Integration Management	<input type="checkbox"/>
Technical Capability Management	<input type="checkbox"/>



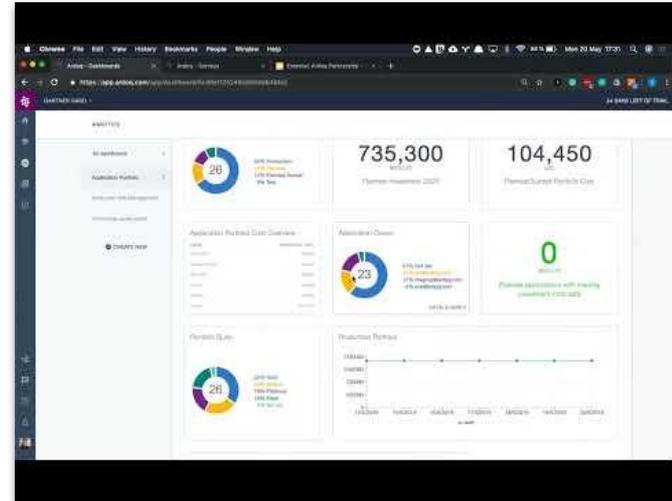
Ensuring Your Application Inventory Is Complete

The Application Rationalization Data Quality Dashboard provides data regarding the completeness of the application portfolio. It identifies gaps in data quality associated with the essential use cases required to facilitate Application Rationalization. Application rationalization is difficult if you are starting with poor or incomplete application data. Before moving on to assess and analyze your applications, do make sure your data is high quality.

Application Rationalization Data Quality Dashboard



WATCH THESE DASHBOARDS IN ACTION



Important Links

[Building and Using Dashboards](#)
[From Business Question to Dashboards](#)
[Product Training](#)



Using Ardoq to Automate - Triggers for Continuous Application Rationalization

Most organizations have governance processes and policies they are required to follow. Those processes establish rules to ensure compliance. We can use some of those rules to provide guidance as we look at Application Rationalization.

Example Application Rationalization Governance Rules:

- To ensure a business-aligned IT Portfolio, **all new application implementations must be evaluated for Business Value and Technical Fit. Business Value and Technical Fit values must be evaluated twice per year.**
- To minimize the risk of bloated IT portfolio, **all applications must be reviewed as a potential rationalization candidate within 6 months of their Lifecycle End Date.**

Specifying governance rules identifies ways of automating the application rationalization process, improving the process's quality and saving you manual work. While these are only a few examples of how governance rules can be used, take some time to think about what other governance rules you have within your organization that you might be able to automatically enforce through Ardoq. The Automated Alerts section of this guide explains how to automate based on the rules you define.

Additional Rules

- _____
- _____
- _____
- _____
- _____

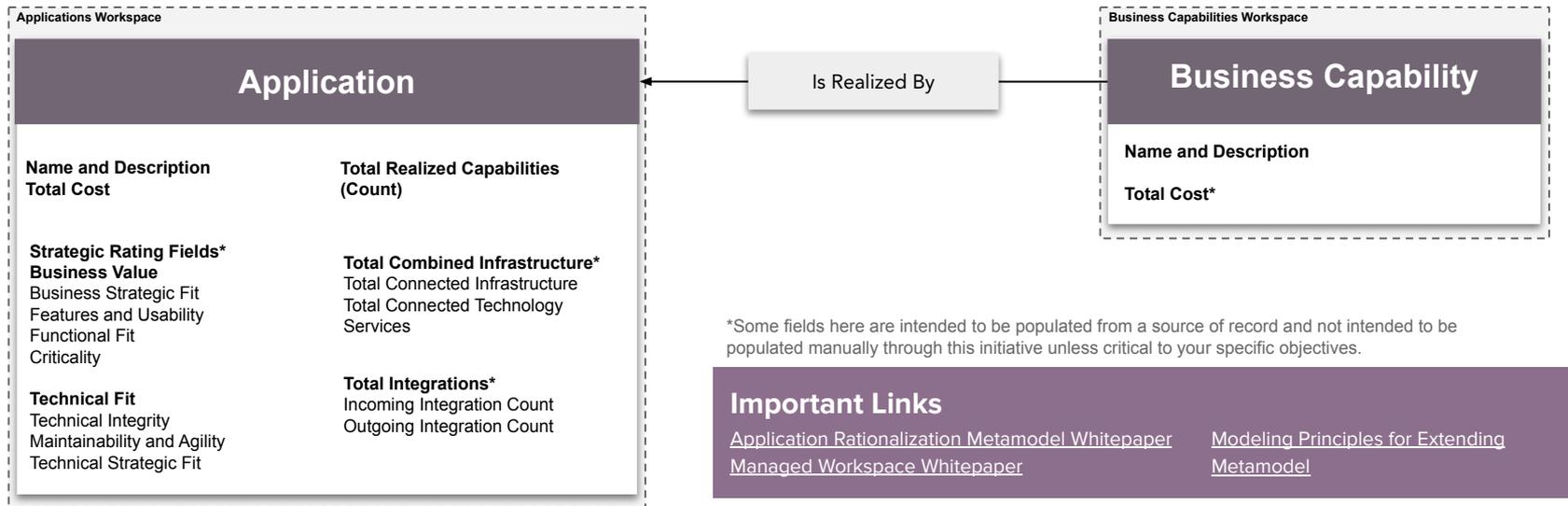
Important Links
[Scheduling a Broadcast](#)
[Working with Broadcasts and Timing](#)



Application Rationalization Metamodel

The [Application Rationalization metamodel](#) utilizes existing components from previous use case guides. To further inventory your application portfolio to facilitate application rationalization, we add fields to establish business value and technical fit to aid evaluation of the application portfolio to facilitate decision-making. This addition to the application component builds on what you've accomplished by completing ALM, ITLM and other use cases. The components and properties shown here should already exist in Ardoq if you have loaded the application rationalization bundle. If you have your applications in an existing application workspace, please ensure you copy the properties to your application component. You will also need to need to adjust any surveys to reflect your organization's Ardoq implementation.

If you want to include more evaluation criteria than what is shown below, Ardoq's flexible model and [Modeling Principles for Extending Metamodels](#) can help guide you through any adaptation.



Evaluating your Application Portfolio

With portfolio inventory data established, you now need to assess your applications in terms of the criteria you need to make rationalization decisions. We provide criteria for business value and technical fit but you can extend these with additional fields. Business Value is the importance of an application to achieve the goals of a business team or organization. Technical Fit captures the technical integrity of the application and its impact on the technical burden of the organization.

Business Value

Business Value is determined by considering an application's:

- **Effectiveness** - the extent to which an application is a solution for the goal organizations are trying to achieve
- **Mission criticality** - the degree to which an application is critical in supporting and executing the organization's mission
- **Utilization** - usage data for the application. Inventory tools can help agencies measure usage without relying solely on requirement information provided by an application owner.
- **Complexity** - the customization, unique features and functions enabled by the application. Applications with greater complexity typically require unique skills to develop and maintain, satisfy more technically complex requirements, or pull from multiple data sources
- **Usability** - how easy it is for the user or customer to operate or learn

Technical Fit

Technical Fit is determined by considering an application's:

- **Technical requirements** - what levels of storage, bandwidth, data, maintenance, and support are needed to make an application run
- **Software and hardware version control** - how often an application is updated, and how much marginal effort does each update require from administrators and users
- **Dependencies and interoperability** - to what degree do other applications or systems depend on this application to run, and what disruptions in other applications would affect it
- **Scalability and adaptability** - can an application be scaled to onboard new users and can it be augmented to fit the needs of new user groups
- **Security standards** - is an application vulnerable to security attacks and does it fit into agency risk tolerance models



Collaborating to Fill In the Gaps - Creating Surveys

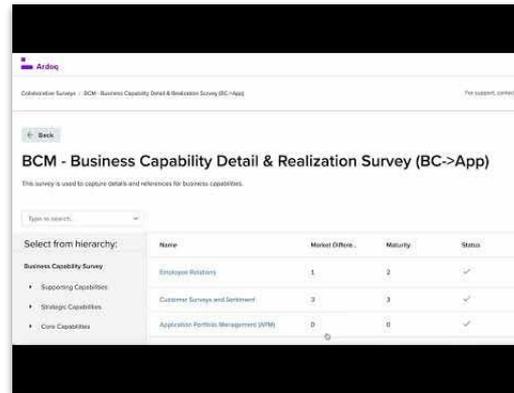
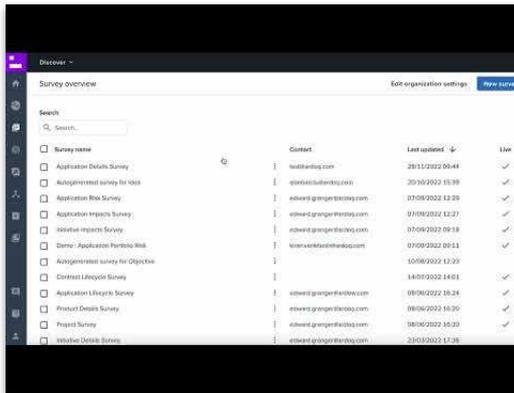
The most effective way to collect your applications' evaluation criteria is to crowdsource the business value and technical fit from application owners and technical owners. This information is collected through Surveys to ensure early engagement of stakeholders in the Application Rationalization process. It is also possible to make updates and changes in Ardoq via the Excel importer or GUI. The surveys listed will focus on delivering a strategic rating in the form of Gartner's TIME model.

Go to the Surveys Tool in Ardoq

Build your own surveys or use the prebuilt surveys as a basis to calculate the strategic rating of an application.

There are several prebuilt surveys you can use:

- **Business Value Survey:** Use this survey to capture the relative value an application brings to the organization and its overall importance to enabling business capabilities.
- **Technical Fit Survey:** Use this survey to understand how an application supports the technical ambitions and objectives of its organization.



Important Note: Surveys and Broadcasts are great tools to ensure your data is current and accurate. At the **Maintain** stage we will dig deeper and build the things necessary to keep this data fresh.

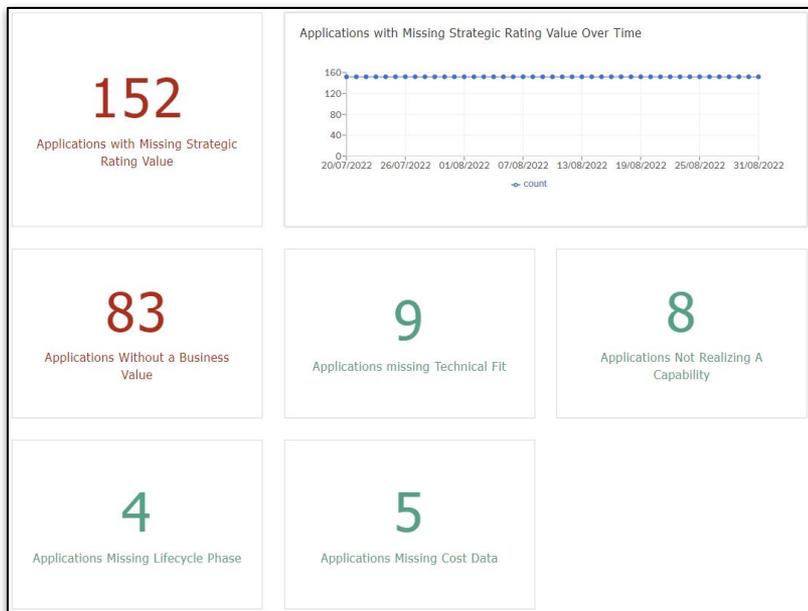
Important Links

[Surveys How-To](#)
[How to Manually Create a Survey](#)
[How to Use the Grid Editor](#)
[Product Training](#)

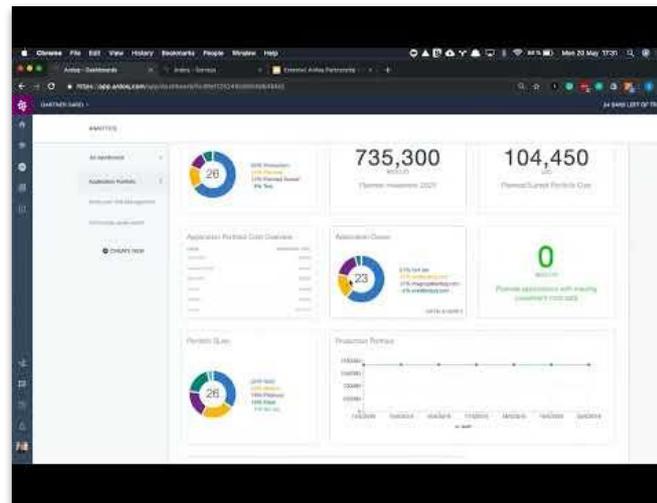
Assessing Collected Business Value and Technical Fit Data

Data collected from application owners about your application's Business Value and Technical Fit must be as complete as possible. To make effective decisions regarding application rationalization your data must also be high quality. The Application Rationalization Data Quality Dashboard gives an overview of any gaps that may impact strategic ratings for your application portfolio.

Application Rationalization Data Governance Dashboard



WATCH THESE DASHBOARDS IN ACTION



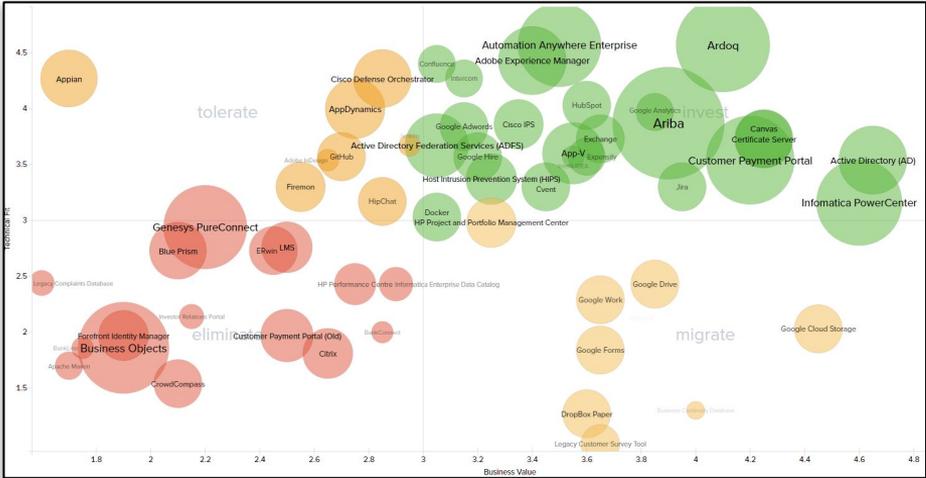
Important Links

[Building and Using Dashboards](#)
[From Business Question to Dashboards](#)
[Product Training](#)



Analyzing the Application Portfolio

The Analyze phase classifies the application portfolio according to the Garner TIME model to provide a partitioned overview of rationalization candidates. The evaluation criteria from the Evaluate step - Business Value and Technical fit - are combined to create a single **Strategic Rating** of an application for the organization.



Gartner’s TIME (or Tolerate, Invest, Migrate, and Eliminate) is a framework to evaluate your application portfolio against two primary measures we collected in the assessment of your application portfolio: Business Value and Technical Fit.

Tolerate - Applications that provide low business value but have a working function and high technical fit. This type of application shouldn't be too costly and should require little to no support.

Invest - Applications that are both high in technical fit and help you reach your business objectives deserve further investment. This type of application experiences no disruptions and serves its purpose, and ideally generates cost savings or income.

Migrate - Applications that serve a crucial purpose to your business but are problematic on the IT side need to be migrated. This rating highlights applications that might require too much effort or cost for maintenance and support.

Eliminate - Applications that have low business value and poor technical fit. These should be eliminated.

Identify and Triage Quick Win Candidates

In the triage step, we narrow down and prioritize the identified application rationalization candidates. The use case bundle provides an example prioritization criterion that combines the strategic rating with an application's end-of-life date to focus on applications that need short-term contract renewal. These candidates are presented in the [AR - Quick Wins Candidate Report](#) that is part of this use case implementation.

You can tailor this report to meet your needs and criteria. For example, by changing Lifecycle Phase to Application End Date and Filtering on applications with 12-24 months remaining, you can identify medium term candidates.

You can do further triaging to narrow down the list of candidates by utilizing additional prioritization criteria such as structural complexity, cost, strategy, and other factors relevant to your organization.

However, the architect will need to review each of the candidates to determine which applications to develop a rationalization business case for and which applications to review at a later stage.

Quick Wins Candidate Report Query

```
oneYearFromNow = (new Date() +
365).format('YYYY-MM-dd')
g.V().
  hasLabel('Application').
  filter(
    has('strategic_rating','Eliminate').
    has('live_end_date', lt(oneYearFromNow)))
```

Strategic Rating: Eliminate



Lifecycle End Date <12
Months



Quick Win Candidates

Examine Cost Data to Further Triage Candidates

Now that we have determined the list of candidates via the AR - Quick Wins report, further assess your application's total cost to filter opportunities. Using total cost gives you an indication of the potential savings in terms of CAPEX and OPEX. However, we would also advise that you consider the rationalization cost. This cost usually takes the form of resourcing, retraining, upskilling, etc.

Name	Strategic Rating	Lifecycle Phase	Total Cost	Total Connected Infrastructure	Total Integrations	Total Capabilities Realized
 Citrix	Eliminate	Phasing Out	US\$27,034.00	4	1	1
 BankConnect	Eliminate	Phasing Out	US\$5,000.00	0	0	2
 ERwin	Eliminate	Phasing Out	US\$25,000.00	4	0	1
 LMS	Eliminate	Phasing Out	US\$27,763.00	5	0	2
 HP Performance Centre	Eliminate	Phasing Out	US\$18,482.00	4	0	1

Important Links

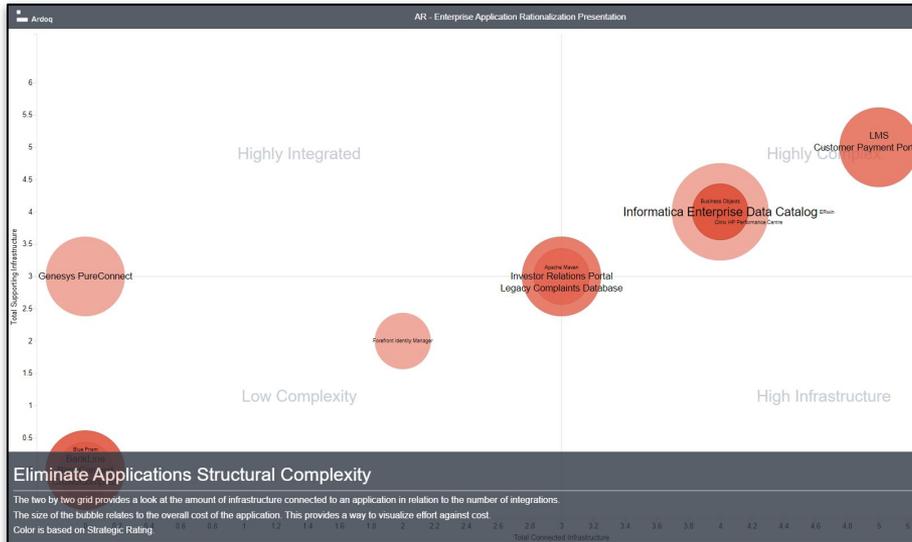
[IT Cost Management Metamodel](#)
[Take Control of Your Costs Using Ardog](#)



Continue to Triage by Looking at Indicative Structural Complexity

With the quick wins and costs understood, you should look at how the application(s) are connected within the IT landscape. This includes looking at the total connected infrastructure, the number of capabilities realized, and the number of integrations towards the application rationalization candidate. With the identified Quick Wins Candidates, cost information, and awareness of structural complexity, we can filter out applications that might not be relevant and defer them to future application rationalization cycles.

Application Rationalization Presentation



Factors to check to determine Structural Complexity:

- **Total Connected Infrastructure** - the total number of servers or technology services used to support a given application.
- **Total Capabilities Realized** - the total number of inbound and outbound integrations for a given application.
- **Total Integrations** - the total number of inbound and outbound integrations for a given application. This requires the Application Integration Management use case to return this value.

The built-in Application Rationalization Presentation will give you an overview of the application portfolio with a rationalization context.

Important Links

[Presentation Permissions](#)

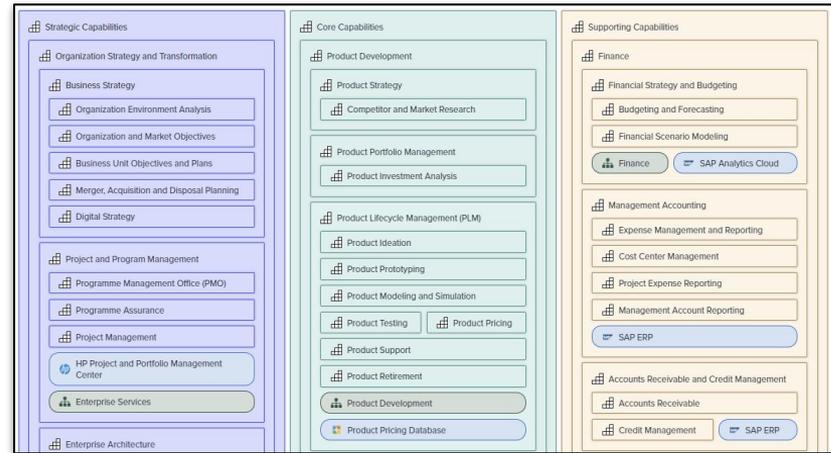
Does Your IT Strategy Impact the Application Rationalization Initiative?

As a last step in triaging your candidates list, we suggest looking at your organization's IT strategy. Your IT strategy may further influence rationalization decisions as there may be implications for the identified applications, impacting how you develop a business case for rationalization. So, it is important to evaluate each candidate against your organization's enterprise IT strategy.

For example, an identified application may have a strategic rating of "eliminate"; however it is part of a strategic initiative to be delivered in the coming months. Your organization might have a cloud computing adoption strategy and a SaaS application that has not been completely realized, which will replace a legacy system. The architecture team will need to evaluate these considerations linked to strategy.

Things to consider:

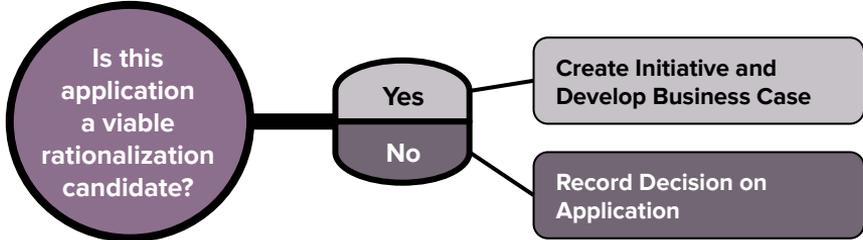
1. Does my organization have a cloud-first strategy for application acquisition?
2. Is there a strategic initiative or project yet to be initiated that may impact the identified application(s)?
3. What is my organization's approach to information security?
4. Does my organization's overall strategy impact the current IT application portfolio?



Progressing to Business Case and Impact Assessment

By now, your applications have been assigned a strategic rating and further triaged to identify quick win candidates for potential Application Rationalization opportunities. It's now time to decide whether or not a business case should be developed to rationalize your application.

In this guide, we include steps for Impact Assessment and Business Case Development. Practically, however, Impact Assessment would be part of your business case development. Both of these would mainly take place outside the Ardoq app, and we advise that you develop your business case in the format supported or preferred by your organization.



Handling Candidate Applications That Will Remain

If an identified candidate for rationalization will not be eliminated, we recommend capturing this decision as a change in its lifecycle status to review later. This allows architects and decision-makers to focus on identified applications and, at the same time, highlight candidates that can be reviewed as part of the next application review cycle.

Impact Assessment

Your impact assessment should look at the following:

1. Define the change.
2. Compare contrasting alternatives (other applications realizing the same capabilities).
3. Identify the effects on the business, systems, and user environments in terms of impact.
4. Identify relevant risk mitigation strategies to minimize the impact of the change.
5. Document in business case.

Your ITSM process may require a slightly different impact assessment process so feel free to substitute with your own.

Name	Parent	Lifecycle Phase
Active Directory (AD)	None ▾	Live ▾
Active Directory Federation Services (ADFS)	None ▾	Live ▾
Adobe Experience Manager	None ▾	Live ▾
Adobe InDesign	None ▾	Live ▾
Apache Maven	None ▾	Review ▾



Supporting the Development of Your Business Case

For each shortlisted application you should develop your business case in the format your business supports. You will ultimately use your business case to further engage the organization and gain stakeholder buy-in.

To enable business case development, Ardoq provides you with the following data:

- Application Data
- Strategic Rating
- Cost
- Indicative Effort Based on Structural Complexity
- Linked Capabilities
- Lifecycle Information
- Application Platform

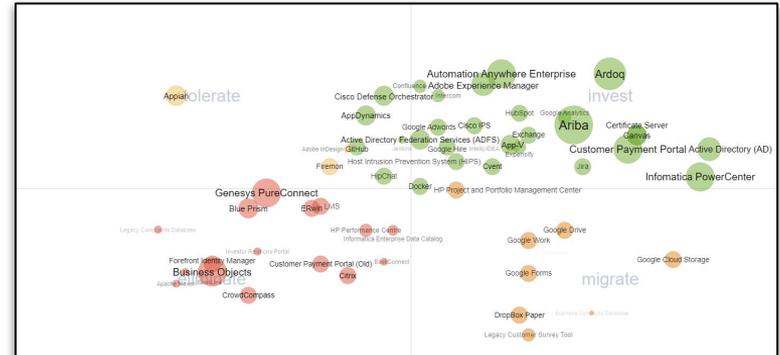
Additional data you need to consider when building an individual business case:

- Data Completeness Dashboard (80% or more of your application portfolio)
- Application Consumption (Service Now)
- Strategic Alignment of the Application (Cloud First etc.)
- Compliance or Retention Requirements
- Reasons for Overlapping Capabilities (Essential Variation vs Non-Essential Variation)
- Capability Rationalization vs Application Rationalization
- Migration Effort
- Capacity and Resource Availability
- Change Management Process

Ardoq Business Case Tips

In developing a business case Architects and IT leaders should focus on articulating:

- The benefits of executing the application rationalization
- The costs and risks of each potential rationalization project, including the opportunity cost of doing nothing
- The impacts to the business unit(s) or organization in terms of process improvements, training, functional gains or losses.



Continuous Application Rationalization

Ardoq enables architects and decision-makers to automate data collection to facilitate application rationalization. This can be configured to facilitate the continual collection of application data, allowing a continual cycle of triage and rationalization.

This ensures that the application portfolio is constantly optimized over time to meet the organization's requirements.

As previously mentioned in the Evaluate phase, you can automate the survey cycle, scheduling surveys to be sent to application owners via broadcasts at regular intervals.

We recommend setting prebuilt data collection broadcasts to run at 6-month intervals. You should determine if this works for you and your organization.

Survey name

AR - Business Value Survey

AR - Technical Fit Survey

Compose message

Subject

Sender 

Message

Use your organization's logo in the message template. [Add organization logo.](#)



Complete a business value assessment of your applications

Hi [audienceName],

As part of our Application Portfolio Management (APM) initiative, **MyOrg** needs you to complete a business value assessment of the applications you own. This will help us measure the business value of all applications in MyOrg's portfolio.

Click on the link below to complete the [surveyName] for your [componentCount] [componentType](s).

[surveyLinks]

Important Links

[Scheduling a Broadcast &
Working with Broadcasts and Timing](#)



Automated Alerts

As data changes within the repository, you can leverage broadcast alerts to dynamically trigger alert workflows and notify the relevant people in the organization.

Automated Alerts

- Alert - New Application Added, Requires Business Value and Technical Fit Scores**
 Notifies the application owner(s) when a new application is added to the application portfolio to provide values for Business Value and Technical Fit.
- Alert - New Application Creates Capability Realization Overlap**
 Notifies the application owner when a new application is added to the application portfolio and creates a capability realization overlap with another application.
- Alert - Application End of Life (12 Months)**
 Notifies the application owner that the application lifecycle end date is in the next 12 months and provides a survey to update the application's information.

Scheduled Surveys

- AR - Business Value (6 Month Recurring)** Sends a survey to application owners to capture the relative value an application brings to the organization and the overall importance to enabling business capabilities.
- AR - Technical Fit (6 Month Recurring)** Sends a survey to technical owners to update and validate how the application supports the technical ambitions and objectives of its organization.

1. Select content

Select the content you want to broadcast. Add filter rules to send Broadcasts under certain conditions.

Content type
 Survey

Survey name
 ALM - Application Details Survey

Add filter rules

Survey is incomplete

Survey has not been updated for 3 months

Filter based on:

Current conditions

Workspace	Applications	Application

Search for: all of the components that match the following rules:

Live END before 1 Year from now

+ Add rule + Add subquery Hide

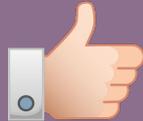
Important Links

[Scheduling a Broadcast & Working with Broadcasts and Timing](#)

Help us to keep improving!

Was this guide helpful?

Click below to submit your response



Yes, this
was helpful



No, this was
not helpful



CHANGE LOG

A list of changes made to the guide are listed below:

Version	Date	Changes
1.0	09/15/22	<ul style="list-style-type: none">• Published
1.0.1	10/31/24	<ul style="list-style-type: none">• Added workspaces to metamodel



Preconfigured Asset and Functionality Dependency

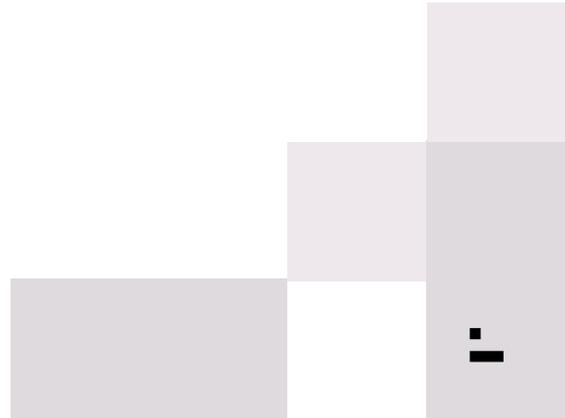
A list of all the preconfigured Application Rationalization assets and the features required to leverage them. To be able to modify or extend existing preconfigured assets you must have the corresponding add-on.

	Ardoq Platform	Engagement Features	Ardoq Discover	Scenarios
AR Metamodel Calculated Fields	✓			
AR Excel Importer Template	✓			
AR Perspectives	✓			
AR Reports AR DQ Dashboard	✓			
AR Surveys	✓			
AR Broadcasts		✓		
AR Presentations	✓			
AR Discover Viewpoints			✓*	

*Limited Access

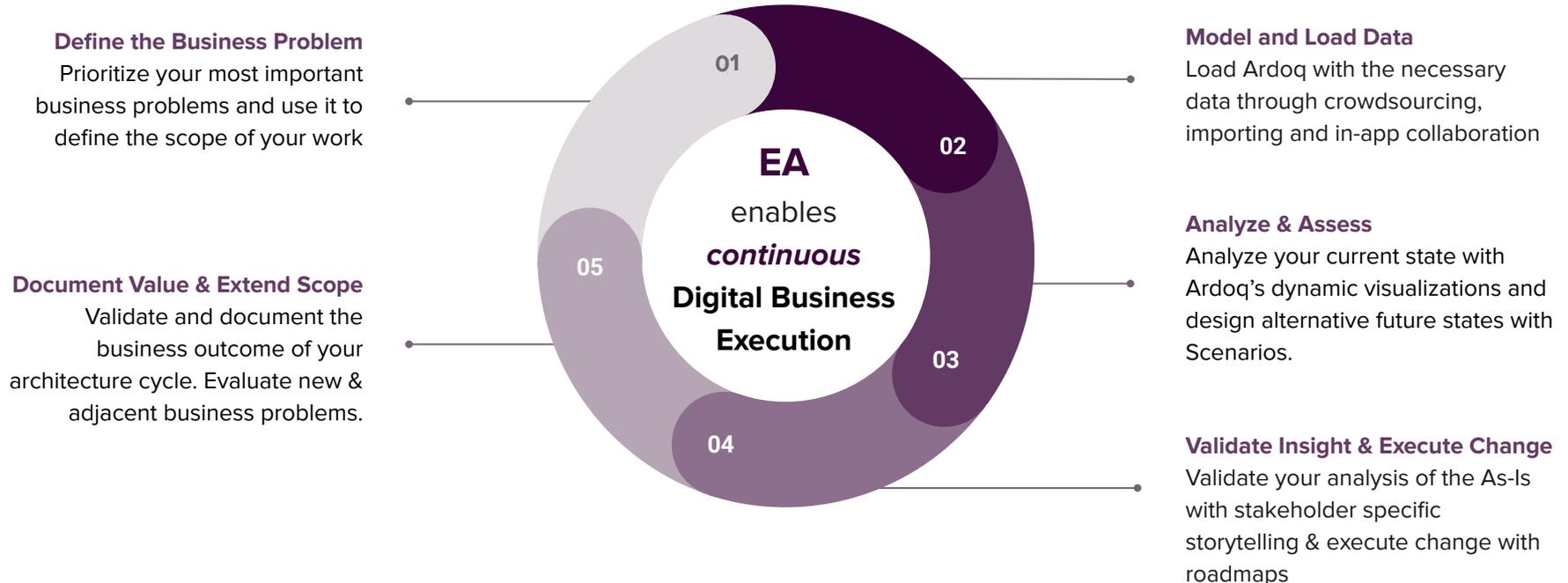


Appendix



📌 An Iterative Approach to EA

As organizations grow, they get more complex: More people, more apps, more processes, more products. More clashes and more dependencies, more wasteful duplication and more legacy. We approach EA to be as automated, democratized and run as a continuous process to reduce that complexity and provide insight and value to as many stakeholders as possible



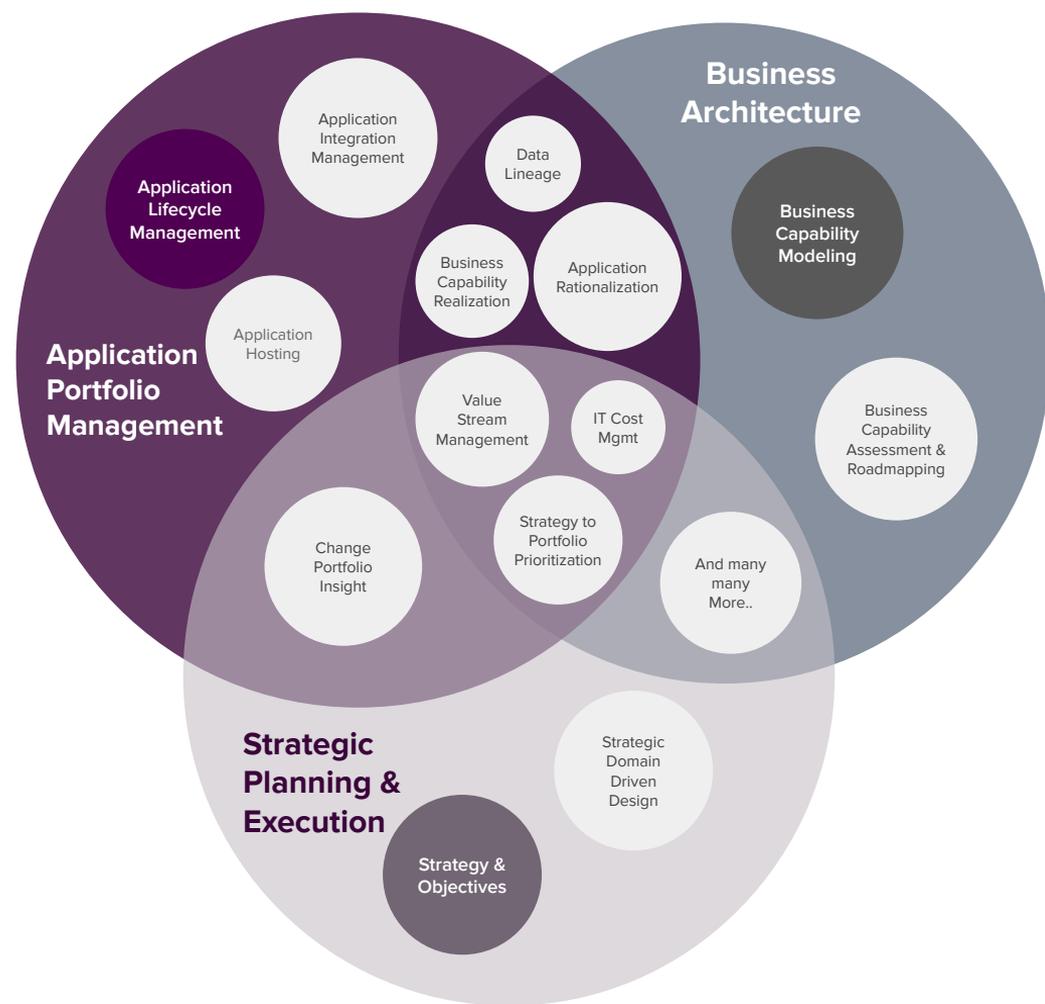


Guides or Use Case Guides are Ardoq's *best-practice approach* on how to solve specific business problems.

Our guides combine Enterprise Architecture best practices, prebuilt assets, and innovative technology so you can easily and **quickly deliver tangible value** to your stakeholders.

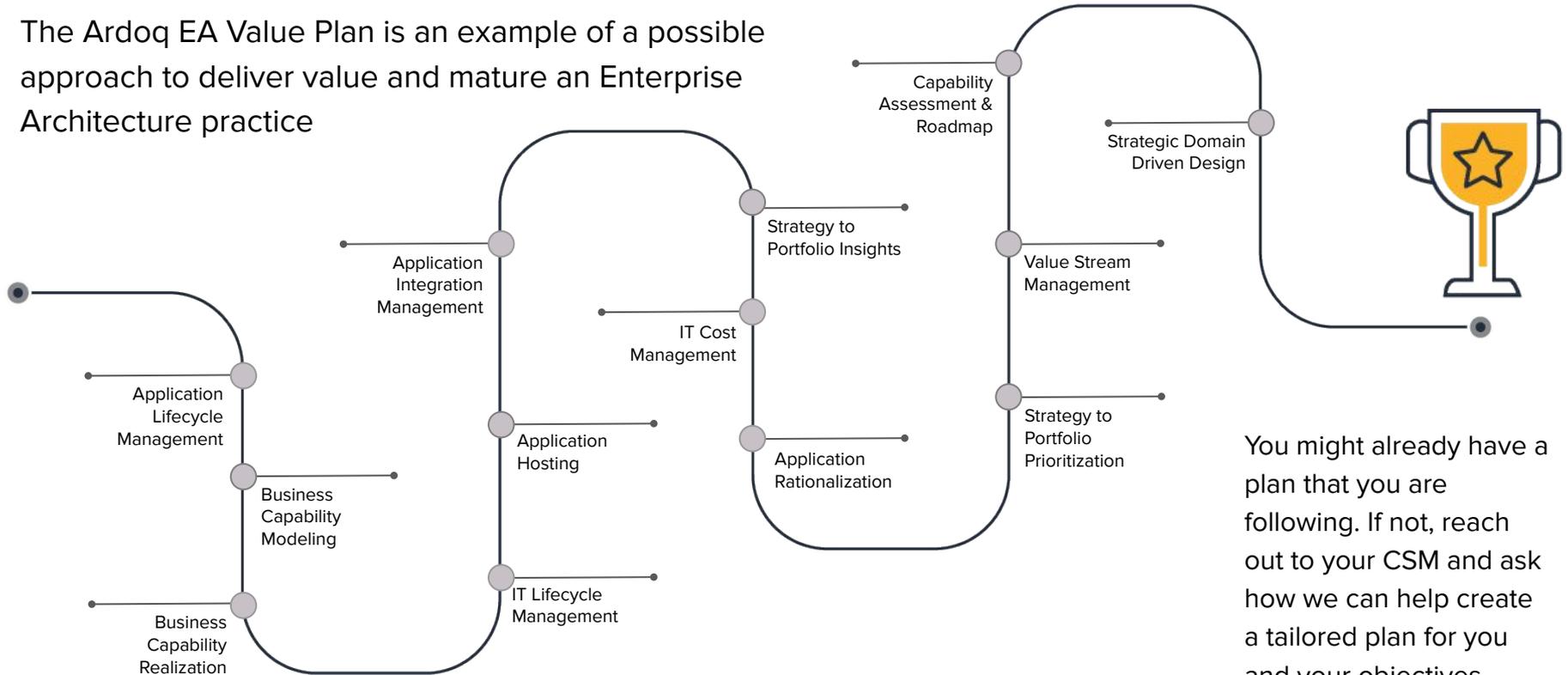
Where do we start?

- ***Applications***
- ***Infrastructure***
- ***Capabilities***



Ardoq Enterprise Architecture Value Plan

The Ardoq EA Value Plan is an example of a possible approach to deliver value and mature an Enterprise Architecture practice



You might already have a plan that you are following. If not, reach out to your CSM and ask how we can help create a tailored plan for you and your objectives.

The Enterprise Architecture Guide Approach

A consistent way to tackle your specific business problems and get tangible results with clear value

