

Application Portfolio Management Foundations

Ensure your application portfolio delivers the best possible return on investment.

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Info-Tech's products and services combine actionable insight and relevant advice
with ready-to-use tools and templates that cover the full spectrum of IT concerns.
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Table of Contents

5	<u>Executive Summary</u>
34	<u>Phase 1 - Lay Your Foundations</u>
54	<u>Phase 2 - Improve Your Inventory</u>
66	<u>Phase 3 - Rationalize Your Applications</u>
83	<u>Phase 4 - Populate Your Roadmap</u>
113	<u>Appendices</u>
117	<u>Bibliography</u>

Analyst Perspective

You can't outsource accountability.



Many lack visibility into their overall application portfolio, focusing instead on individual projects or application development. Inevitably, application sprawl creates process and data disparities, redundant applications, and duplication of resources and stands as a significant barrier to business agility and responsiveness. The shift from strategic investment to application maintenance creates an unnecessary constraint on innovation and value delivery.

With the rise and convenience of SAAS solutions, IT has an increasing need to discover and support all applications in the organization. Unmanaged and unsanctioned applications can lead to increased reputational risk. What you don't know WILL hurt you.

You can outsource development, you can even outsource maintenance, but you cannot outsource accountability for the portfolio. Organizations need a holistic dashboard of application performance and dispositions to help guide and inform planning and investment discussions. Application portfolio management (APM) can't tell you why something is broken or how to fix it, but it is an important tool to determine if an application's value and performance are up to your standards and can help meet your future goals.

Hans Eckman

Principal Research Director
Info-Tech Research Group

Is this research right for you?

Research Navigation

Managing your application portfolio is essential regardless of its size or whether your software is purchased or developed in house. Each organization must have some degree of application portfolio management to ensure that applications deliver value efficiently and that their risk or gradual decline in technical health is appropriately limited.

Your APM goals	If this describes your primary goal(s)
• We are building a business case to determine where and if APM is needed now. • We want to understand how well supported are our business capabilities, departments, or core functions by our current applications.	• Start with Application Portfolio Snapshot • Next step: <i>APM Foundations</i> (this blueprint)
• We want to start our APM program with our core or critical applications. • We want to build our APM inventory for less than 150 applications (division, department, operating unit, government, small enterprise, etc.).	• Optionally start with Application Portfolio Snapshot for capability mapping and analysis • Start with <i>APM Foundations</i>
• We want to start simple with a quick win for our 150 most important applications. • We want to start with an APM pilot before committing to an enterprise APM program. • We need to rationalize potentially redundant and underperforming applications to determine which to keep, replace, or retire.	• Start with <i>APM Foundations</i> • Continue with Build an Application Rationalization Framework
• We want to start enterprise APM, with up to 150 critical applications. • We want to collect and analyze detailed information about our applications. • We need tools to help us calculate total cost of ownership (TCO) and value. • We want to customize our APM journey and rationalization. • We want to build a formal communication strategy for our APM program.	• Start with <i>APM Foundations</i> • Continue with Build an Application Rationalization Framework • Then continue with Modernize Your Applications

Executive Summary

Your Challenge

- Organizations consider application oversight a low priority and app portfolio knowledge is poor.
- No dedicated or centralized effort to manage the app portfolio means no single source of truth is available to support informed decision making.
- Organizations acquire more applications over time, creating redundancy, waste, and the need for additional support.
- Organizations are more vulnerable to changing markets. Flexibility and growth are compromised when applications are unadaptable or cannot scale.

Common Obstacles

- APM implies taking a holistic approach and compiling multiple priorities and perspectives.
- Organizations have limited time to act strategically or proactively and need to be succinct.
- Uncertainties on business value prevent IT from successfully advising software decision making.
- IT knows its technical debt but struggles to get the business to act on technical risks.
- Attempts at exposing these problems rarely gain buy-in and discourage the push for improvement.

Info-Tech's Approach

- Think low priority over no priority.
- Integrate these tasks into your mixed workload.
- Create an inventory built for better decision making.
- Rationalize your apps in accordance with business priorities and communicate risks on their terms.
- Create a roadmap that improves communication between those who own, manage, and support an application.
- Build your APM process fit for size.

Info-Tech Insight: You can't outsource strategy.

Modern software options have decreased the need for organizations to have robust in-house application management capabilities. Your applications' future and governance of the portfolio still require a centralized IT oversight to ensure the best return on investment.

A hidden and inefficient application portfolio is the root cause of so many pains experienced by both IT and the business.

- Demand/Capacity Imbalance
- Overspending
- Security and Business Continuity Risk
- Delays in Delivery
- Barriers to Growth

The top IT challenges for SE come from app management

#1 challenge small enterprise owners face in their use of technology:

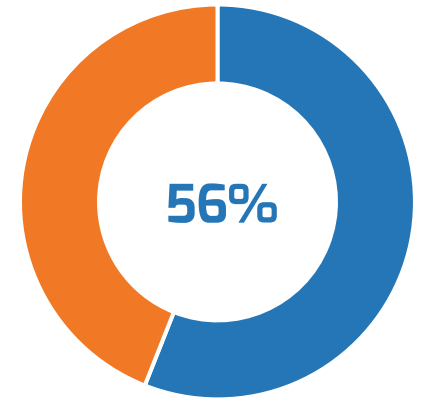
Taking appropriate security precautions	24%
The costs of needed upgrades to technology	17%
The time it takes to fix problems	17%
The cost of maintaining technology	14%
Lack of expertise	9%
Breaks in service	7%

Source: National Small Business Association, 2019

Having more applications than an organization needs means unnecessarily high costs and additional burden on the teams who support the applications. Especially in the case of small enterprises, this is added pressure the IT team cannot afford.

A poorly maintained portfolio will eventually hurt the business more than it hurts IT.

Legacy systems, complex environments, or anything that leads to a portfolio that can't adapt to changing business needs will eventually become a barrier to business growth and accomplishing objectives. Often the blame is put on the IT department.



of small businesses cited inflexible technology as a barrier to growth

Source: Salesforce as quoted by Tech Republic, 2019

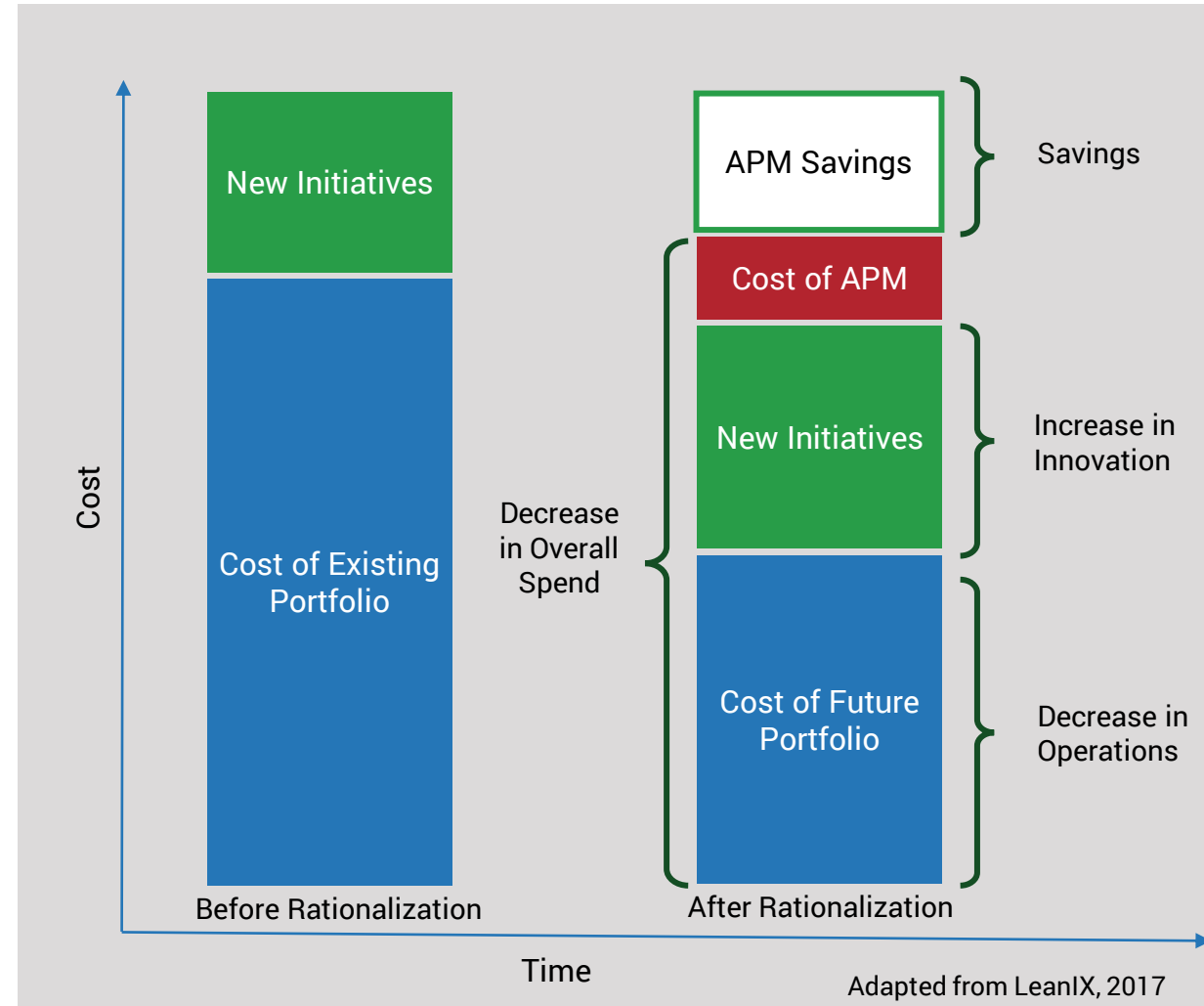
APM comes at a justified cost

The benefits of APM

APM identifies areas where you can reduce core spending and reinvest in innovation initiatives.

Other benefits can include:

- Fewer redundancies
- Less risk
- Less complexity
- Improved processes
- Flexibility
- Scalability



Application Portfolio Management (APM):

The ongoing practice of:

- Providing visibility into applications across the organization.
- Recommending corrections or enhancements to decision makers.
- Aligning delivery teams on priority.
- Showcasing the direction of applications to stakeholders.

APM allows you to better understand and set the direction of your portfolio



Application Inventory

The artifact that documents and informs the business of your application portfolio.



Application Rationalization

The process of collecting information and assessing your applications to determine recommended dispositions.



Application Alignment

The process of revealing application information through interviewing stakeholders and aligning to business capabilities.



Application Roadmap

The artifact that showcases the strategic directions for your applications over a given timeline.

Create a balanced approach to value delivery

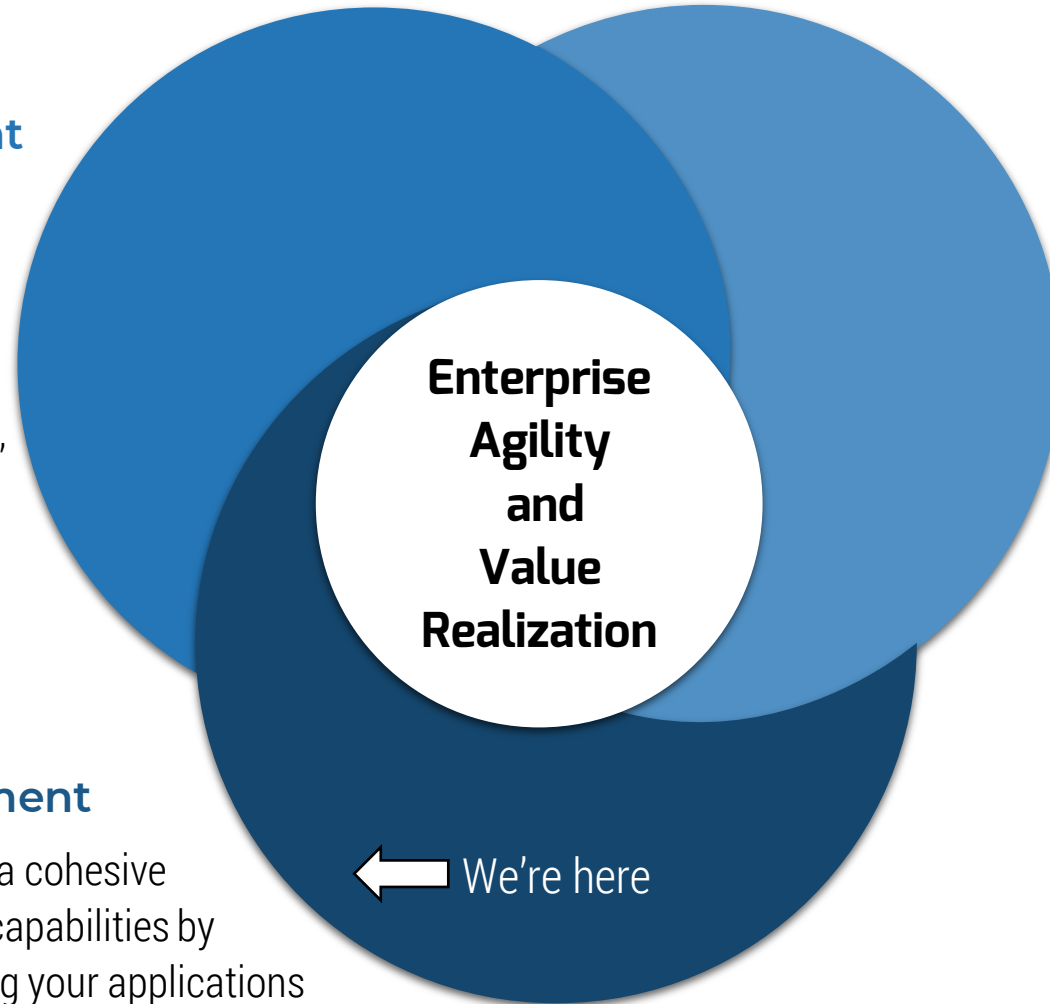
Product Lifecycle Management

Align your product and service improvement and execution to enterprise strategy and value realization in three key areas: defining your products and services, aligning product/service owners, and developing your product vision.

- [Make the Case for Product Delivery](#)
- [Deliver on Your Digital Product Vision](#)
- [Build a Better Product Owner](#)

Application Portfolio Management

Transform your application portfolio into a cohesive service catalog aligned to your business capabilities by discovering, rationalizing, and modernizing your applications while improving application maintenance, management, and reuse.



Product Delivery Lifecycle (Agile DevOps)

Enhance business agility by leveraging an Agile mindset and continuously improving your delivery throughput, quality, value realization, and adaptive governance.

- [Agile/DevOps Research Center](#)
- [Implement Agile Practices That Work](#)
- [Spread Best Practices With an Agile Center of Excellence](#)
- [Implement DevOps Practices That Work](#)
- [Perform an Agile Skills Assessment](#)
- [Define the Role of Project Management in Agile and Product-Centric Delivery](#)

What Do We Mean by an Application Department Strategy?

Unlock the Potential of Your Application Portfolio With Your Application Department Strategy.

Your Delivery Orientation

Your ideal delivery orientation is foundational to your overall application strategy. It is heavily influenced by your department goals.

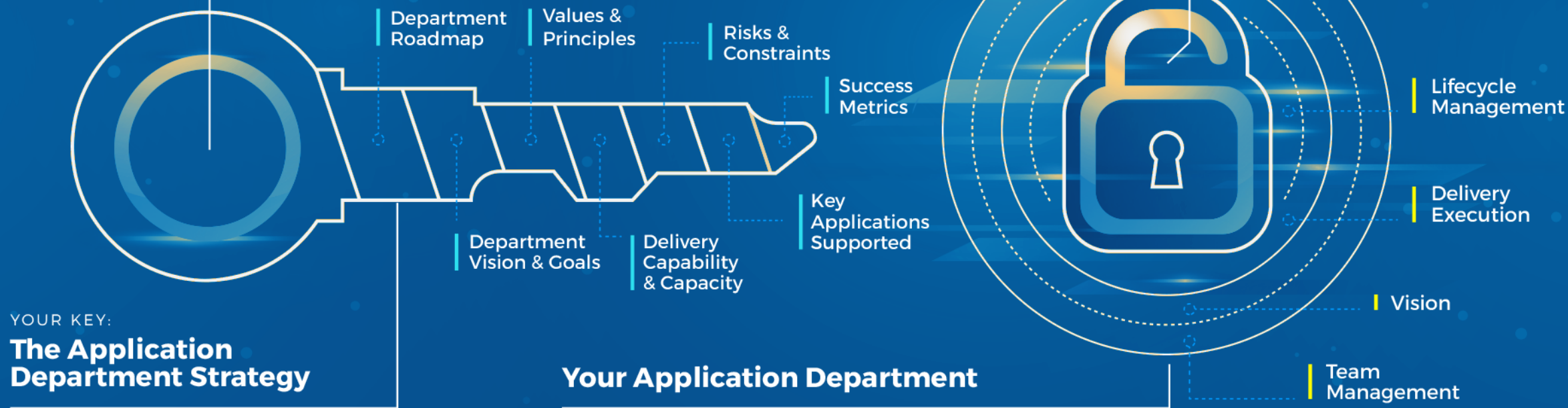
Incoming Demand

The demands on your application department depend on the needs and requirements of the organization.

IT, LINE OF BUSINESS STRATEGY/GOALS ORGANIZATIONAL STRATEGY BUSINESS CAPABILITIES PROCESSES SUB-CAPABILITIES

Application Portfolio

Start by understanding your application landscape and performance. Use *APM Foundations* to connect and update your application department orientation.



The application department strategy details the direction, activities, and tactics to deliver on the promise of your application portfolio.

Your application department provides the structure and resources to execute on your strategy through four key activities: lifecycle management, delivery execution, vision, and team management.

Accelerate Your Transition to Product Delivery

Product-centric management and delivery promotes the continuous delivery of value. To be successful, take a holistic approach to the transformation.



Product Lifecycle Management helps organizations get the right changes to the right people at the right time.



Product Delivery enhances our throughput and quality.



Application Portfolio Management helps us better understand and rationalize the products and services that support our teams

Once you have all three in place, look to improving your organizational design and adaptive governance to reduce constraints and optimize performance.

Enhancing Delivery

- ☑ Improve Requirements Gathering
- ☑ Build a Software Quality Assurance Program
- ☑ Automate Testing to Get More Done

Product Lifecycle Management

The right changes at the right time

- ☑ Make the Case for Product Delivery
- ☑ Deliver on Your Digital Product Vision
- ☑ Deliver Digital Products at Scale

Product Delivery Management

Continuous value delivery

- ☑ Agile/DevOps Resource Center
- ☑ Implement Agile Practices That Work
- ☑ Implement DevOps Practices That Work
- ☑ Modernize Your SDLC

Application Portfolio Management

You can't manage what you don't know

- ☑ APM Research Center
- ☑ Application Portfolio Snapshot
- ☑ Application Portfolio Management Foundations

Organizational Design & Governance

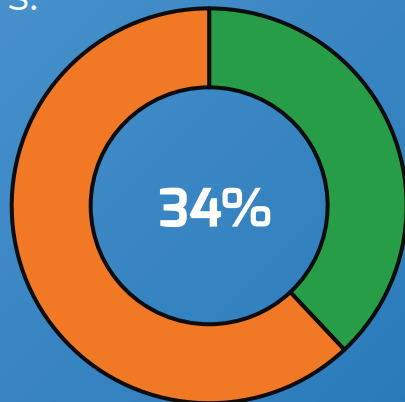
- ☑ Redesign Your IT Organizational Structure
- ☑ Build a Strategic IT Workforce Plan
- ☑ Make Your IT Governance Adaptable

Application Sprawl:

Inefficiencies within your application portfolio are created by the gradual and non-strategic accumulation of applications.

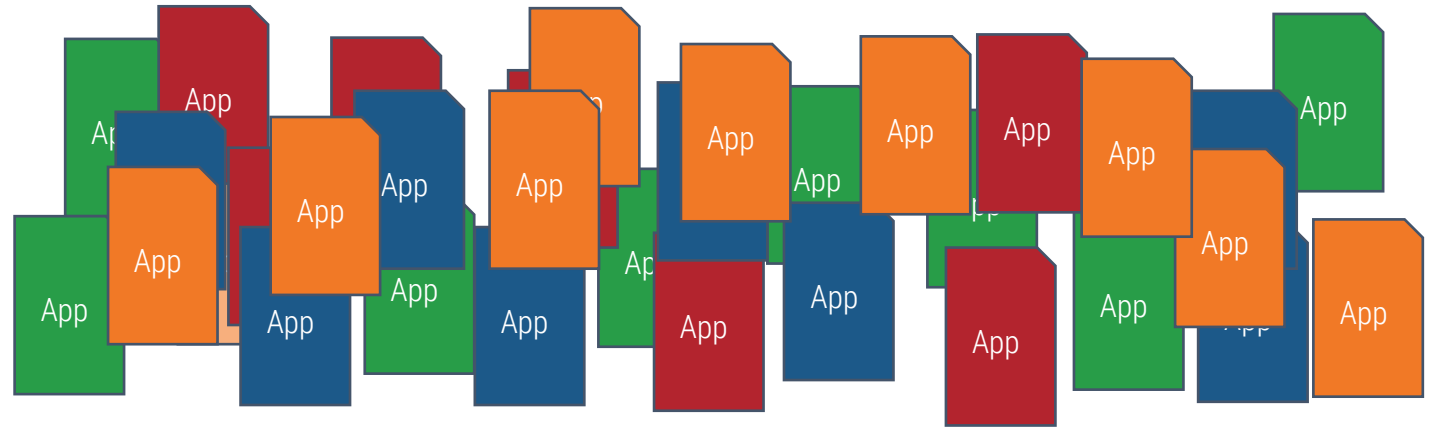
You have more apps than you need.

Only 34% of software is rated as both IMPORTANT and EFFECTIVE by users.

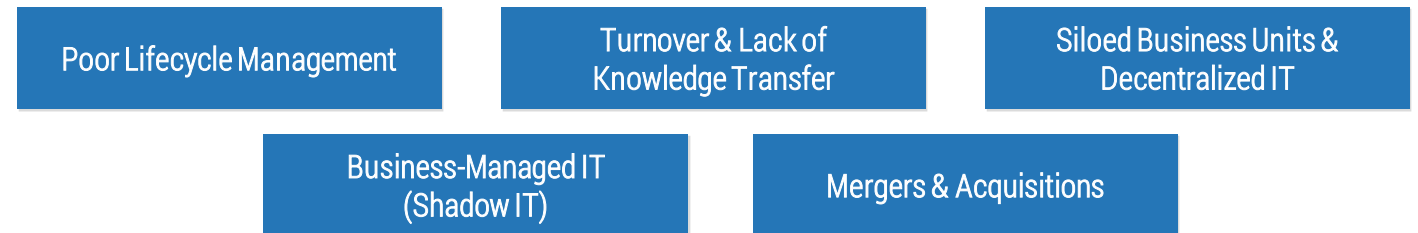


Source: [Info-Tech's CIO Business Vision](#)

Every organization experiences some degree of application sprawl



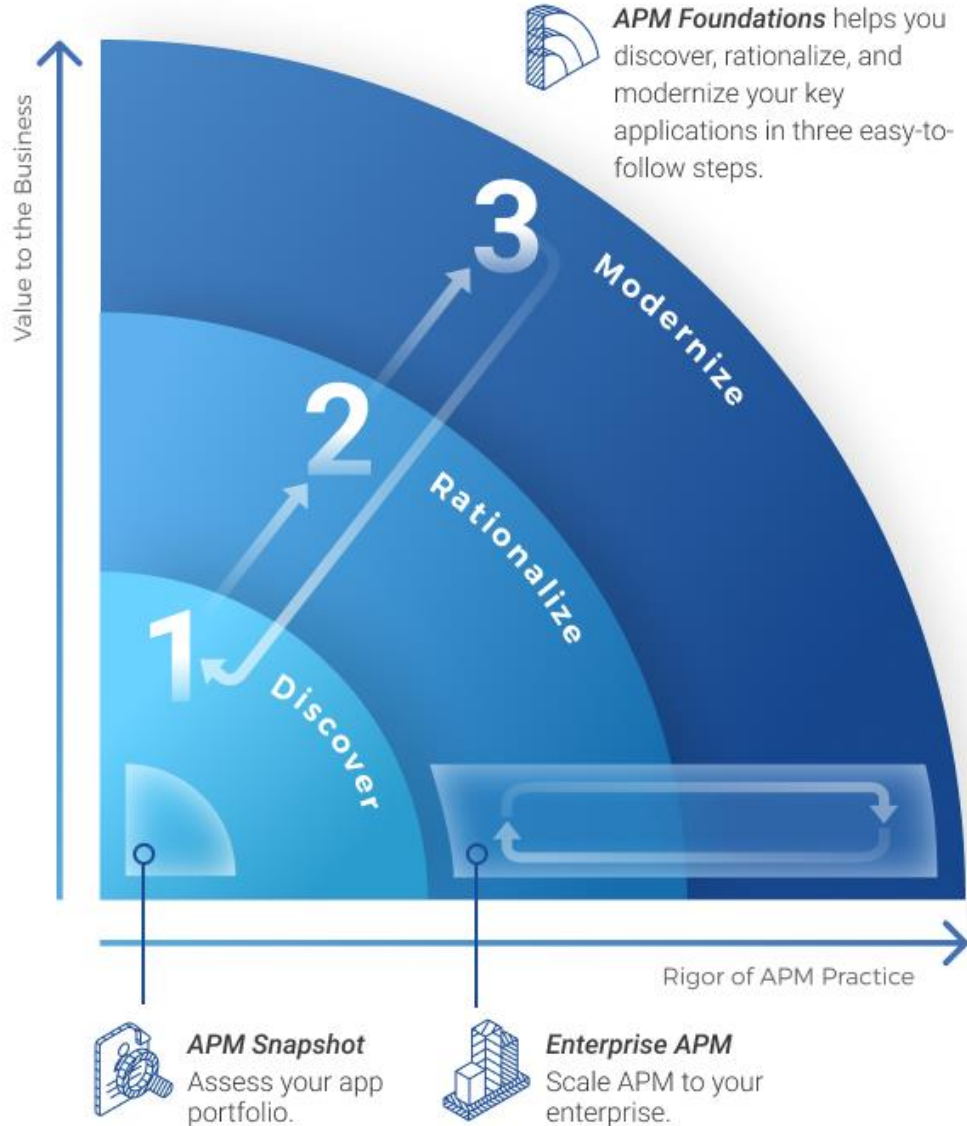
Causes of Sprawl



Problems With Sprawl

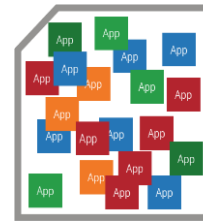


Build your APM journey map



APM Snapshot

How well does our app portfolio support our key business functions?



Evaluate

Business Capabilities

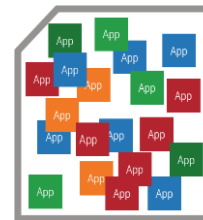
Prioritize APM

Business Units



Application Portfolio Management Foundations

What disposition is needed for each application?



Evaluate

Evaluate

Evaluate

Rationalize
Each App

Compare
Redundant
Apps

Modernize

App Maintain

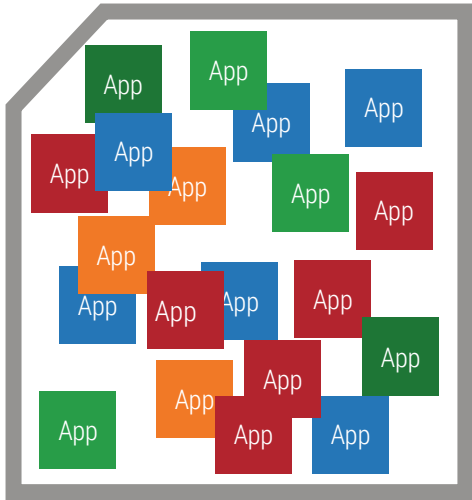
App Modernize

App Consolidate

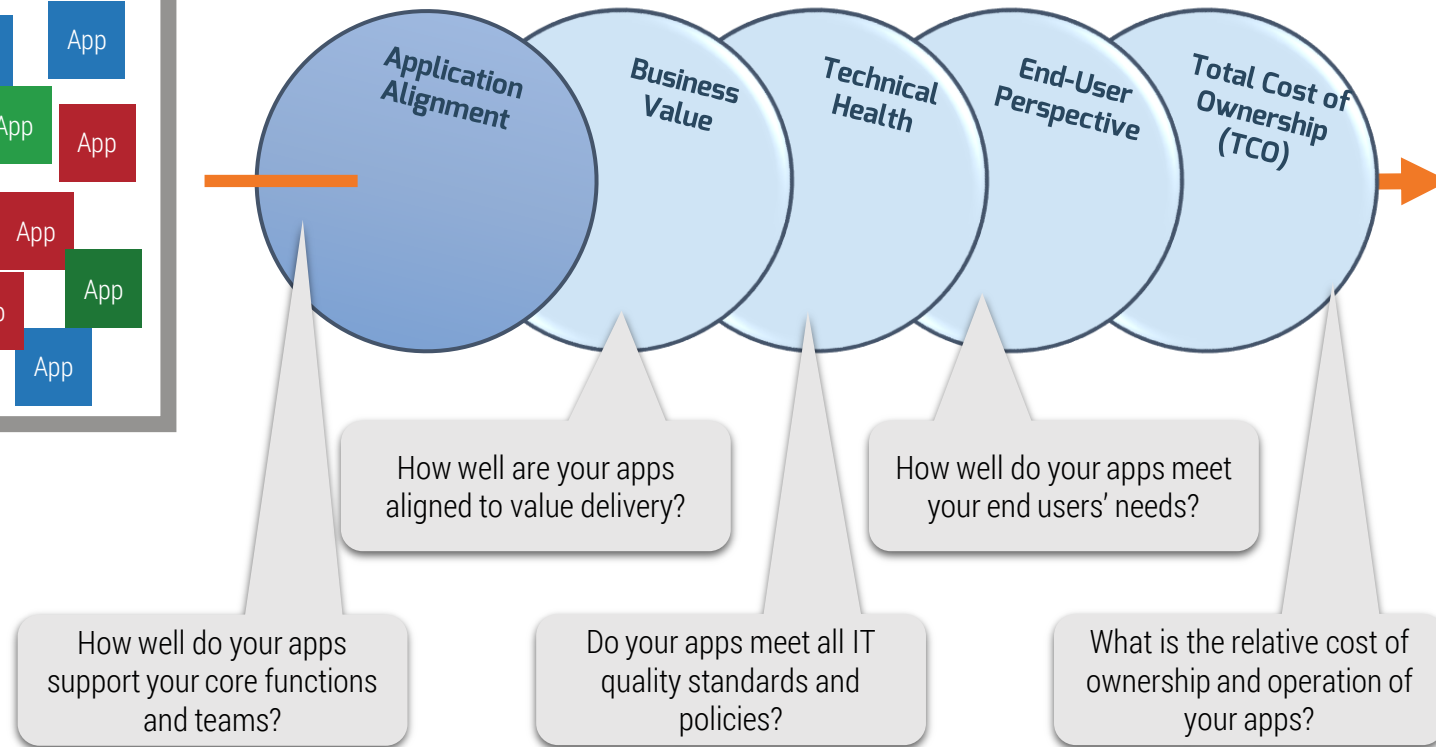
App Retire

Application rationalization provides insight

Directionless portfolio of applications



Info-Tech's Five Lens Model



Assigned dispositions for individual apps

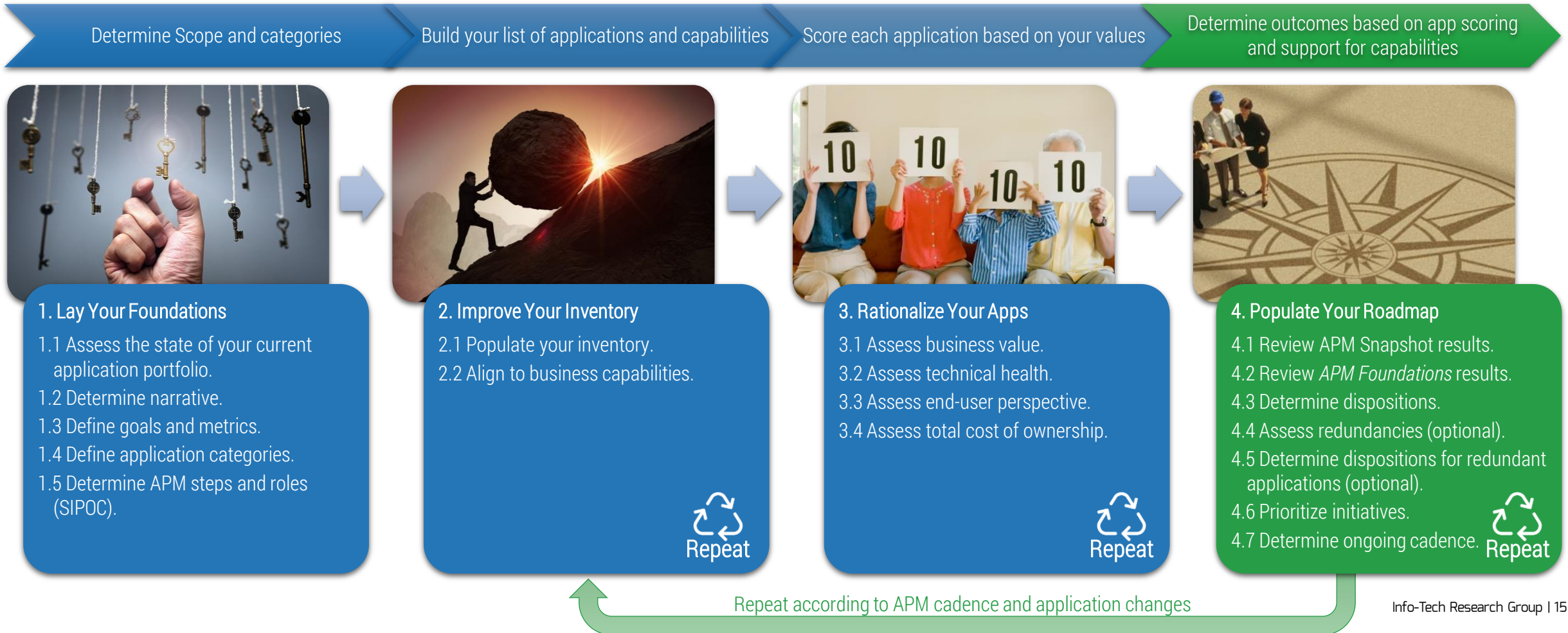
- App** **Maintain:** Keep the application but adjust its support structure.
- App** **Modernize:** Create a new initiative to address an inadequacy.
- App** **Consolidate:** Create a new initiative to reduce duplicate functionality.
- App** **Retire:** Phase out the application.

Disposition: The intended strategic direction or implied course of action for an application.

Application rationalization requires the collection of several data points that represent these perspectives and act as the criteria for determining a disposition for each of your applications.

APM is an iterative and evergreen process

APM provides oversight and awareness of your application portfolio's performance and support for your business operations and value delivery to all users and customers.



Executive Brief

Case Study

INDUSTRY
Retail

SOURCE
Deloitte, 2017

Supermarket Company

The grocer was a smaller organization for the supermarket industry with a relatively low IT budget. While its portfolio consisted of a dozen applications, the organization still found it difficult to react to an evolving industry due to inflexible and overly complex legacy systems.

The IT manager found himself in a scenario where he knew the applications well but had little awareness of the business processes they supported. Application maintenance was purely in keeping things operational, with little consideration for a future business strategy.

As the business demanded more responsiveness to changes, the IT team needed to be able to react more efficiently and effectively while still securing the continuity of the business.

The IT manager found success by introducing APM and gaining a better understanding of the business use and future needs for the applications. The organization started small but then increased the scope over time to produce and develop techniques to aid the business in meeting strategic goals with applications.

Results

The IT manager gained credibility and trust within the organization. The organization was able to build a plan to move away from the legacy systems and create a portfolio more responsive to the dynamic needs of an evolving marketplace.

The application portfolio management initiative included the following components:

Train teams and stakeholders on APM

Model the core business processes

Collect application inventory

Assign APM responsibilities

Start small, then grow

Info-Tech's application portfolio management methodology

	1. Lay Your Foundations	2. Improve Your Inventory	3. Rationalize Your Apps	4. Populate Your Roadmap
Phase Activities	1.1 Assess your current application portfolio 1.2 Determine narrative 1.3 Define goals and metrics 1.4 Define application categories 1.5 Determine APM steps and roles	2.1 Populate your inventory 2.2 Align to business capabilities	3.1 Assess business value 3.2 Assess technical health 3.3 Assess end-user perspective 3.4 Assess total cost of ownership	4.1 Review APM Snapshot results 4.2 Review <i>APM Foundations</i> results 4.3 Determine dispositions 4.4 Assess redundancies (optional) 4.5 Determine dispositions for redundant applications (optional) 4.6 Prioritize initiatives 4.7 Determine ongoing APM cadence
Phase Outcomes	Work with the appropriate management stakeholders to: - Extract key business priorities. - Set your goals. - Define scope of APM effort.	Gather information on your own understanding of your applications to build a detailed inventory and identify areas of redundancy.	Work with application subject matter experts to collect and compile data points and determine the appropriate disposition for your apps.	Work with application delivery specialists to determine the strategic plans for your apps and place these in your portfolio roadmap.

Key deliverable:



Blueprint Storyboard

This is the PowerPoint document you are viewing now. Follow this guide to understand APM, learn how to use the tools, and build a repeatable APM process that will be captured in your playbook.

Application Portfolio Management Foundations

Ensure your application portfolio delivers the best possible return on investment.

Build your APM journey map



Apply Info-Tech's 7 R's Rationalization Disposition Model



Blueprint deliverables

Each step of this blueprint is accompanied by supporting deliverables to help you accomplish your goals.



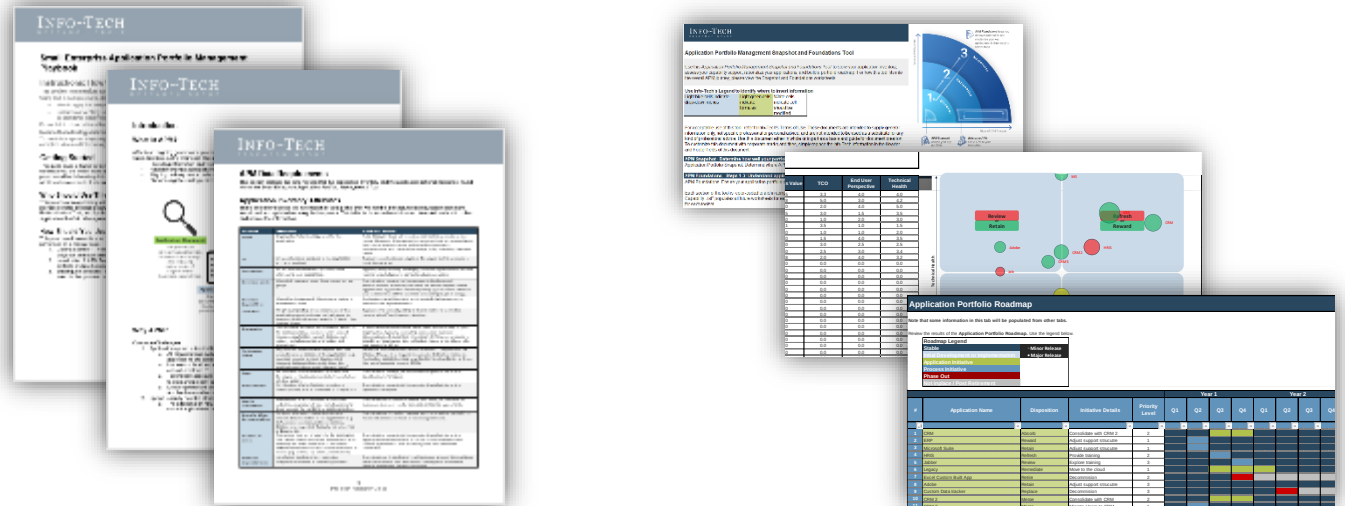
Application Portfolio Management Foundations Playbook

This template allows you to capture your APM roles and responsibilities and build a repeatable process.



Application Portfolio Management Snapshot and Foundations Tool

This tool stores all relevant application information and allows you to assess your capability support, execute rationalization, and build a portfolio roadmap.



Info-Tech offers various levels of support to best suit your needs

DIY Toolkit

"Our team has already made this critical project a priority, and we have the time and capability, but some guidance along the way would be helpful."

Guided Implementation

"Our team knows that we need to fix a process, but we need assistance to determine where to focus. Some check-ins along the way would help keep us on track."

Workshop

"We need to hit the ground running and get this project kicked off immediately. Our team has the ability to take this over once we get a framework and strategy in place."

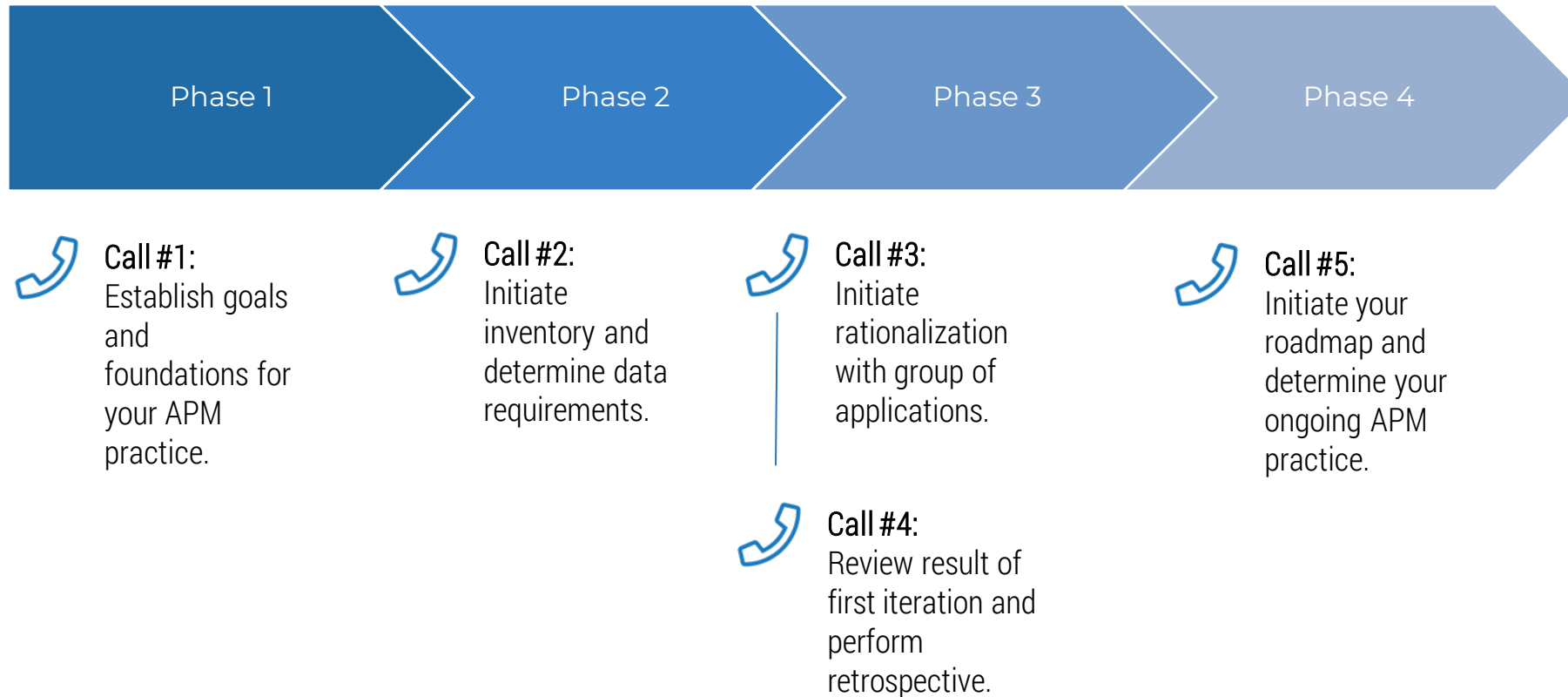
Consulting

"Our team does not have the time or the knowledge to take this project on. We need assistance through the entirety of this project."

Diagnostics and consistent frameworks are used throughout all four options.

Guided Implementation

What does a typical GI for on this topic look like?



A Guided Implementation (GI) is a series of calls with an Info-Tech analyst to help implement our right-sized best practices in your organization.

A typical GI, using our materials, is 3 to 6 calls over the course of 1 to 3 months.

Note: The Guided Implementation will focus on a subset or group of applications depending on the state of your current APM inventory and available time. The goal is to use this first group to build your APM process and models to support your ongoing discovery, rationalization, and modernization efforts.

Workshop Overview

Contact your account representative for more information.
workshops@infotech.com 1-888-670-8889

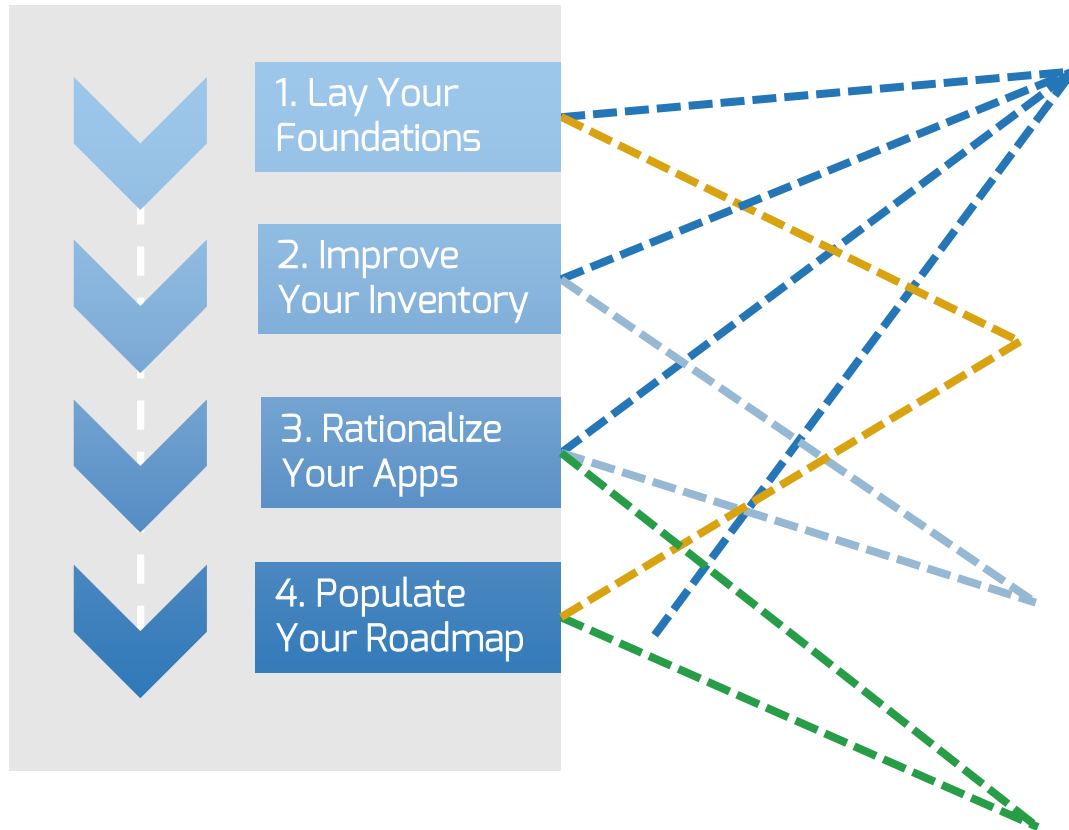
	1. Lay Your Foundations	2. Improve Your Inventory	3. Rationalize Your Apps	4. Populate Your Roadmap	Post Workshop Steps
Activities	1.1 Assess your current application portfolio 1.2 Determine narrative 1.3 Define goals and metrics 1.4 Define application categories 1.5 Determine APM steps and roles	2.1 Populate your inventory 2.2 Align to business capabilities	3.1 Assess business value 3.2 Assess technical health 3.3 Assess end-user perspective 3.4 Assess total cost of ownership	4.1 Review APM Snapshot results 4.2 Review <i>APM Foundations</i> results 4.3 Determine dispositions 4.4 Assess redundancies (optional) 4.5 Determine dispositions for redundant applications (optional) 4.6 Prioritize initiatives 4.7 Determine ongoing APM cadence	- Complete in-progress deliverables from the previous four days. - Set up review time for workshop deliverables and to discuss the next steps.
Outcomes	Work with the appropriate management stakeholders to: - Extract key business priorities - Set your goals - Agree on key terms and set the scope for your APM effort	Work with your applications team to: - Build a detailed inventory - Identify areas of redundancy	Work with the SMEs for a subset of applications to: - Define your rationalization criteria, descriptions, and scoring - Evaluate each application using rationalization criteria	Work with application delivery specialists to: - Determine the appropriate disposition for your apps - Build an initial application portfolio roadmap - Establish an ongoing cadence of APM activities	Info-Tech analysts complete: - Workshop report - APM Snapshot and Foundations Toolset - Action plan
Note: The workshop will focus on a subset or group of applications depending on the state of your current APM inventory and available time. The goal is to use this first group to build your APM process and models to support your ongoing discovery, rationalization, and modernization efforts.					

Workshop Options

Contact your account representative for more information.
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Outcomes	1-Day Snapshot	3-Day Snapshot and Foundations (Key Apps)	4-Day Snapshot and Foundations (Pilot Area)
APM Snapshot - Align applications to business capabilities - Evaluate application support for business capabilities			
APM Foundations - Define your APM program and cadence - Rationalize applications using weighted criteria - Define application dispositions - Build an application roadmap aligned to initiatives		 Establish APM practice with a small sample set of apps and capabilities.	 Establish APM practice with a pilot group of apps and capabilities.

Blueprint Pre-Step: Get the right stakeholders to the right exercises



APM Lead/Owner (Recommended)

- ☐ Applications Lead or the individual responsible for application portfolio management, along with any applications team members, if available

Key Corporate Stakeholders

Depending on size and structure, participants could include:

- ☐ Head of IT (CIO, CTO, IT Director, or IT Manager)
- ☐ Head of shared services (CFO, COO, VP HR, etc.)
- ☐ Compliance Officer, Steering Committee
- ☐ Company owner or CEO

Application Subject Matter Experts

[Individuals who have familiarity with a specific subset of applications.](#)

- ☐ Business owners (product owners, Head of Business Function, power users)
- ☐ Support owners (Operations Manager, IT Technician)

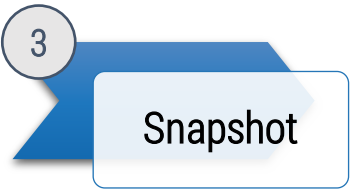
Delivery Leads

- ☐ Development Managers
- ☐ Solution Architects
- ☐ Project Managers



1

Diagnostic



4 Foundations: Results

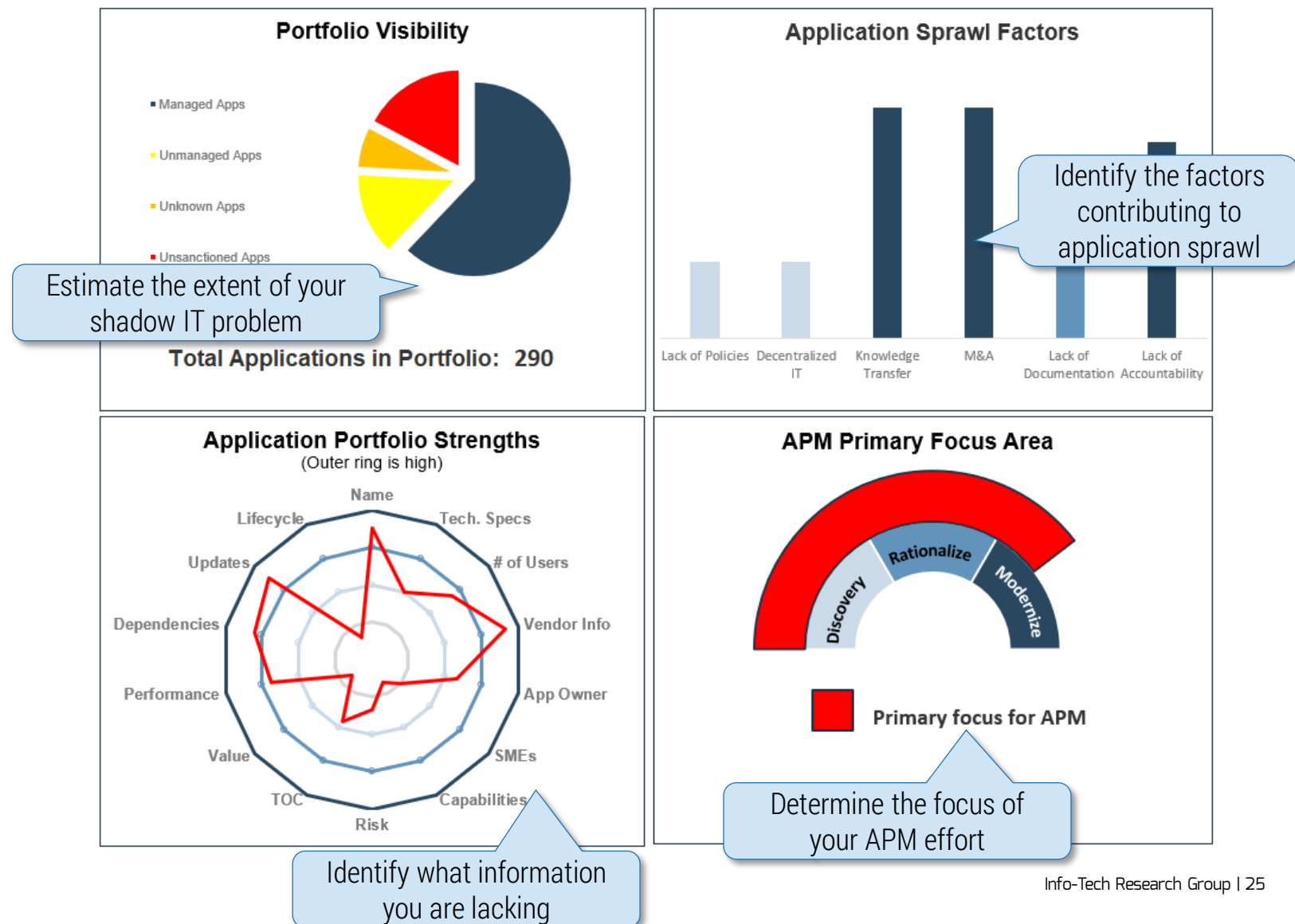
5 Foundations: Chart



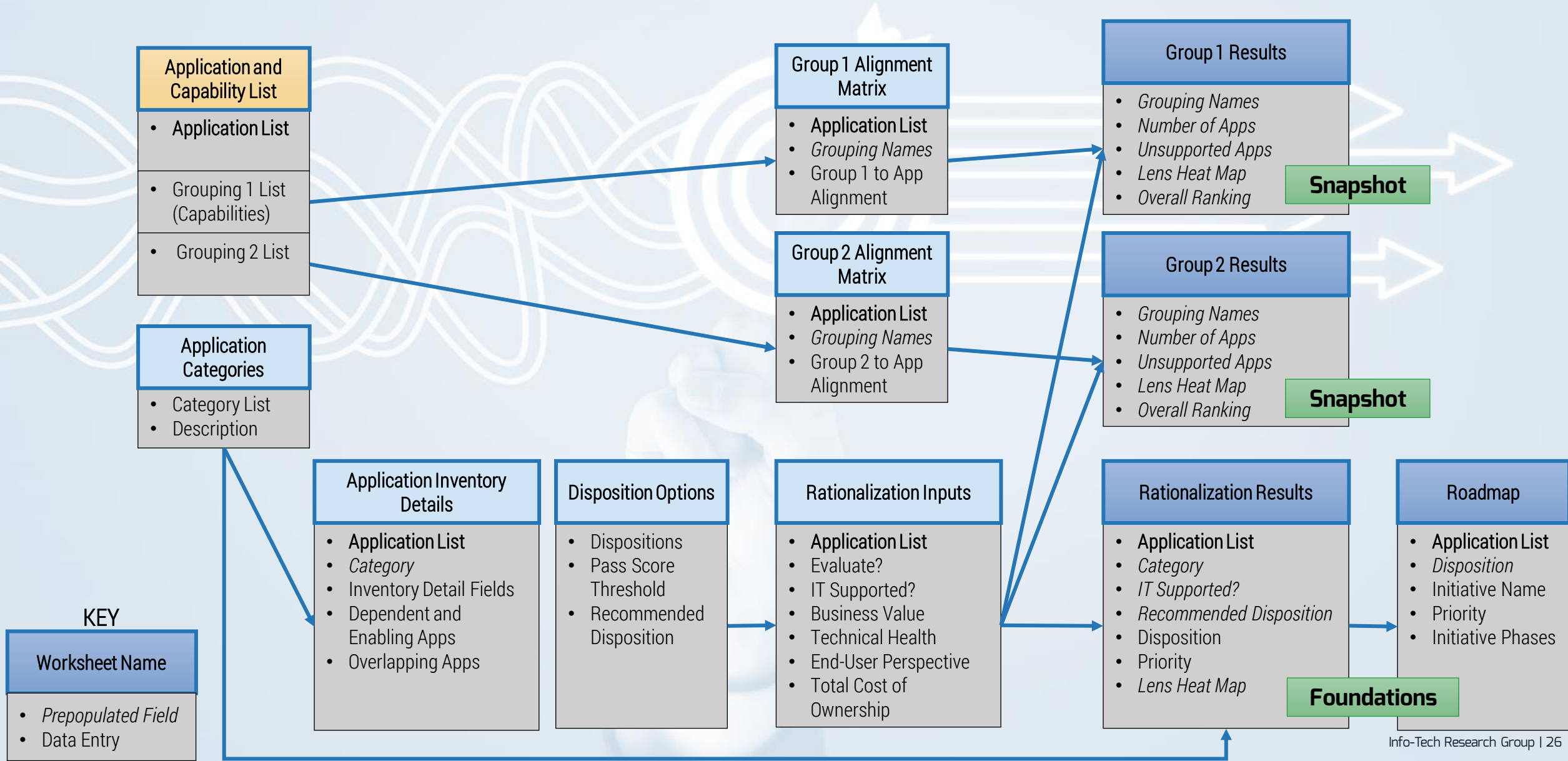
Info-Tech Research Group | 24

One of the primary purposes of application portfolio management is to get what we know and need to know on paper so we can share a common vision and understanding of our portfolio. This enables better discussions and decisions with your application owners and stakeholders.

Assess your current application portfolio with Info-Tech's *APM Diagnostic Tool*



APM worksheet data journey map



Interpreting your APM Snapshot results

The total number of apps isn't necessarily bad, but it indicates increased complexity and support.

Apps not adequately supported by IT are a cause for concern and action.

The category weighting can be adjusted to match your values and priorities.

Each grouping item has a weighted total to give an overall relative score.

Total Weighting (must equal 100%) = 100%		Category Weighting (must equal 100%)					Key	
Business Capabilities	Total Number of Apps	Number of Apps Not Managed by IT	Business Value	Technical Health	End-User Perspective	Total Cost of Ownership	Overall Score (5-point scale)	Grouped Score (5-point score quartiles)
Enrollment	6	1	2.77	3.07	3.20	4.15	3.11	62%
Eligibility	3	1	1.89	2.86	2.17	3.21	2.46	49%
Service Management	5	1	2.75	3.36	3.44	4.56	3.31	66%
Service Reporting	5	1	2.57	3.07	3.13	4.08	3.03	61%
CRM	5	1	2.75	3.36	3.44	4.56	3.31	66%
Fraud Management	6	0	3.00	2.82	3.33	4.15	3.11	62%
Corporate Operations	2	0	3.58	3.71	3.44	3.88	3.64	73%
Finance	3	0	3.06	4.05	3.08	4.25	3.58	72%
HR	2	0	3.58	3.71	3.44	3.88	3.64	73%
IT	2	0	4.00	4.43	4.63	4.63	4.00	80%

Use the heat map to identify strengths and gaps supporting each grouping.

Each grouping is shown on a 100-point scale to identify where it falls by quartile. Use this to prioritize your root cause activities.

Interpreting your APM Foundations results

Use the column filters to see smaller groupings of applications.

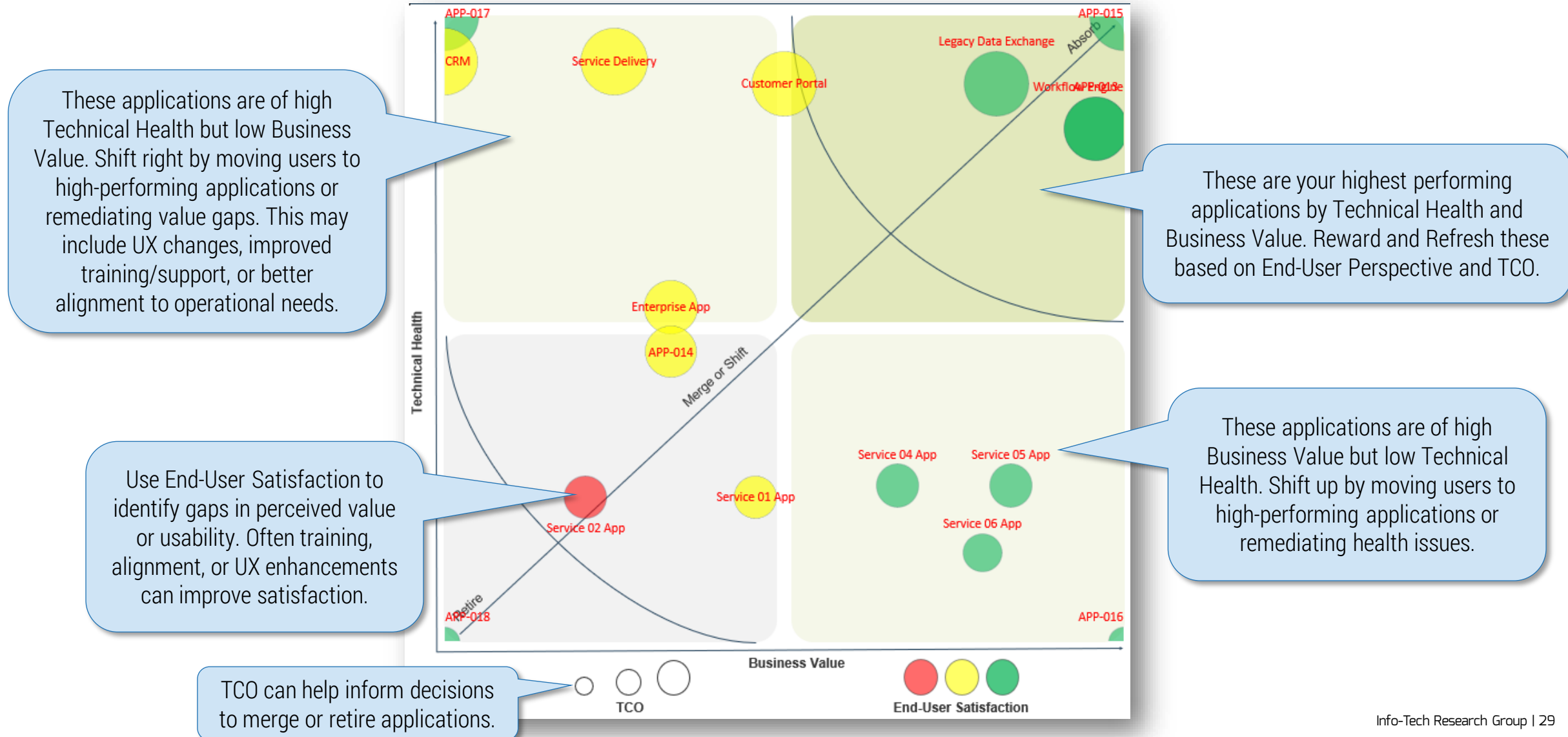
The Disposition and Priority are populated from the Disposition Options worksheet and the individual application category scores. You can adjust the final disposition and Priority in the white cells.

No.	Application Name	Chart Name	Category	IT Supported	Recommended Disposition	Recommended Priority	Disposition	Priority	Business Value	Technical Health	End-User Perspective	Total Cost of Ownership
10	Service Delivery	Service Delivery	Partner Applications	Y	Refocus	High	Refocus	High	2.0	4.7	2.4	5.0
11	Customer Portal	Customer Portal	Partner Applications	Y	Refocus	High	Refocus	High	3.0	4.6	2.3	5.0
12	Legacy Data Exchange	Legacy Data Exchange	Shadow IT	Y	Reward	Moderate	Reward	Moderate	4.3	4.6	4.4	4.8
13	APP-013	APP-013	0	Y	Reward	Moderate	Reward	Moderate	4.8	4.3	4.9	4.4
14	APP-014	APP-014	0	Y	Retire	Very High	Retire	Very High	2.3	2.9	2.0	3.4
15	APP-015	APP-015	0	Y	Reward	Moderate	Reward	Moderate	5.0	5.0	5.0	5.0
16	APP-016	APP-016	0	Y	Remediate	Very High	Remediate	Very High	5.0	1.0	5.0	5.0
17	APP-017	APP-017	0	Y	Refocus	Very Low	Refocus	Very Low	1.0	5.0	5.0	5.0
18	APP-018	APP-018	0	Y	Retire	Very High	Retire	Very High	1.0	1.0	5.0	5.0

Applications marked as N/A in the Rationalization Inputs will show as N/A in the results and are not calculated in the Grouping Results.

Use the heat map to quickly identify strengths and gaps for each application.

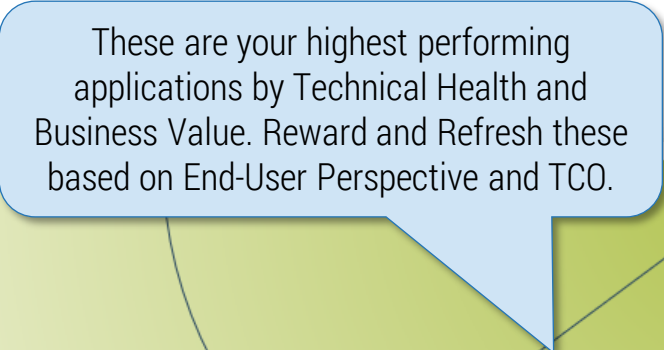
Interpreting your APM Foundations chart



Group comparison can be used for more than just redundant/overlapping applications.

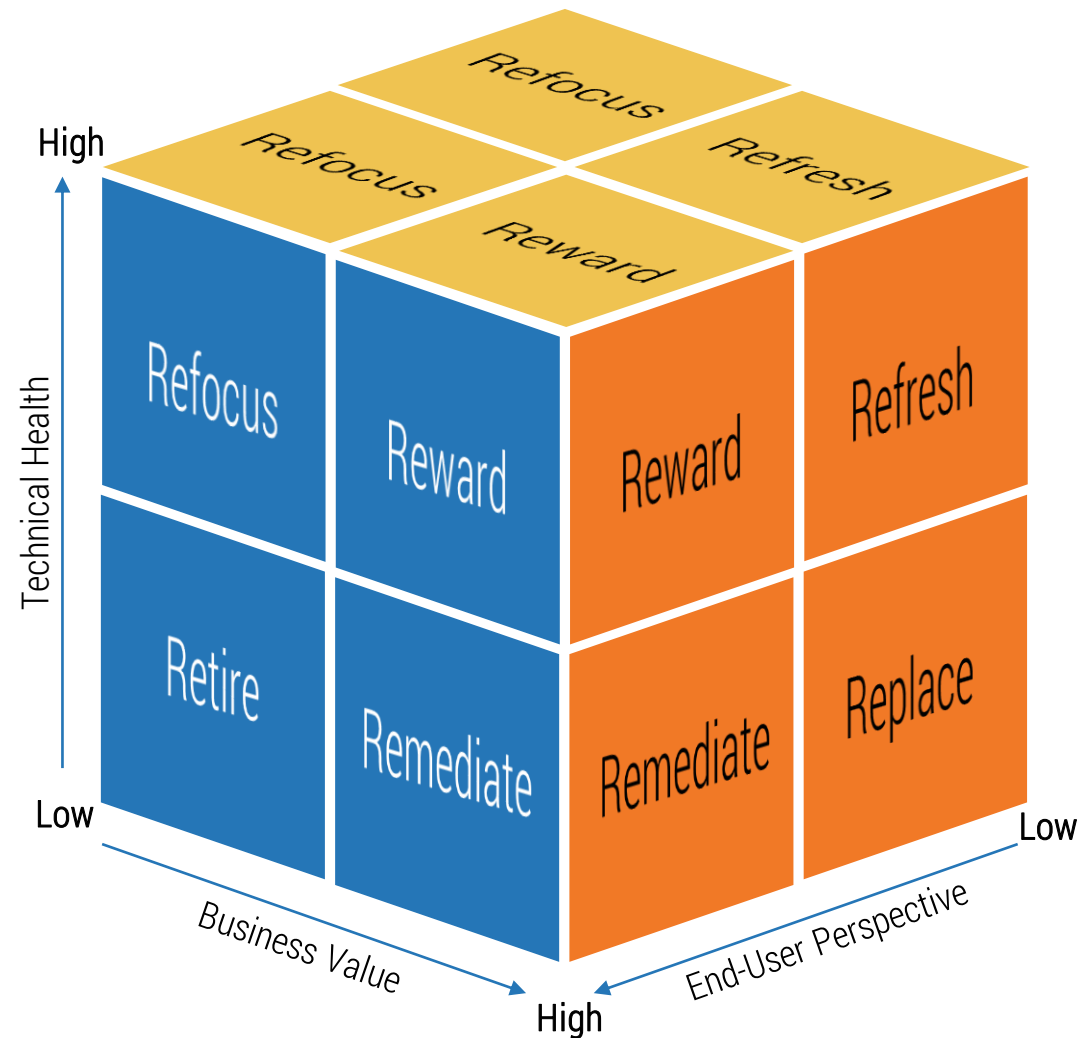
Use the drop-down menu of applications to select the ones you want to compare. You can duplicate this spreadsheet for different groupings and comparisons of applications.

Any apps in the lower-left should be prioritized for retirement based on TCO and End-User Satisfaction.



These applications are candidates for absorption, retirement, or remediation if they need to be retained.

Apply Info-Tech's 6 R's Rationalization Disposition Model



Disposition	Description
Reward	Prioritize new features or enhancement requests and openly welcome the expansion of these applications as new requests are presented.
Refresh	Address the poor end-user satisfaction with a prioritized project. Consult with users to determine if UX issues require improvement to address satisfaction.
Refocus	Determine the root cause of the low value. Refocus, retrain, or refresh the UX to improve value. If there is no value found, aim to "keep the lights on" until the app can be decommissioned.
Replace	Replace or rebuild the application as technical and user issues are putting important business capabilities at risk. Decommission application alongside replacement.
Remediate	Address the poor technical health or risk with a prioritized project. Further consult with development and technical teams to determine if migration or refactoring is suited to address the technical issue.
Retire	Cancel any requested features and enhancements. Schedule the proper decommission and transfer end users to a new or alternative system if necessary.

TCO, compared relatively to business value, helps determine the practicality of a disposition and the urgency of any call to action. Application alignment is factored in when assessing redundancies and has a separate set of dispositions.

Populate roadmap example

Review your application's disposition.

List initiatives related to your applications.

Review and update the priority for the initiative.

Build the timeline for your initiatives.

You can adjust initiative phase names here.

Initiative Phase	Short Name
Planning	Plan
Implementation	Build
Maintain and Enhance	Run
Decommission	End

#	Application Name	Disposition	Initiative Details	Priority	Year 1				Year 2				Year 3				Y 4	Y 5
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Enterprise App	Retire		Low	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run
2	Workflow Engine	Reward		Low	Run	Run	Run	Run	Run	Run	Plan	Build	Build	Run	Run	Run	Run	Run
3	Service 01 Management System	Retire	Project Omega	Very High		Plan	Build	End										
4	Service 02 Management System	Retire	Project Omega	Very High	Plan	Build	End											
5	Service 03 Management System		Evaluate	Low				Plan	Build	Run	Run	Run	Run	Run	Run	Run	Run	Run
6	Service 04 Management System	Retire	Project Delta	Very High	Plan	Plan	Build	Build	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run
7	Service 05 Management System	Remediate	Project Delta	Very High			Plan	Build	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run
8	Service 06 Management System	Remediate	Project Delta	Very High	Plan	Build	Run	Run	Run	Run	Plan	Plan	Build	Build	End			
9	Customer Management System	Refocus	External System	Very Low														
10	Service Delivery	Refocus	External System	Very Low														
11	Customer Portal	Refocus	External System	Very Low														
12	Legacy Data Exchange	Reward	Cloud Exchange	Very Low	Run	Run	Run	Run	Plan	Run	Run	Run	Run	Run	Run	Run	Run	Run
13	APP 012	Reward		Moderate														

**ARE YOU
READY TO GET
STARTED?**



Phase 1

Lay Your Foundations

Phase 1

- 1.1 Assess Your Current Application Portfolio
- 1.2 Determine Narrative
- 1.3 Define Goals and Metrics
- 1.4 Define Application Categories
- 1.5 Determine APM Steps and Roles

Phase 2

- 2.1 Populate Your Inventory
- 2.2 Align to Business Capabilities

Phase 3

- 3.1 Assess Business Value
- 3.2 Assess Technical Health
- 3.3 Assess End-User Perspective
- 3.4 Assess Total Cost of Ownership

Phase 4

- 4.1 Review APM Snapshot Results
- 4.2 Review *APM Foundations* Results
- 4.3 Determine Dispositions
- 4.4 Assess Redundancies (Optional)
- 4.5 Determine Dispositions for Redundant Applications (Optional)
- 4.6 Prioritize Initiatives
- 4.7 Determine Ongoing APM Cadence

This phase involves the following participants:

- Applications Lead
- Key Corporate Stakeholders

Additional Resources

- [*Build a Value Measurement Framework*](#)

Application Portfolio
Management Foundations

APM supports many goals

Building an APM process requires a proper understanding of the underlying business goals and objectives of your organization's strategy. Effectively identifying these drivers is paramount to gaining buy-in and the approval for any changes you plan to make to your application portfolio.

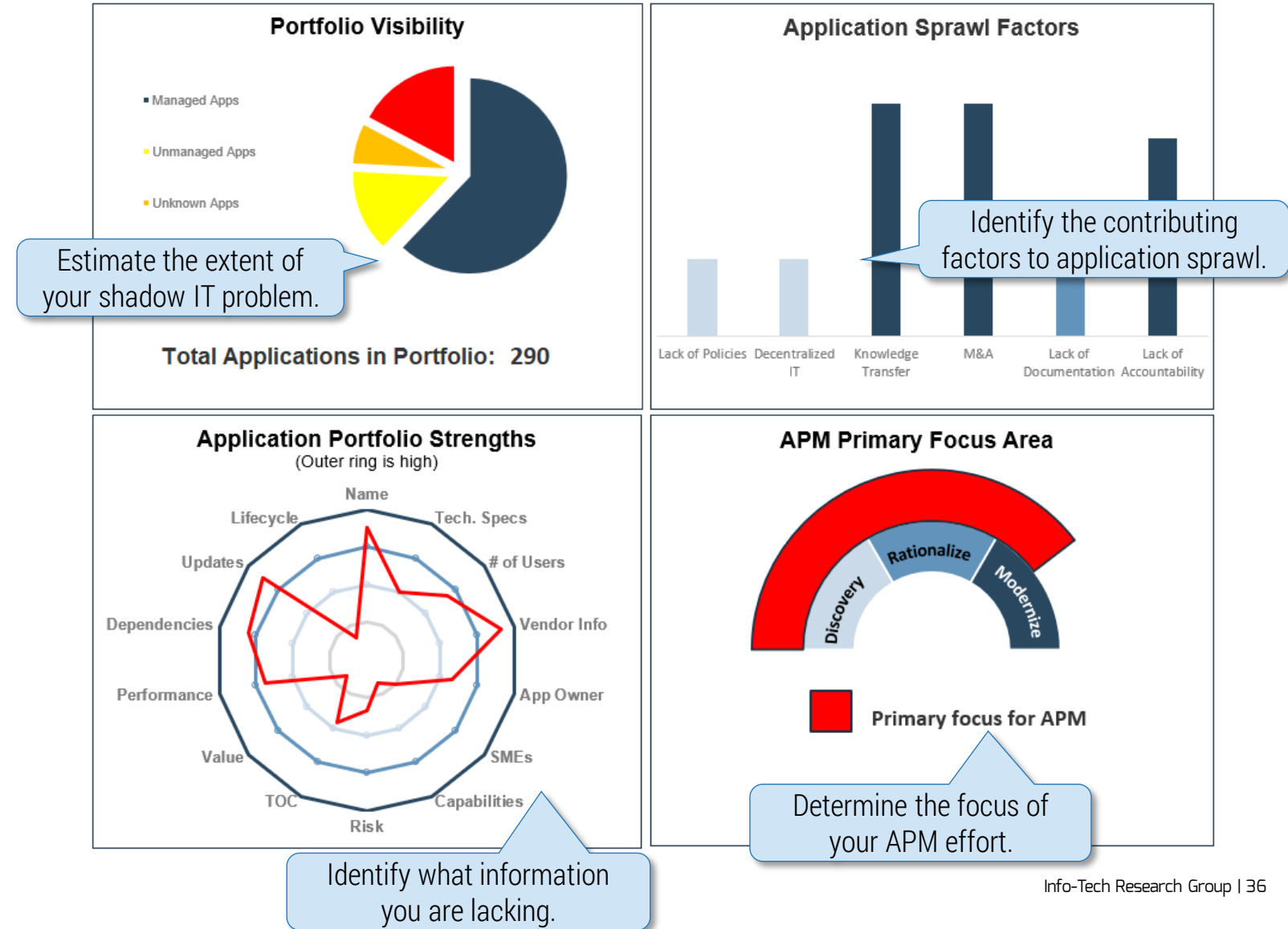
After identifying these goals, you will need to ensure they are built into the foundations of your APM process.

"What is most critical?" but also "What must come first?"



One of the primary purposes of application portfolio management is to get what we know and need to know on paper so we can share a common vision and understanding of our portfolio. This enables better discussions and decisions with your application owners and stakeholders.

Assess your current application portfolio with Info-Tech's *APM Diagnostic Tool*



1.1 Assess your current application portfolio with Info-Tech's diagnostic tool

Estimated time: 1 hour

1. This tool provides visibility into your application portfolio and APM practices.
2. Based on your assessment, you should gain a better understanding of whether the appropriate next steps are in application discovery, rationalization, or roadmapping.
3. Complete the "Data Entry" worksheet in the *Application Portfolio Management Diagnostic Tool* (Excel).
4. Review the "Results" worksheet to help inform and guide your next steps.

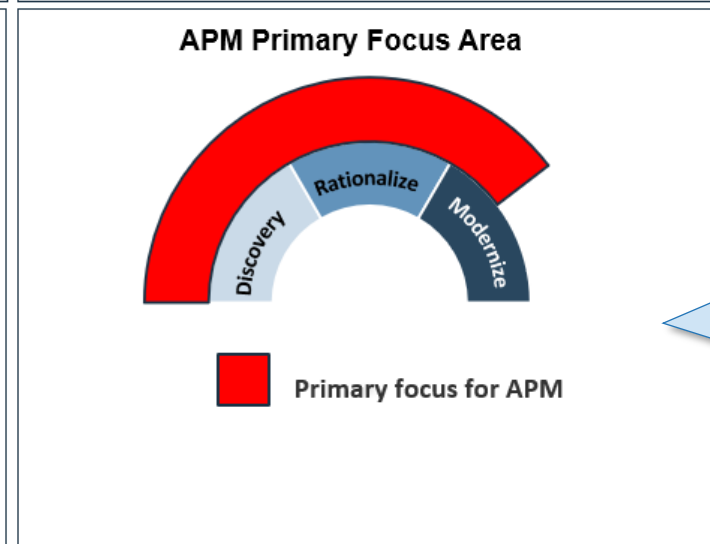
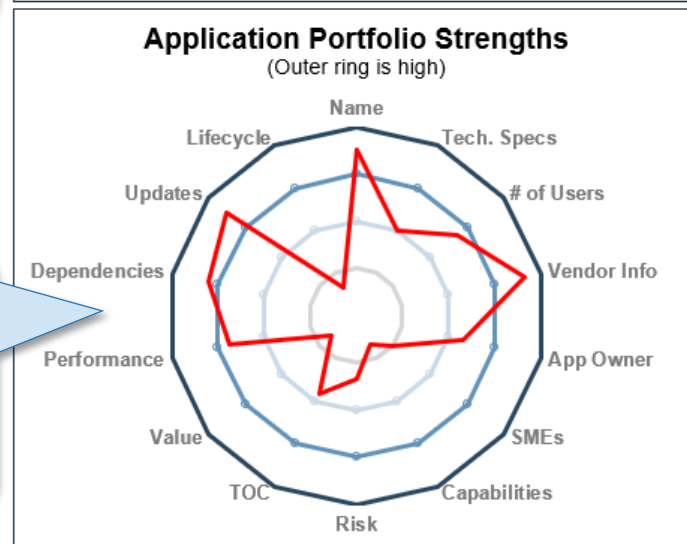
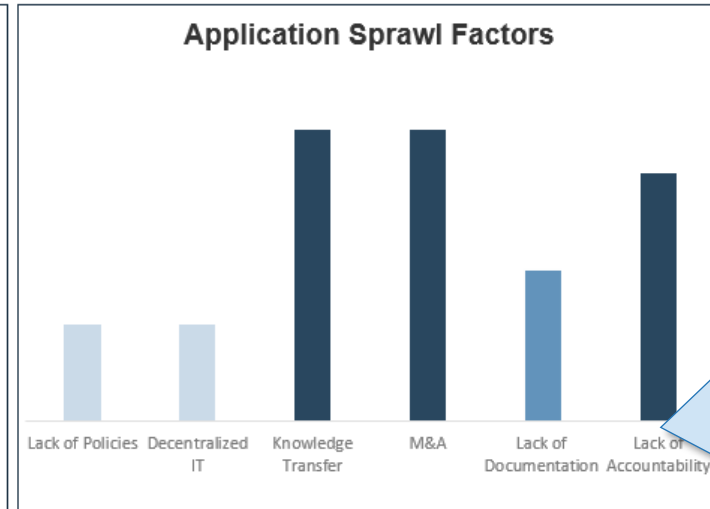
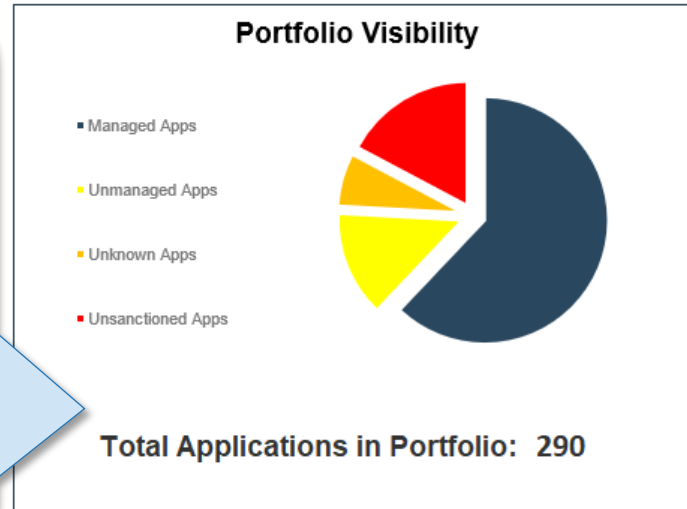
Input	Output
• Current APM program • Application landscape	• APM current-state assessment
Materials	Participants
• <i>Application Portfolio Management Diagnostic Tool</i>	• Applications Lead



Download the *Application Portfolio Management Diagnostic Tool*

1.1 Understanding the diagnostic results

- Managed Apps are your known knowns and most of your portfolio.
- Unmanaged and Unsanctioned Apps are known but have unknown risks and compliance. Bring these under IT support.
- Unknown Apps are high risk and noncompliant. Prioritize these based on risk, cost, and use.



- Your APM inventory is only as good as the information in it. Use this chart to identify gaps and develop a path to define missing information.

- APM is more than an inventory and assessment. A strong APM program provides ongoing visibility and insights to drive application improvement and value delivery.
- Use your Sprawl Factors to identify process and organizational gaps that may need to be addressed.

- APM is an iterative process. Use this state assessment to determine where to focus most of your current effort.

Understand potential motivations for APM

The value of APM is defined by how the information will be used to drive better decisions.

Portfolio Governance

Improves:

- Spending efficiency
- Risk
- Retirement of aged and low-value applications
- Business enablement

Impact on your rationalization framework:

- Less urgent
- As rigorous as appropriate
- Apply in-depth analysis as needed

Transformative Initiatives

Enables:

- Data migration or harmonization
- Legacy modernization
- Infrastructure/cloud migration
- Standardizing platforms
- Shift to cloud and SAAS

Impact on your rationalization framework:

- Time sensitive
- Scope on impacted areas
- Need to determine specific dispositions
- Outcomes need to include detailed and actionable steps

Event-Driven Rationalization

Responds to:

- Mergers and acquisitions
- Regulatory and compliance change
- New applications
- Application retirement by vendors
- Changes in business operations
- Security risks and BC/DR

Impact on your rationalization framework:

- Time constrained
- Lots of discovery work
- Primary focus on duplication
- Increased process and system understanding

Different motivations will influence the appropriate approach to and urgency of APM or, specifically, rationalizing the portfolio. When rationalizing is directly related to enabling or in response to a broader initiative, you will need to create a more structured approach with a formal budget and resources.

1.2 Determine narrative

Estimated time: 30 minutes-2 hours

1. Open the “Narrative” tab in the *APM Snapshot and Foundations Tool*.
2. Start by listing your prevailing IT pain points with the application portfolio. These will be the issues experienced predominantly by the IT team and not necessarily by the stakeholders. Be sure to distinguish pain points from their root causes.
3. Determine an equivalent business pain point for each IT pain point. This should be how the problem manifests itself to business stakeholders and should include potential risks to the organization is exposed to.
4. Determine the business goal for each business pain point. Ideally, these are established organizational goals that key decision-makers will recognize. These goals should address the business pain points you have documented.
5. Determine the technical objective for each business goal. These speak to the general corrections or enhancements to the portfolio required to accomplish the business goals.
6. Use the “Narrative - Matrix” worksheet to group items into themes if needed.

Input	Output
• Familiarity with application landscape • Organizational context and strategic artifacts	• Narrative for application portfolio transformation
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Application Portfolio Manager



Record the results in the
APM Snapshot and Foundations Tool

Connect your pains to what the business cares about to find the most effective narrative

Root Cause	IT Pain Points	Business Pain Points	Business Goals	Narrative	Technical Objectives
Sprawl	Back-End Complexity	Hurdles to Growth/Change	Scalability	Create Strategic Alignment Identify specific business capabilities that are incompatible with strategic initiatives.	Platform Standardization
	Disparate Data/Apps	Poor Business Analytics	Flexibility/Agility		
	Poor Architectural Fit	Process Inefficiency	Data-Driven Insights	Reduce Application Intensity Highlight the capabilities that are encumbered due to functional overlaps and complexity.	Platform Standardization Consolidation
Shadow IT/decentralized oversight	Redundancy	Software Costs	M&A Transition		
	Maintenance Demand/Resource Drain	Business Continuity Risk	Business Unit Consolidation/Centralization	Reduce Software Costs Specific business capabilities come at an unnecessarily or disproportionately high cost.	Data Harmonization
	Low Maintainability	Data Privacy Risk	Process Improvement		Removal/Consolidation of Redundant Applications
Neglect over time	Technical Debt	Data/IP Theft Risk	Process Modernization	Mitigate Business Continuity Risk Specific business capabilities are at risk of interruption or stoppages due to unresolved back-end issues.	Legacy Modernization
	Legacy, Aging, or Expiring Apps	Poor User Experience	Cost Reduction		
	Security Vulnerabilities	Low-Value Apps	Stability	Mitigate Security Risk Specific business capabilities are at risk due to unmitigated security vulnerabilities or breaches.	Application Upgrades
Poor delivery processes	Unsatisfied Customers		Customer Protection		
			Security	Increase Satisfaction Applications Specific business capabilities are not achieving their optimal business value.	Removal of Low-Value Applications
			Employee Enablement		
			Business Enablement		
			Innovation		

1.3 Define goals and metrics

Estimated time: 1 hour

1. Determine the motivations behind APM. You may want to collect and review any of the organization's strategic documents that provide additional context on previously established goals.
2. With the appropriate stakeholders, discuss the goals of APM. Try to label your goals as either:
 - a) Short term: Refers to immediate goals used to represent the progress of APM activities. Likely these goals are more IT-oriented
 - b) Long term: Refers to broader and more distant goals more related to the impact of APM. These goals tend to be more business-oriented.
3. To help clearly define your goals, discuss appropriate metrics for each goal. Often these metrics can be expressed as:
 - a) Leading indicators: Metrics used to gauge the success of your short-term goals and the progress of APM activities.
 - b) Lagging indicators: Metrics used to gauge the success of your long-term goals.



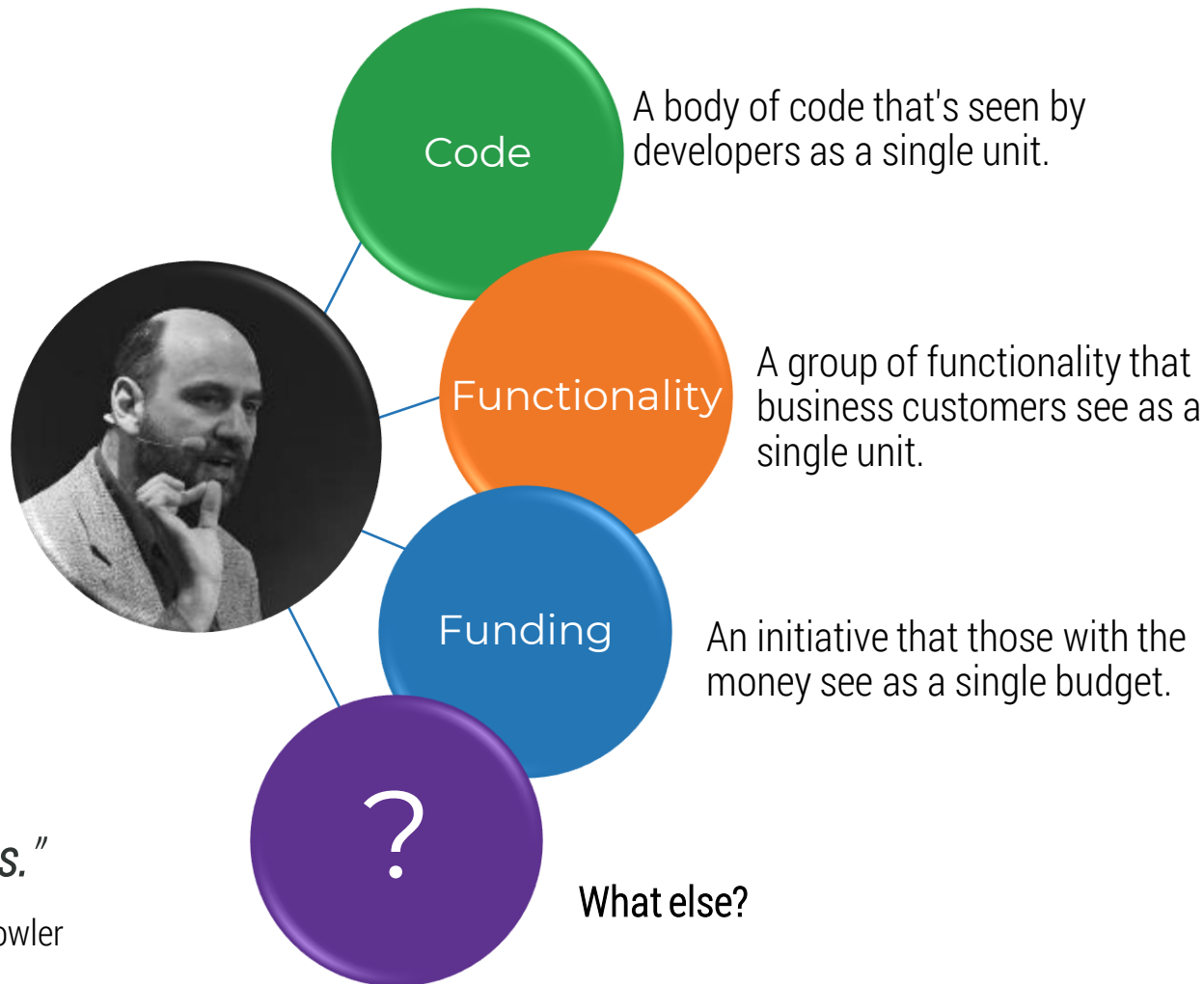
Record the results in the
APM Snapshot and Foundations Tool

Input	Output
• Overarching organizational strategy • IT strategy	• Defined goals and metrics for APM
Materials	Participants
• Whiteboard • Markers • <i>APM Snapshot and Foundations Tool</i>	• Applications Lead • Key Corporate Stakeholders

1.3 Define goals and metrics: Example

	Goals		Metric	Target
Short Term	Improve ability to inform the business	Leading Indicators	- Application inventory with all data fields completed - Applications with recommended dispositions	80% of portfolio
	Improve ownership of applications		Applications with an assigned business and technical owner	80% of portfolio
	Reduce costs of portfolio		- TCO of full application portfolio - The number of recovered/avoided software licenses from retired apps	- Reduce by 5% \$50,000
Long Term	Migrate platform	Lagging Indicators	- Migrate all applications - Total value change in on-premises apps switched to SaaS	100% of applications - Increase 50%
	Improve overall satisfaction with portfolio		End-user satisfaction rating	Increase 25%
	Become more customer-centric		- Increased sales - Increased customer experience	Increase 35%

“Application” doesn’t have the same meaning to everyone



*“Essentially applications are **social constructions**.”*

Source: Martin Fowler

APM focuses on **business applications**.

“Software used by business users to perform a business function.”

– ServiceNow, 2020

Unfortunately, that definition is still quite vague.

You must set boundaries and scope for “application”

1. Many individual items can be considered applications on their own or components within or associated with an application.

Apps can be categorized by aspects of your architecture or tech stack

Interface	Presentation Layer	UI
Software Component	Middleware	API
Supporting Software	Micro Service	Data Access/ Transfer/Load
Platform	Database	Operating System

Apps can be categorized by the application family

Parent Application	Package	Suite
Child Application	Module	Component (Functional)

2. Different categories of applications may be out of scope or handled differently within the activities and artifacts of APM.

Apps can be categorized by generic categories

Enterprise Applications	Productivity Tools	Customer-Facing Applications
Unique Function-Specific Applications		Mobile Applications

Apps can be categorized by bought vs. built or install types

Custom	Off the Shelf	Hybrid
On-Prem	SaaS	End-User-Built Tools

Apps can be categorized by the group managing them

IT-Managed Applications	Business-Managed Applications (Shadow IT)	Partner/External Applications
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Apps can be categorized by tiers

Mission Critical	Tier 2	Tier 3
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Set boundaries on what is an application or the individual unit that you’re making business decisions on. Also, determine which categories of applications are in scope and how they will be included in the activities and artifacts of APM. Use your product families defined in [Deliver Digital Products at Scale](#) to help define your application categories, groups, and boundaries.

1.4 Define application categories

Estimated time: 1 hour

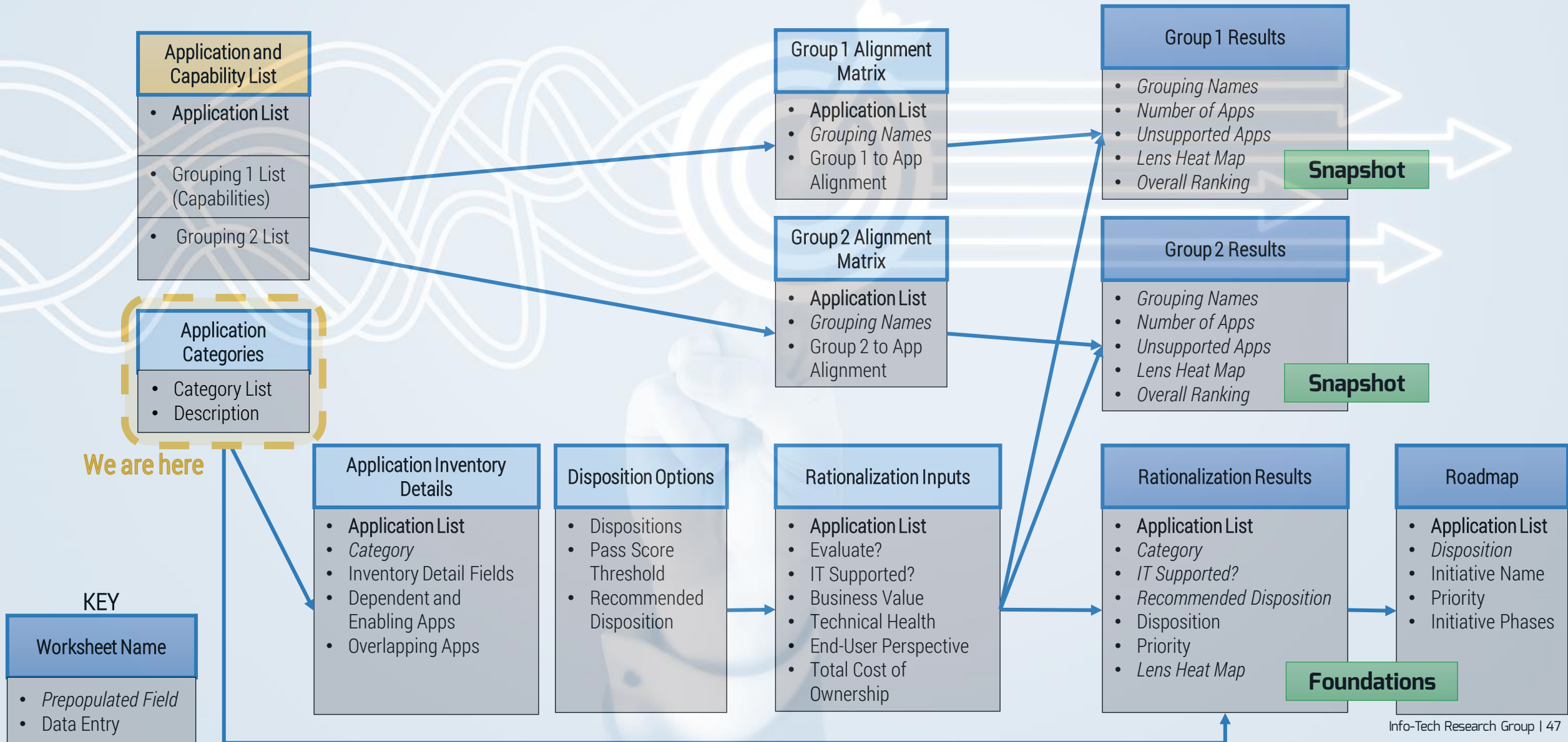
1. Review the items listed on the previous slide and consider what categories provide the best initial grouping to help organize your rationalization and dispositions. Update the category list to match your application groupings.
2. Identify the additional categories you need to manage in your application portfolio.
3. For each category, establish or modify a description or definition and provide examples that exist in your current portfolio.
4. For each category, answer:
 - a) Will these be documented in the application inventory?
 - b) Will these be included in application rationalization? Think about if this item will be assigned a TCO, value score, and, ultimately, a disposition.
 - c) Will these be listed in the application portfolio roadmap?
5. If you completed [Deliver Digital Products at Scale](#), use your product families to help define your application categories.

Input	Output
• Working list of applications	• Definitions and guidelines for which application categories are in scope for APM
Materials	Participants
• Whiteboard and markers • <i>APM Snapshot and Foundations Tool</i>	• Applications Lead • Key Corporate Stakeholders



Record the results in the
APM Snapshot and Foundations Tool

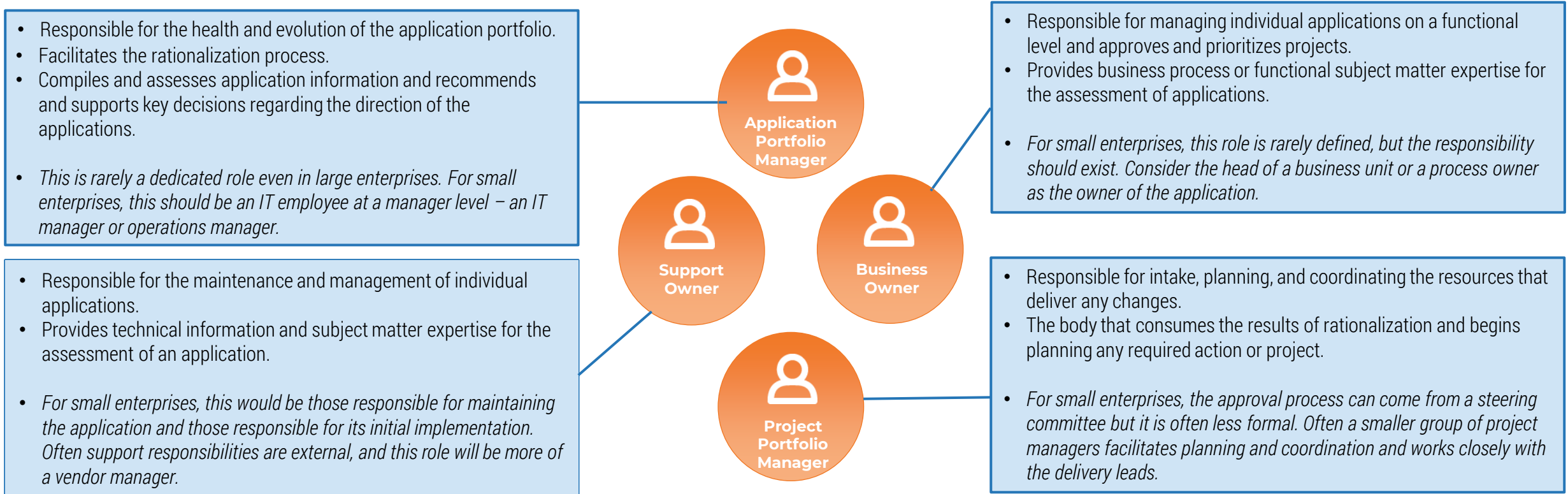
1.4 APM worksheet data journey map



1.4 Define application categories: Example

Category	Definition/Description	Examples	Documented in your application inventory?	Included in application rationalization?	Listed in your application portfolio roadmap?
Business Application	End-user facing applications that directly enable specific business functions. This includes enterprise-wide and business-function-specific applications. Separate modules will be considered a business application when appropriate.	ERP system, CRM software, accounting software	Yes	Yes. Unless currently in dev. TCO of the parent application will be divided among child apps.	Yes
Software Components	Back-end solutions are self-contained units that support business functions.	ETL, middleware, operating systems	No. Documentation in CMDB. These will be listed as a dependency in the application inventory.	No. These will be linked to a business app and included in TCO estimates and tech health assessments.	No
Productivity Tools	End-user-facing applications that enable standard communication of general document creation.	MS Word, MS Excel, corporate email	Yes	No	Yes
End-User-Built Microsoft Tools	Single instances of a Microsoft tool that the business has grown dependent on.	Payroll Excel tool, Access databases	No. Documentation in Business Tool Glossary.	No	No
Partner Applications	Partners or third-party applications that the business has grown dependent on but are internally owned or managed.	Supplier's ERP portal, government portal	No	No	Yes
Shadow IT	Business-managed applications.	Downloaded tools	Yes	Yes. However, just from a redundancy perspective.	Yes

The roles in APM rarely exist; you need to adapt



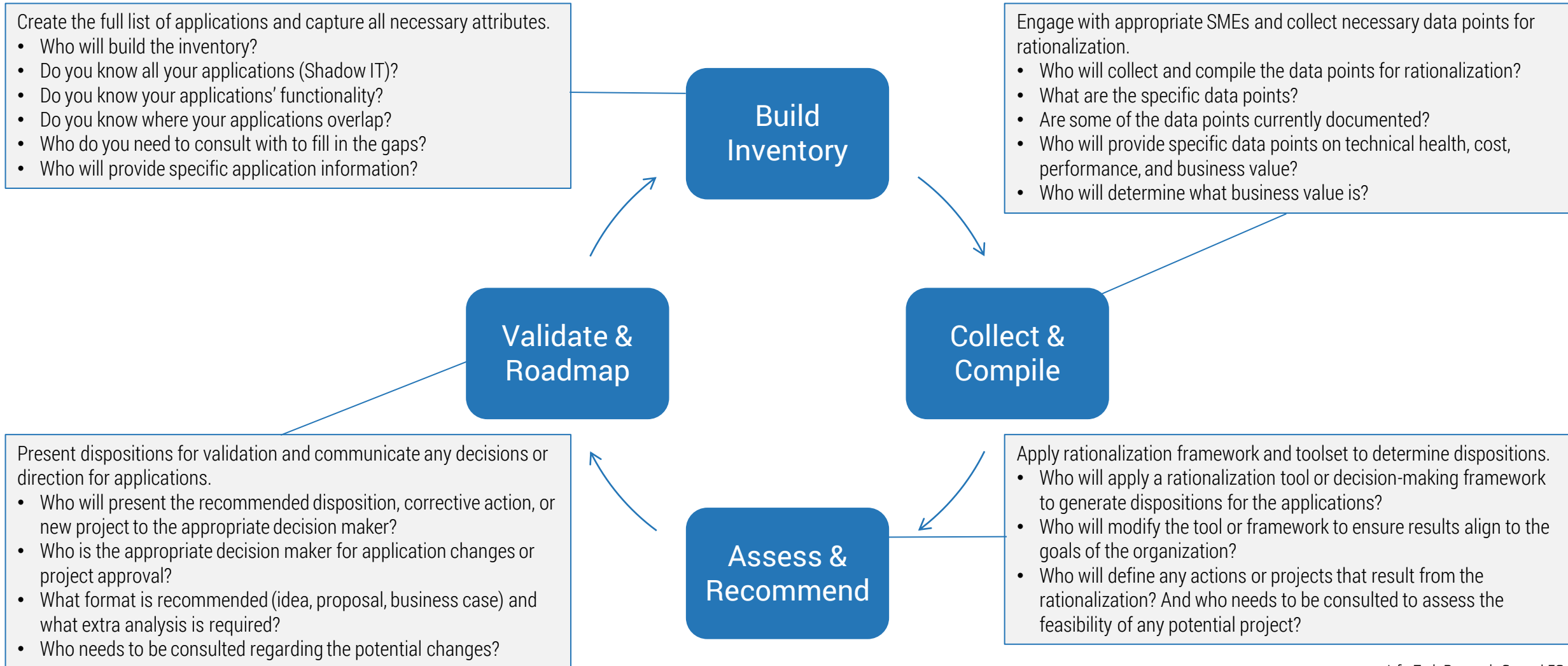
Corner-of-the-Desk Approach

- x No one is explicitly dedicated to building a strategy or APM practices.
- x Information is collected whenever the applications team has time available.
- x Benefits are pushed out and the value is lost.

Dedicated Approach

- ✓ The initiative is given a budget and formal agenda.
- ✓ Roles and responsibilities are assigned to team members.

The high-level steps of APM present some questions you need to answer



1.5 Determine APM steps and roles (SIPOC)

Estimated time: 1-2 hours

1. Begin by comparing Info-Tech's list of common APM roles to the roles that exist in your organization with respect to application management and ownership.
2. There are four high-level steps for APM: build inventory, collect & compile, assess & recommend, and validate & roadmap. Apply the SIPOC (Supplier, Input, Process, Output, Customer) model by completing the following for each step:
 - a) In the Process column, modify the description, if necessary. Identify who is responsible for performing the step.
 - b) In the Inputs column, modify the list of inputs.
 - c) In the Suppliers column, identify who must be included to provide the inputs.
 - d) In the Outputs column, modify the list of outputs.
 - e) In the Customers column, identify who consumes the outputs.
3. (Optional) Outline how the results of APM will be consumed. For example, project intake or execution, data or platform migration, application or product management, or whichever is appropriate.

Input	Output
Existing function and roles regarding application delivery, management, and ownership	- Scope of APM - Responsibilities assigned to your roles
Materials	Participants
- Whiteboard and markers "Supporting Activities – SIPOC" worksheet in the <i>APM Snapshot and Foundations Tool</i>	- Applications Lead - Key Corporate Stakeholders

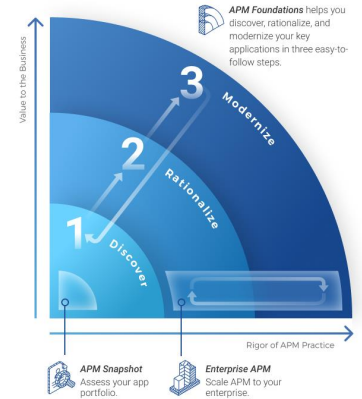


Record the results in the *APM Snapshot and Foundations Tool*

1.5 Determine steps and roles

Suppliers	Inputs	Process	Outputs	Customers
- Applications Manager - Operations Manager - Business Owners - IT Team	- List of applications - Application attributes - Business capabilities	Build Inventory Create the full list of applications and capture all necessary attributes. <i>Resp: Applications Manager & IT team member</i>	- Application inventory - Identified redundancies	Whole organization
- Applications SMEs - Business Owners - Support Owners & Team - End Users	- Application inventory - Existing documentation - Additional collection methods - Knowledge of business value, cost, and performance for each application	Collect & Compile Engage with appropriate SMEs and collect necessary data points for rationalization. <i>Resp: IT team member</i>	Data points of business value, cost, and performance for each application	Applications Manager
Applications Manager	- Defined application rationalization framework and toolset - Data points of business value, cost, and performance for each application	Assess & Recommend Apply rationalization framework and toolset to determine dispositions. <i>Resp: Applications Manager</i>	- Assigned disposition for each application - New project ideas for applications	- Business Owners - Steering Committee
- Business Owners - Steering Committee	- Assigned disposition for each application - New project ideas for applications - Awareness of goals and priorities - Awareness of existing projects and resources capacity	Validate & Roadmap Present dispositions for validation and communicate any decisions or direction for applications. <i>Resp: Applications Manager</i>	- Application portfolio roadmap - Confirmed disposition for each application - Project request submission	Whole organization
- Applications Manager - Solutions Engineer - Business Owner	- Project request submission - Estimated cost - Estimated value or ROI	Project Intake Build business case for project request. <i>Resp: Project Manager</i>	Approved project	Steering Committee

Planning your APM modernization journey steps



Discovery

Enter your pilot inventory.

- Optional Snapshot: Populate your desired snapshot grouping lists (departments, functions, groups, capabilities, etc.).



Rationalization

Score your pilot apps to refine your rationalization criteria and scoring.

- Score 3 to 9 apps to adjust and get comfortable with the scoring.
- Validate scoring with the remaining apps in your pilot group. Refine and finalize the criteria and scoring descriptions.
- Optional Snapshot: Use the Group Alignment Matrix to match your grouping list to select which apps support each grouping item.



Disposition

Determine recommended disposition for each application.

- Review and adjust the disposition recommendations on the "Disposition Options" worksheet and set your pass/fail threshold.
- Review your apps on the "App Rationalization Results" worksheet. Update (override) the recommended disposition and priority if needed.



Roadmap

Populate your application roadmap.

- Indicate programs, projects, initiatives, or releases that are planned for each app.
- Update the priority based on the initiative.
- Use the visual roadmap to show high-level delivery phases.



Phase 2

Improve Your Inventory

Phase 1

- 1.1 Assess Your Current Application Portfolio
- 1.2 Determine Narrative
- 1.3 Define Goals and Metrics
- 1.4 Define Application Categories
- 1.5 Determine APM Steps and Roles

Phase 2

- 2.1 Populate Your Inventory
- 2.2 Align to Business Capabilities

Phase 3

- 3.1 Assess Business Value
- 3.2 Assess Technical Health
- 3.3 Assess End-User Perspective
- 3.4 Assess Total Cost of Ownership

Phase 4

- 4.1 Review APM Snapshot results
- 4.2 Review *APM Foundations* results
- 4.3 Determine Dispositions
- 4.4 Assess Redundancies (Optional)
- 4.5 Determine Dispositions for Redundant Applications (Optional)
- 4.6 Prioritize Initiatives
- 4.7 Determine Ongoing APM Cadence

This phase involves the following participants:

- Applications Lead
- Applications Team

Additional Resources

[*Document Your Business Architecture*](#)

[*Industry Reference Architectures*](#)

[*Application Capability Template*](#)

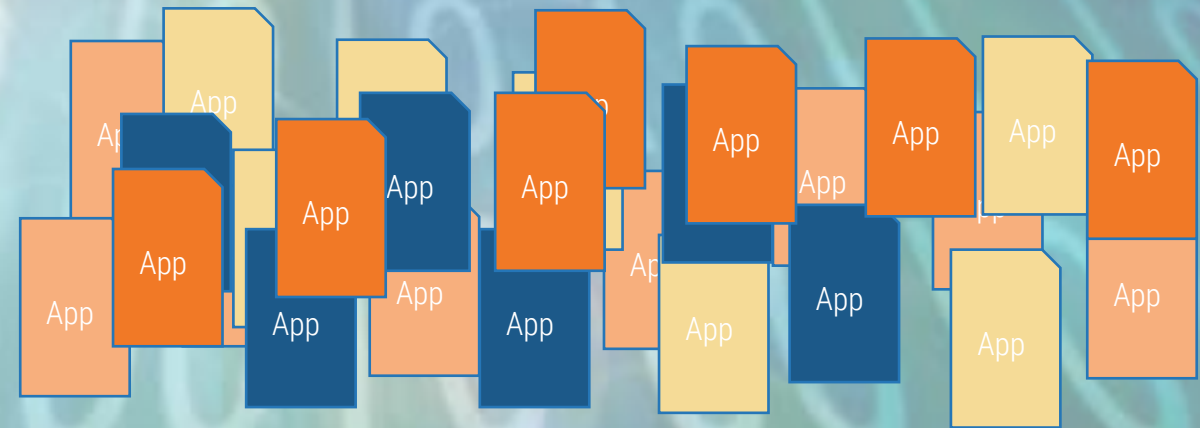
Application Portfolio
Management Foundations

Pre-step: Collect your applications

1. Consult with your IT team and leverage any existing documentation to gather an initial list of your applications.
2. Build an initial working list of applications. This is just meant to be a starting point. Aim to include any new applications in procurement, implementation, or development.
3. The rationalization and roadmapping phases are best completed when iteratively focusing on manageable groups of applications. Group your applications into subsets based on shared subject matter experts. Likely this will mean grouping applications by business units.
4. Select a subset to be the first group of applications that will undergo the activities of rationalization and roadmapping to refine your APM processes, scoring, and disposition selection.

Info-Tech Best Practice

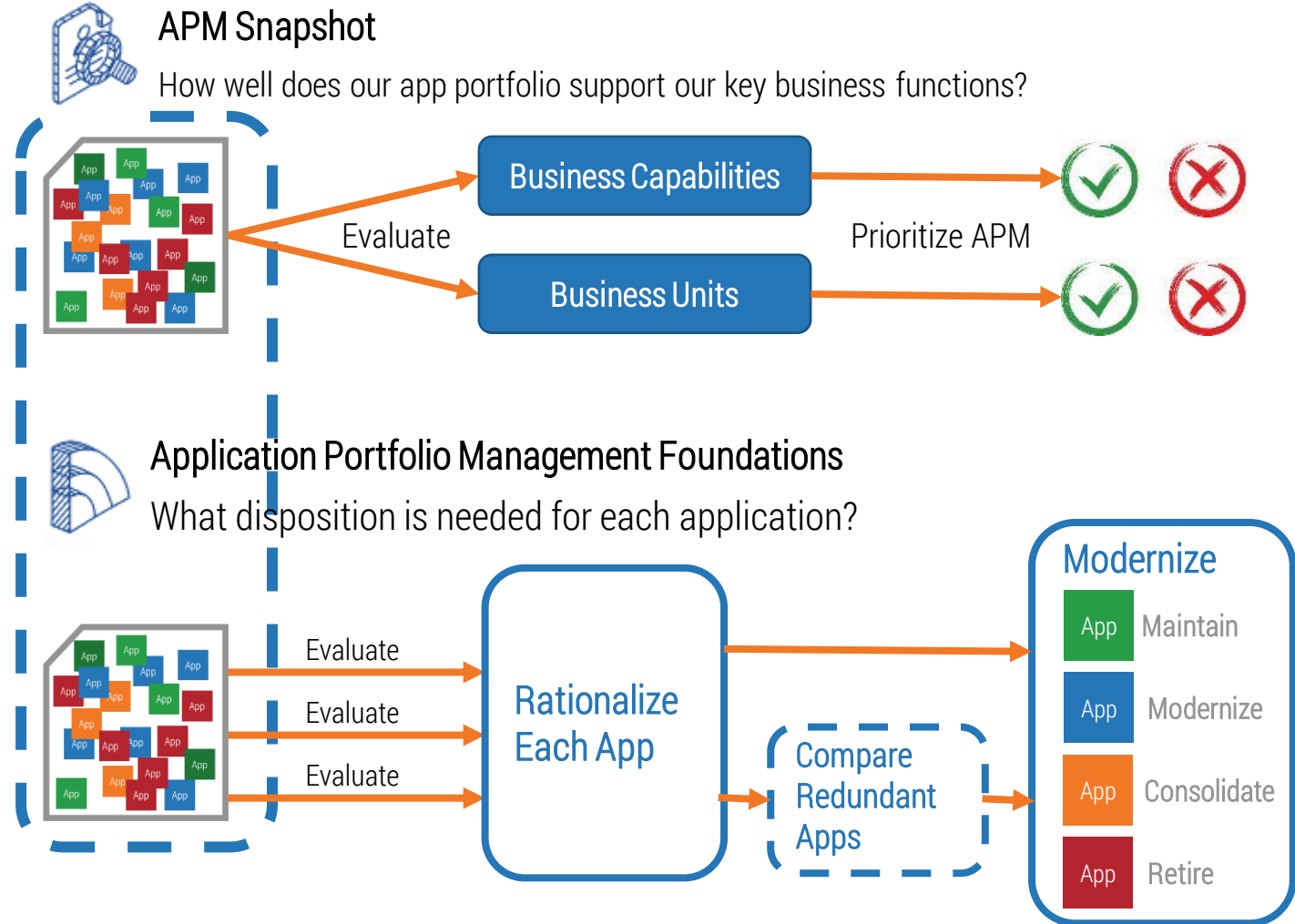
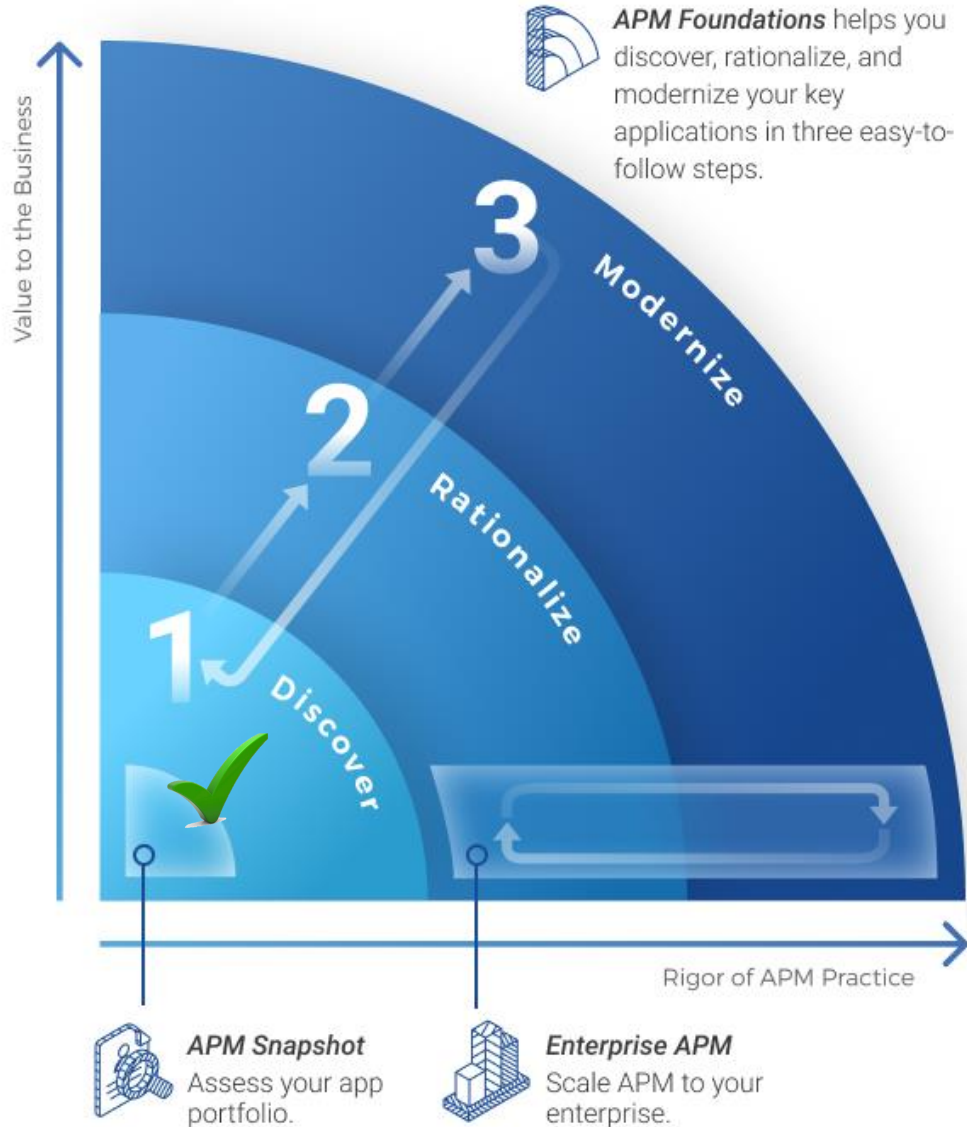
The more information you plan to capture, the larger the time and effort, especially as you move along toward advanced and strategic items. Capture the information most aligned to your objectives to make the most of your investment.



If you completed [*Deliver Digital Products at Scale*](#), use your product families and products to help define your applications.

Learn more about automated application discovery:
[*High Application Satisfaction Starts With Discovering Your Application Inventory*](#)

Discover your applications



2.1 Populate your inventory

Estimated time: 1-4 hours per group

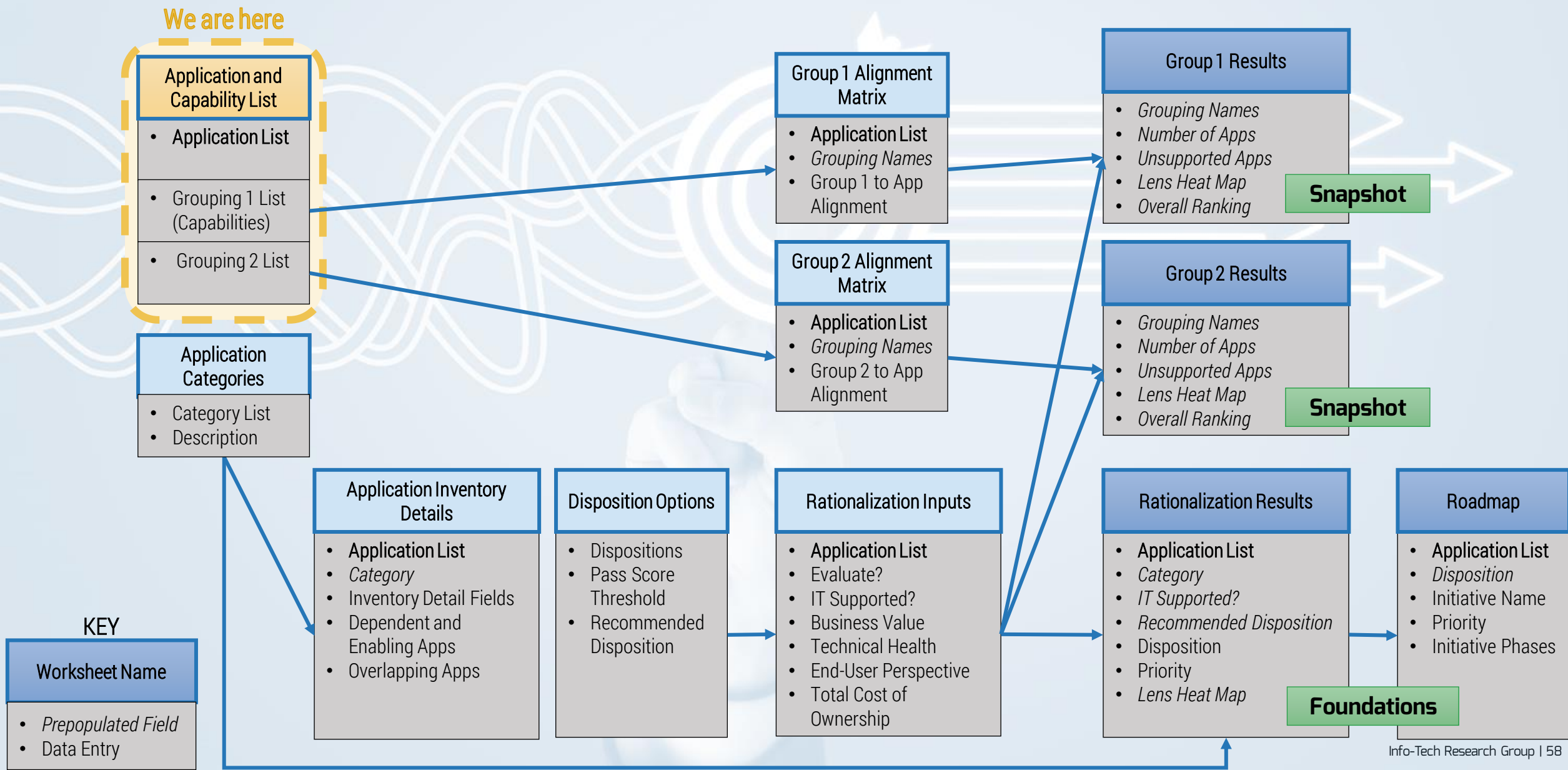
1. Review Info-Tech's list of [application inventory attributes](#).
2. Open the "Application Inventory Details" tab of the [APM Snapshot and Foundations Tool](#). Modify, add, or omit attributes.
3. For each application, populate your prioritized data fields or any fields you know at the time of discovery. You will complete all the fields in future iterations.
4. Complete this the best you can based on your team's familiarity and any readily available documentation related to these applications.
5. Use the drop-down list to select Enabling, Redundant/Overlapping, and Dependent apps. This will be used to help determine dispositions and comparisons.
6. Highlight missing information or placeholder values that need to be verified.



Record the results in the
APM Snapshot and Foundations Tool

Input	Output
• Working list of applications	• Determined attributes for inventory • Populated inventory
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Applications Lead • Any Applications Team Members

2.1 APM worksheet data journey map

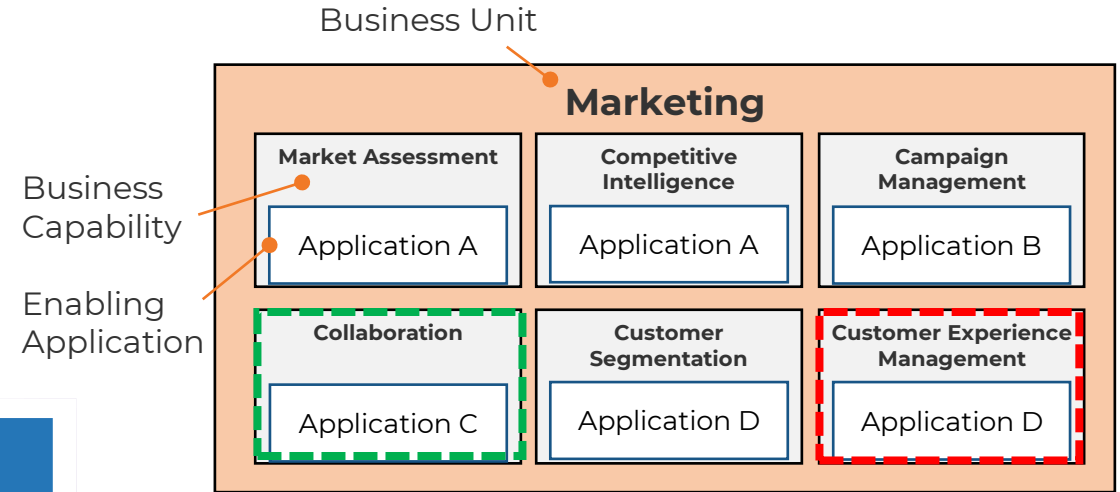


Why is the business capability so important?

For the purposes of an inventory, business capabilities help all stakeholders gain a sense of the functionality the application provides.

However, the true value of business capability comes with rationalization.

Upon linking all the organization's applications to a standardized and consistent set of business capabilities, you can then group your applications based on similar, complementary, or overlapping functionality. In other words, find your redundancies and consolidation opportunities.



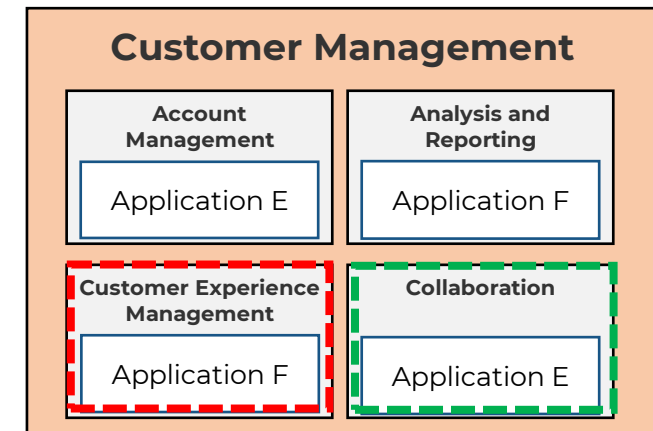
In this scenario, **applications C and E** and **applications D and F** have similar or overlapping functionality and should be made candidates for consolidation.

Important Consideration

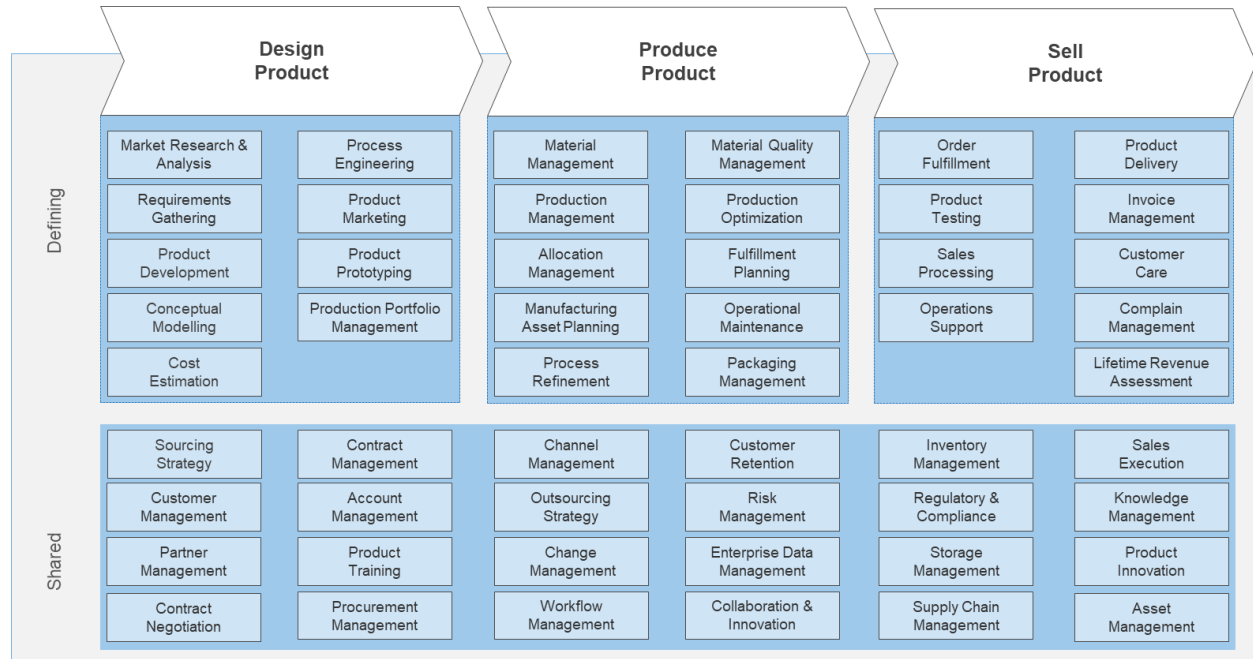
Defining business capabilities and determining the full extent of redundancy is a challenging undertaking and often is a larger effort than APM all together.

Business capabilities should be defined according to the unique functions and language of your organization, at varying levels of granularity, and ideally including target-state capabilities that identify gaps in the future strategy.

This blueprint provides a simplified and generic list for the purpose of categorizing similar functionality. We strongly encourage exploring *Document Your Business Architecture* to help in the business capability defining process, especially when visibility into your portfolio and knowledge of redundancies is poor.



What is a business capability map?



A **business capability map (BCM)** is an abstraction of business operations that helps describe what the enterprise does to achieve its vision, mission, and goals. **Business capabilities** are the building blocks of the enterprise. They are typically defined at varying levels of granularity and include target-state capabilities that identify gaps in the future strategy. These are the people, process, and tool units that deliver value to your teams and customers.

Info-Tech's [Industry Coverage and Reference Architectures](#) give you a head start on producing a BCM fit for your organization. The visual to the left is an example of a reference architecture for the retail industry.

These are the foundational piece for our Application Portfolio Snapshot. By linking capabilities to your supporting applications, you can better visualize how the portfolio supports the organization at a single glance. More specifically, you can highlight how issues with the portfolio are impacting capability delivery.

Reminder: Best practices imply that business capabilities are methodologically defined by business stakeholders and business architects to capture the unique functions and language of your organization.

The approach laid out in this service is about applying minimal time and effort to make the case for proper investment into the best practices, which can include creating a tailored BCM. Start with a **good enough example** to produce a useful visual and generate a positive conversation toward resourcing and analyses.

We strongly encourage exploring [Document Your Business Architecture](#) and the [Application Portfolio Snapshot](#) to understand the thorough methods and tactics for BCM.

Why perform a high-level application alignment before rationalization?

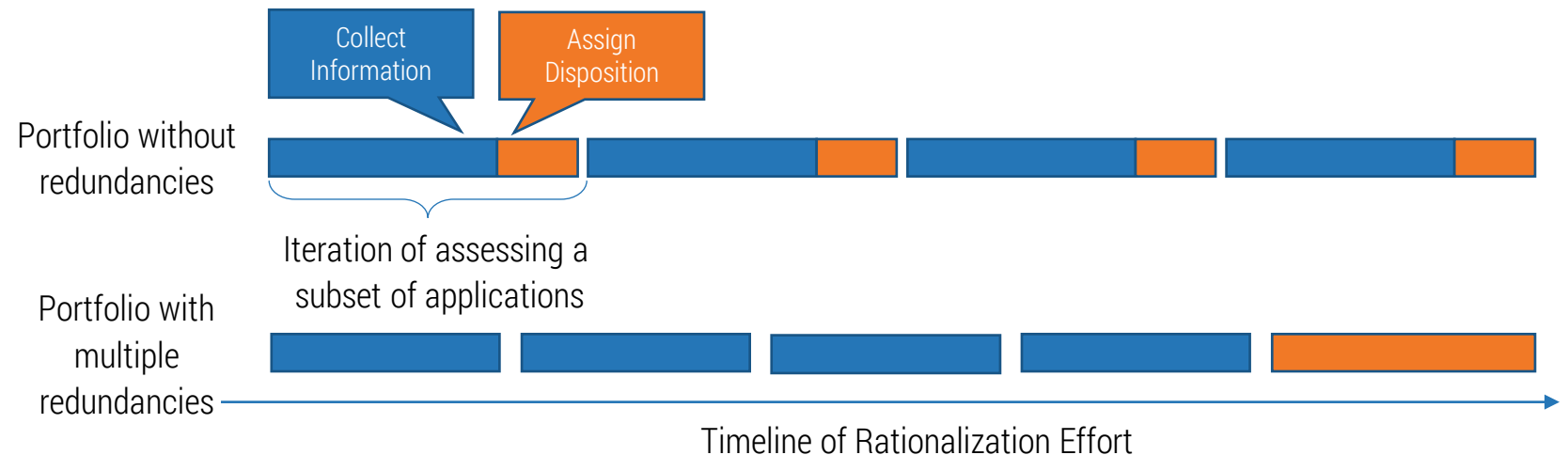
Having to address redundancy complicates the application rationalization process. There is no doubt that assessing applications in isolation is **much easier** and allows you to arrive at dispositions for your applications in a timelier manner.

Rationalization has two basic steps: first, collect and compile information, and second, analyze that information and determine a disposition for each application. When you don't have redundancy, you can analyze an application and determine a disposition in isolation. When you do have redundancies, you need to collect information for multiple applications, likely across departments or lines of business, then perform a comparative analysis.

Most likely your approach will fall somewhere between the examples below and require a hybrid approach.

Benefits of a high-level application alignment:

- Review the degree of redundancy across your portfolio.
- Understand the priority areas for rationalization and the sequence of information collection.



2.2 Align apps to capabilities and functions

Estimated time: 1-4 hours per grouping

The APM tool provides up to three different grouping comparisons to assess how well your applications are supporting your enterprise. Although business capabilities are important, identify your organizational perspectives to determine how well your portfolio supports these functions, departments, or value streams. Each grouping should be a consistent category, type, or arrangement of applications.

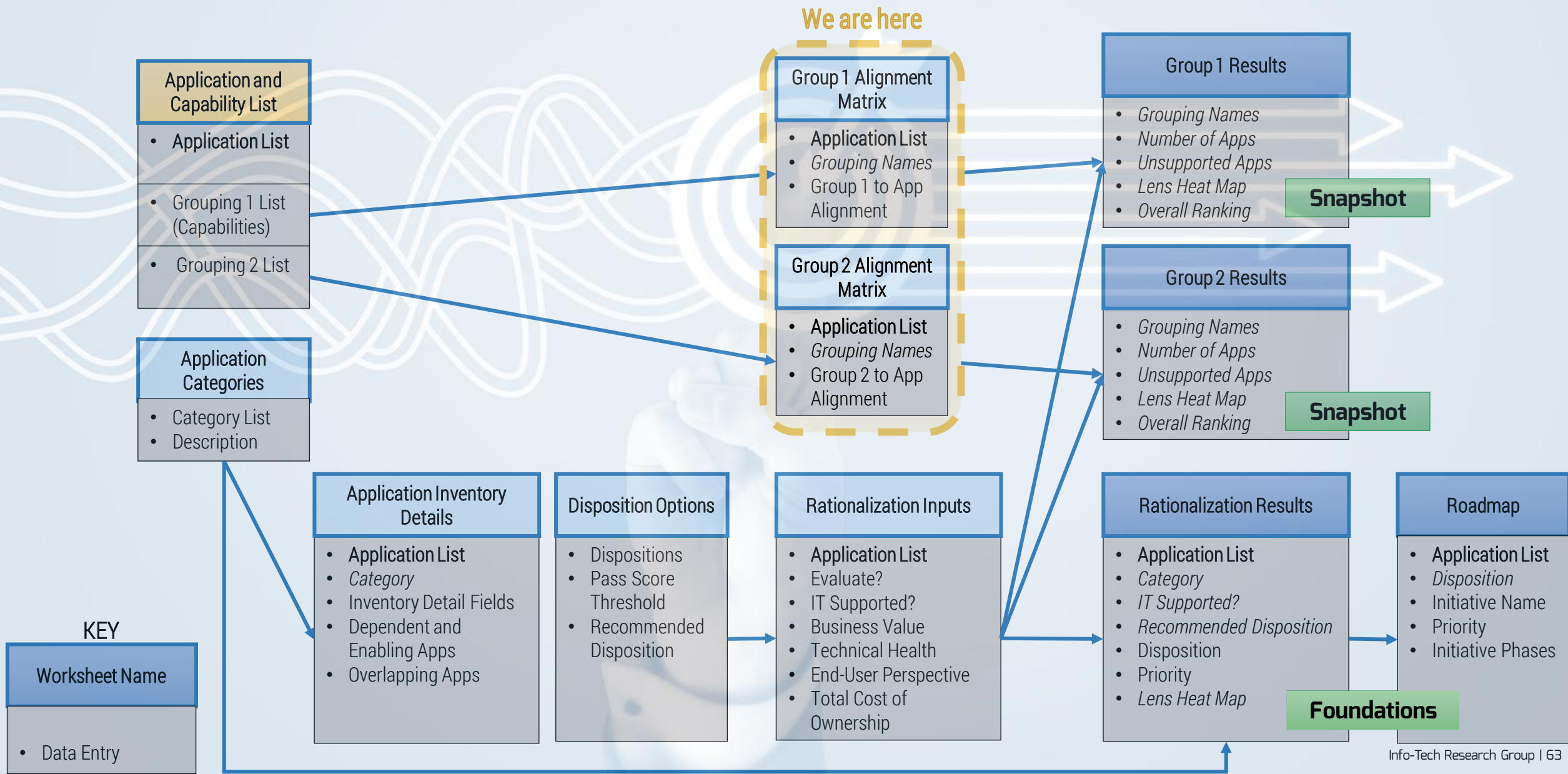
1. Enter the business capabilities, from either your own BCM or the Info-Tech reference architectures, into the Business Capability column under Grouping 1.
2. Open the “Group 1 Alignment Matrix” worksheet in the *APM Snapshot and Foundations Tool*.
3. For each application’s row, enter an “X” in the column of a capability that the application supports.
4. Optionally, repeat these steps under Grouping 2 and 3 for each value stream, department, function, or business unit where you’d like to assess application support. Note: To use Grouping 3, unhide the columns on the “Application and Group Lists” worksheet and unhide the worksheet “Grouping 3 Alignment Matrix.”

↓

Record the results in the *APM Snapshot and Foundations Tool*

Input	Output
• Application inventory • List of business capabilities, Info-Tech Reference Architecture capabilities, departments, functions, divisions, or value streams for grouping comparison	• Assigned business capabilities to applications
Materials	Participants
• Whiteboard and markers • <i>APM Snapshot and Foundations Tool</i>	• Applications Lead • Any Applications Team Members

2.2 APM worksheet data journey map



2.2 Aligning applications to groups example

Alignment Matrix: Identify applications supporting each capability or function.

	Capability, Department, or Function 1	Capability, Department, or Function 2	Capability, Department, or Function 3	Capability, Department, or Function 4	Capability, Department, or Function 5	Capability, Department, or Function 6
Application A	X					
Application B		X				
Application C			X			
Application D			X			
Application E				X	X	
Application F						X
Application G						X
Application H						X
Application I						X
Application J						X

In this example:

BC 1 is supported by App A

BC 2 is supported by App B

BC 3 is supported by Apps C & D

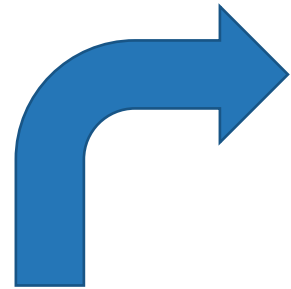
BCs 4 & 5 are supported by App E

BC 6 is supported by Apps F-G. BC 6 shows an example of potential redundancy and portfolio complexity.

The APM tool supports three different Snapshot groupings. Repeat this exercise for each grouping.



Align application to capabilities – tool view



Grouping 1	Business Capabilities																													
	For each group item in row 7, identify its supporting or enabling applications. Unhide the rows for applications 101-500 to assess them. Place an "x" in the cell that intersects the column of the function in row 7 and the row of the application in column B. WARNING: You CANNOT sort, move cells, or insert/delete cells/columns/rows. Doing so will break the hidden calculation sheets and proper alignment of inputs and results.																													
	Business Capabilities																													
	List of Applications	Business Capability - 01	Business Capability - 02	Business Capability - 03	Business Capability - 04	Business Capability - 05	Business Capability - 06	Business Capability - 07	Business Capability - 08	Business Capability - 09	Business Capability - 10	Business Capability - 11	Business Capability - 12	Business Capability - 13	Business Capability - 14	Business Capability - 15	Business Capability - 16	Business Capability - 17	Business Capability - 18	Business Capability - 19	Business Capability - 20	Business Capability - 21	Business Capability - 22	Business Capability - 23	Business Capability - 24	Business Capability - 25	Business Capability - 26	Business Capability - 27	Business Capability - 28	
APP-001	X	X					X							X						X	X					X				X
APP-002		X												X						X	X									X
APP-003	X		X		X		X		X	X		X					X	X		X		X			X	X		X		
APP-004	X		X				X		X	X		X					X	X		X				X		X	X		X	
APP-005	X		X				X		X	X		X				X	X		X				X		X	X		X		
APP-006		X						X		X	X	X						X						X			X	X	X	

Application, Value Stream, and Capability Lists

1. Enter your applications (Limit of 500, unhide rows 101-500 to enter additional applications). The Abbreviated Name is prepopulated from the List of Applications and can be updated manually to match internal naming. The Category list is populated from "Application Categories" worksheet.

2. Groupings 1-3: Enter your application portfolio Snapshot groupings to define how you want to evaluate application support for items within each Grouping (Limit of 100). Business capabilities are recommended for large organizations, and departments or business units are recommended for smaller organizations. Optionally select the Criticality for each item. Grouping 3 is hidden: Unhide columns O-Q to the right to add a third Snapshot grouping. Unhide the Group 3 alignment and Results worksheets.

WARNING: You CANNOT sort, move cells, or insert/delete cells/columns/rows. Doing so will break the hidden calculation sheets and proper alignment of inputs and results.

#	List of Applications	Short Name	Category
1	APP-001	APP-001	Business Application
2	APP-002	APP-002	Business Application
3	APP-003	APP-003	Connectivity
4	APP-004	APP-004	Productivity Tools
5	APP-005	APP-005	Productivity Tools
6	APP-006	APP-006	End User–Built Microsoft Tools
7	APP-007	APP-007	End User–Built Microsoft Tools
8	APP-008	APP-008	End User–Built Microsoft Tools
9	APP-009	APP-009	

Grouping 1		
#	Business Capabilities	Criticality
1	Business Capability - 01	
2	Business Capability - 02	
3	Business Capability - 03	
4	Business Capability - 04	
5	Business Capability - 05	
6	Business Capability - 06	
7	Business Capability - 07	
8	Business Capability - 08	
9	Business Capability - 09	

Grouping 2			Group 3 hidden >	
#	Departments, Business Units, Functions, Value Streams, Markets	Criticality		
1	Business Unit - 01			
2	Business Unit - 02			
3	Business Unit - 03			
4	Business Unit - 04			
5	Business Unit - 05			
6	Business Unit - 06			
7	Business Unit - 07			
8	Business Unit - 08			
9	Business Unit - 09			

Phase 3

Rationalize Your Applications

Phase 1

- 1.1 Assess Your Current Application Portfolio
- 1.2 Determine Narrative
- 1.3 Define Goals and Metrics
- 1.4 Define Application Categories
- 1.5 Determine APM Steps and Roles

Phase 2

- 2.1 Populate Your Inventory
- 2.2 Align to Business Capabilities

Phase 3

- 3.1 Assess Business Value
- 3.2 Assess Technical Health
- 3.3 Assess End-User Perspective
- 3.4 Assess Total Cost of Ownership

Phase 4

- 4.1 Review APM Snapshot results
- 4.2 Review APM Foundations results
- 4.3 Determine Dispositions
- 4.4 Assess Redundancies (Optional)
- 4.5 Determine Dispositions for Redundant Applications (Optional)
- 4.6 Prioritize Initiatives
- 4.7 Determine Ongoing APM Cadence

This phase involves the following participants:

- Applications Lead
- Application SMEs

Additional Resources

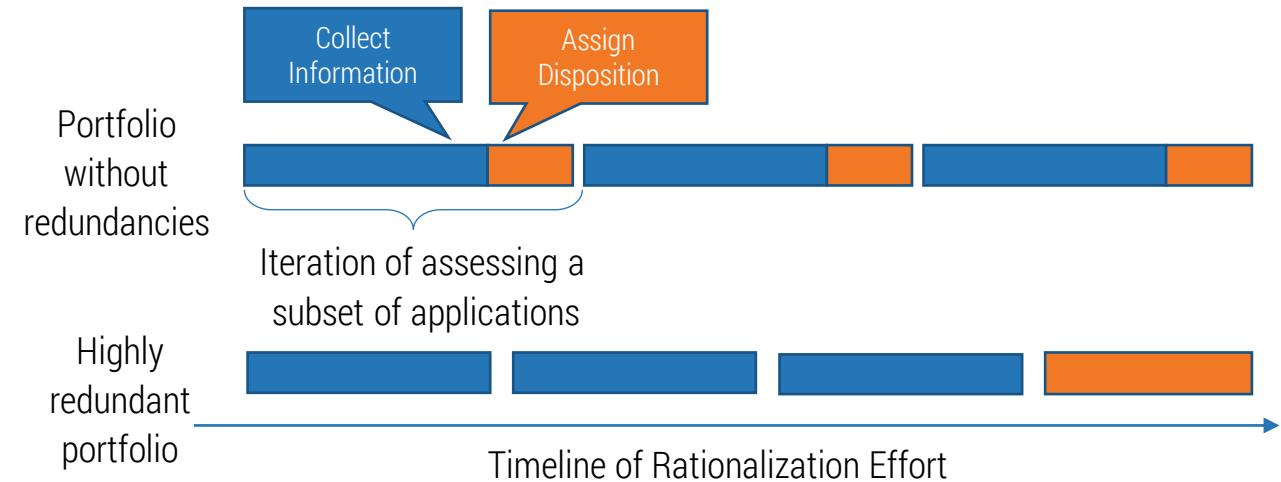
- [*Build a Value Measurement Framework*](#)
- [*Value Calculator*](#)
- [*Application Portfolio Assessment Diagnostic*](#)
- [*Application TCO Calculator*](#)
- [*Application Rationalization Tool*](#)

Application Portfolio
Management Foundations

Phase pre-step: Sequence rationalization assessments appropriately

Use the APM Snapshot results to determine APM iterations

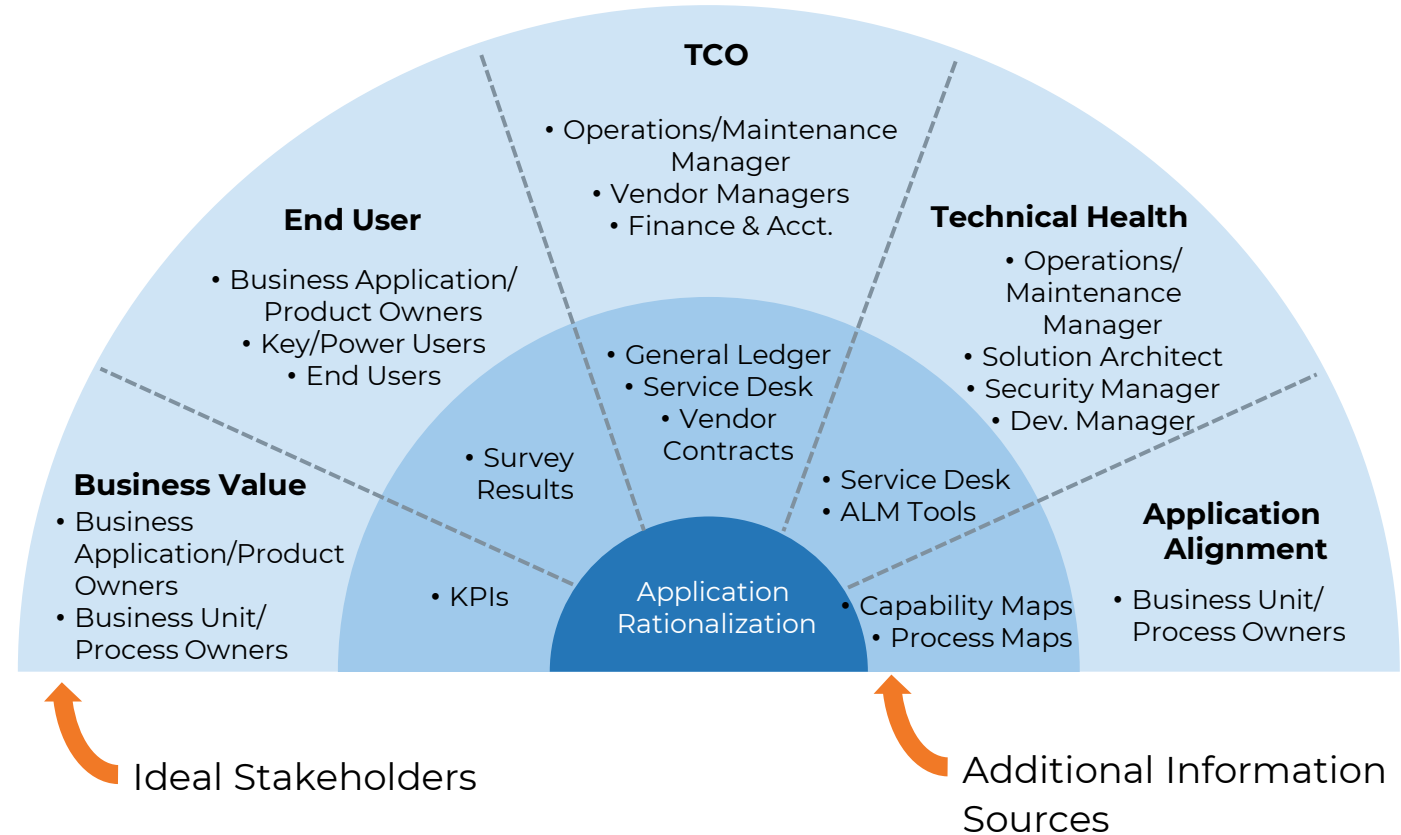
- Application rationalization requires an iterative approach.
- Review your application types and alignment from Phase 2 to begin to identify areas of overlapping or redundant applications.
- Sequence the activities of Phase 3 based on whether you have a:
 - Redundant Portfolio
 - Use the APM Snapshot to prioritize analysis by grouping.
 - Complete the application functional analysis.
 - Use the “Application Comparison” worksheet to aid your comparison of application subsets.
 - Update application dispositions and roadmap initiatives.
 - Non-Redundant Portfolio
 - Use the APM Snapshot to prioritize analysis by grouping.
 - Update application dispositions and roadmap initiatives.



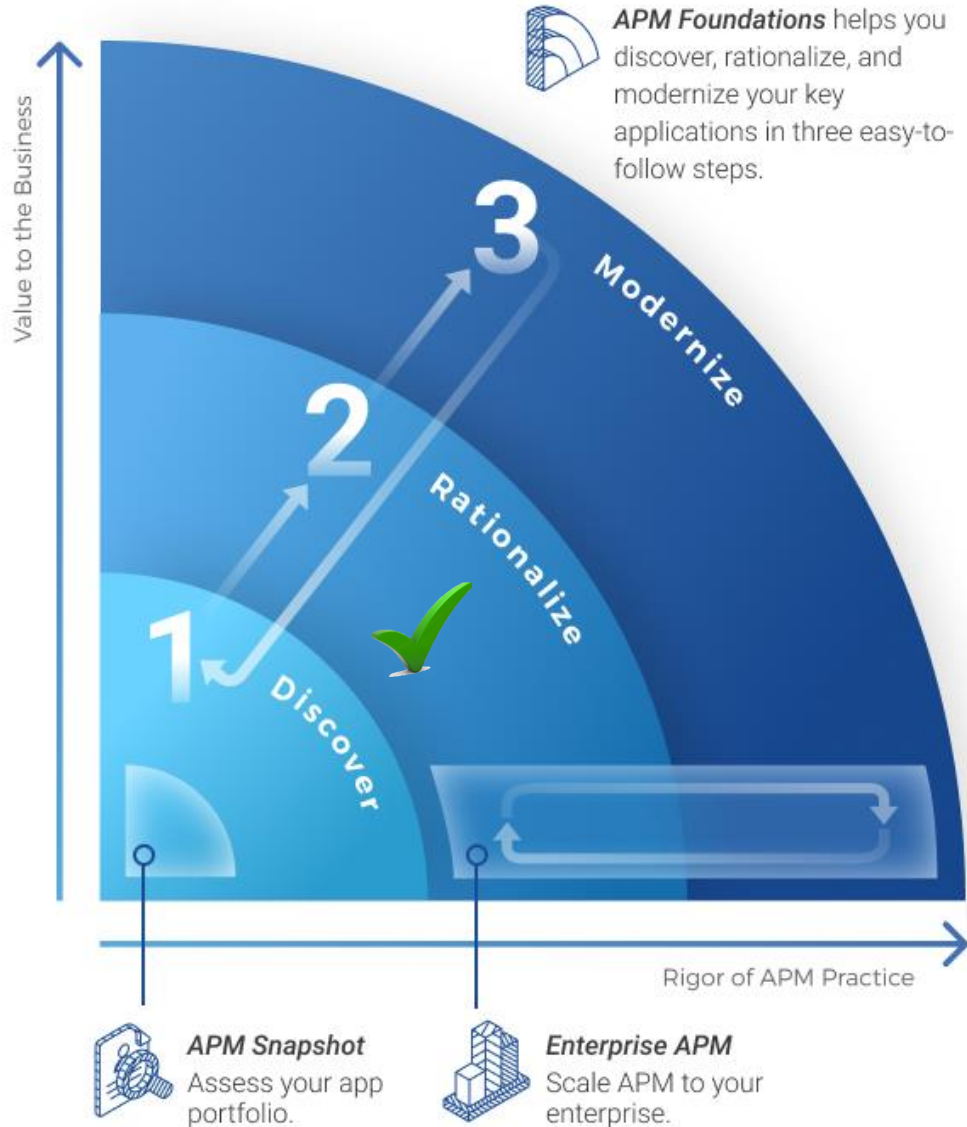
Phase pre-step: Are the right stakeholders present?

Make sure you have the right people at the table from the beginning.

- Application rationalization requires specific stakeholders to provide specific data points.
- Ensure your application subsets are grouped by shared subject matter experts. Ideally, these are grouped by business units.
- For each subset, identify the appropriate SMEs for the five areas of rationalization criteria.
- Communicate and schedule interviews with groups of stakeholders. Inform them of additional information sources to have readily available.
- (Optional) This phase's activities follow the clockwise sequence of the diagram to the right. Reorder the sequence of activities based on overlaps of availability in subject matter expertise.

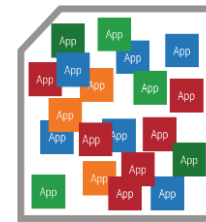


Rationalize your applications



APM Snapshot

How well does our app portfolio support our key business functions?



Evaluate

Business Capabilities

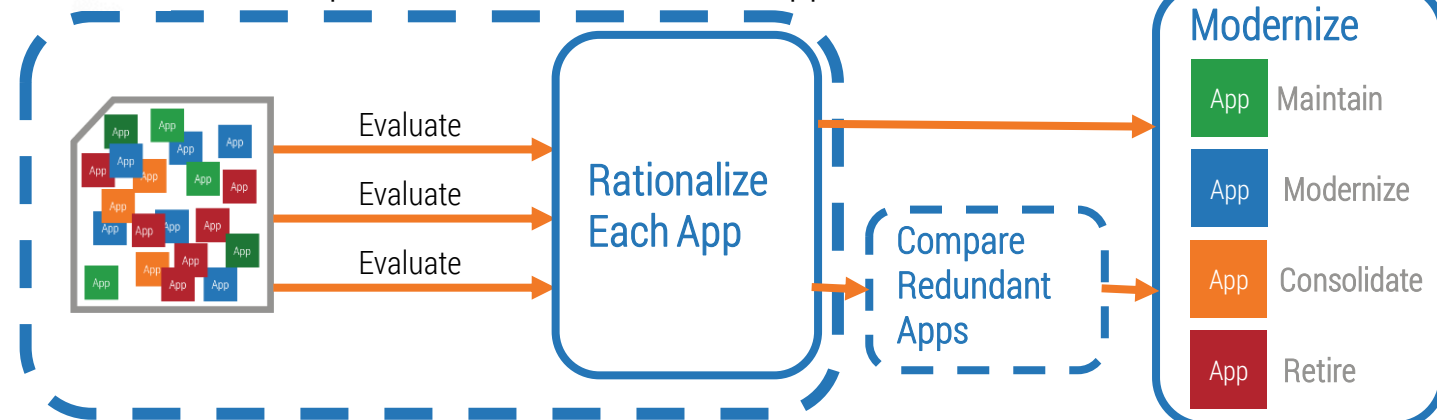
Prioritize APM

Business Units



Application Portfolio Management Foundations

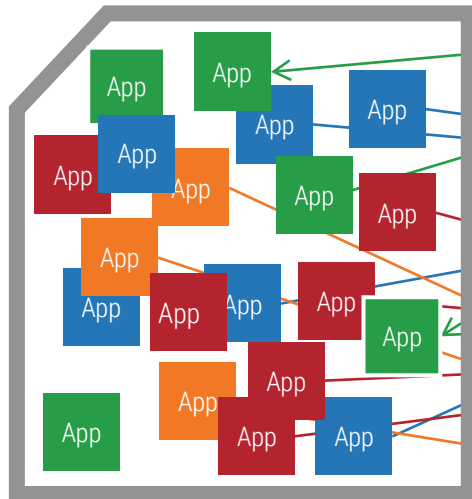
What disposition is needed for each application?



One of the principal goals of application rationalization is determining dispositions

Disposition: The intended strategic direction or course of action for an application.

Directionless portfolio of applications



Assigned dispositions for individual apps

High-level examples:

Maintain: Keep the application but adjust its support structure.



Modernize: Create a new project to address an inadequacy.



Consolidate: Create a new project to reduce duplicate functionality.

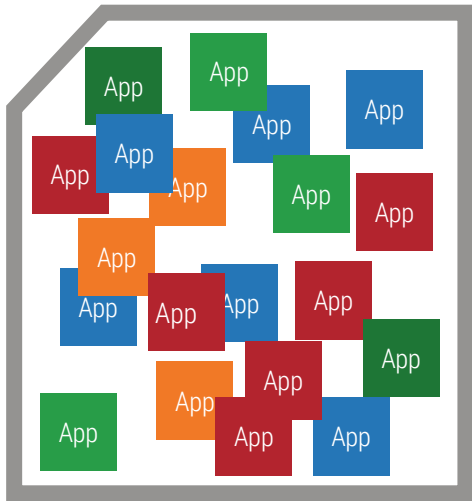


Retire: Phase out the application.

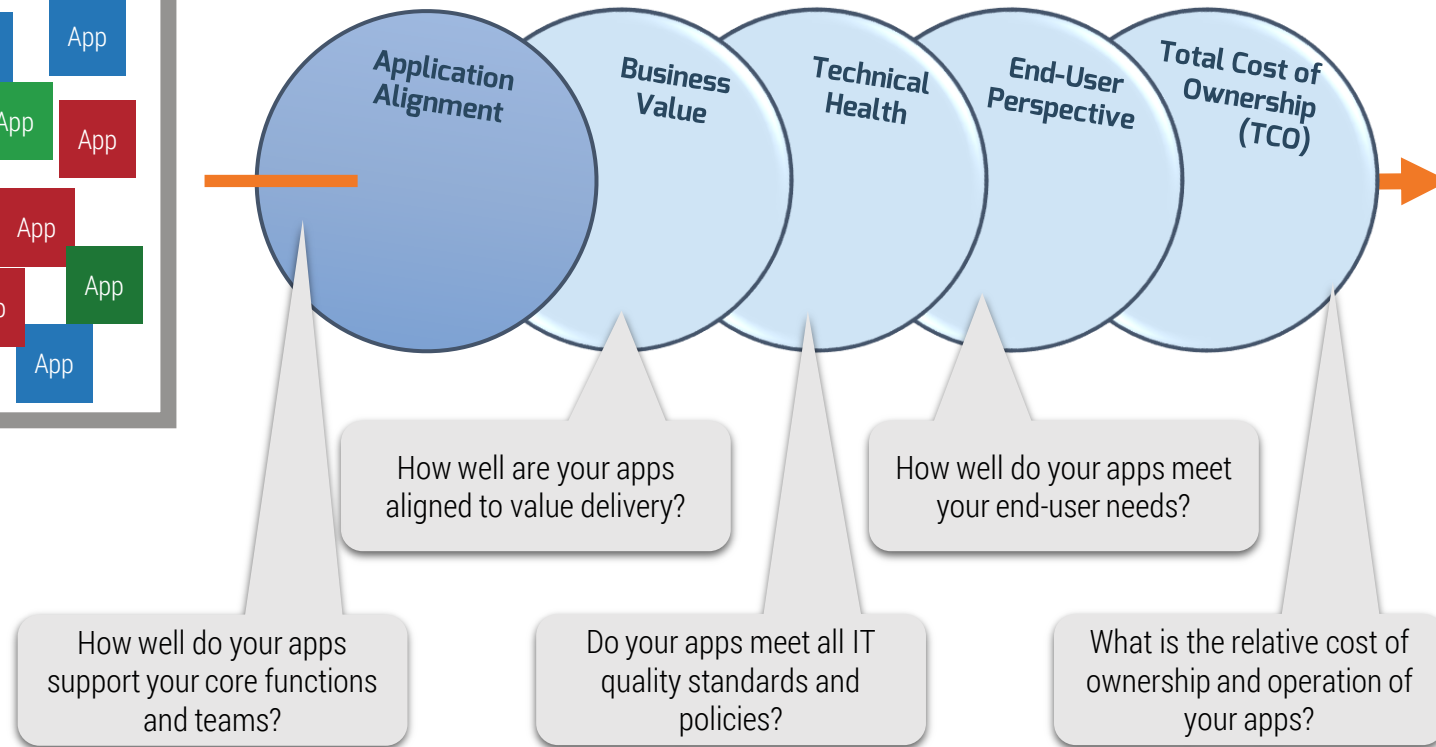


Application rationalization provides insight

Directionless portfolio
of applications



Info-Tech's Five Lens Model



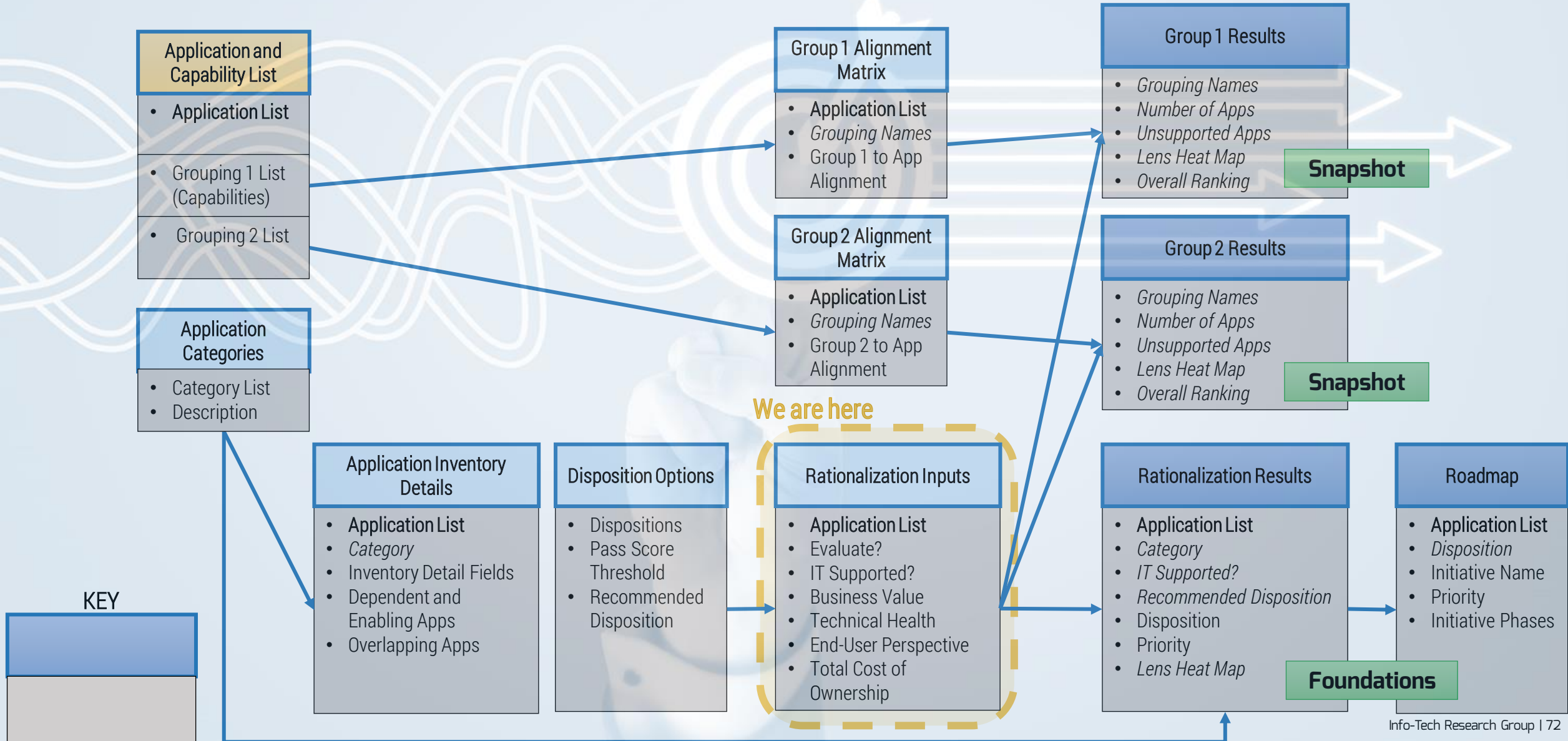
Assigned dispositions
for individual apps

- App** **Maintain:** Keep the application but adjust its support structure.
- App** **Modernize:** Create a new initiative to address an inadequacy.
- App** **Consolidate:** Create a new initiative to reduce duplicate functionality.
- App** **Retire:** Phase out the application.

Application rationalization requires the collection of several data points that represent these perspectives and act as the criteria for determining a disposition for each of your applications.

Disposition: The intended strategic direction or implied course of action for an application.

3.1-3.4 APM worksheet data journey map



In this context...

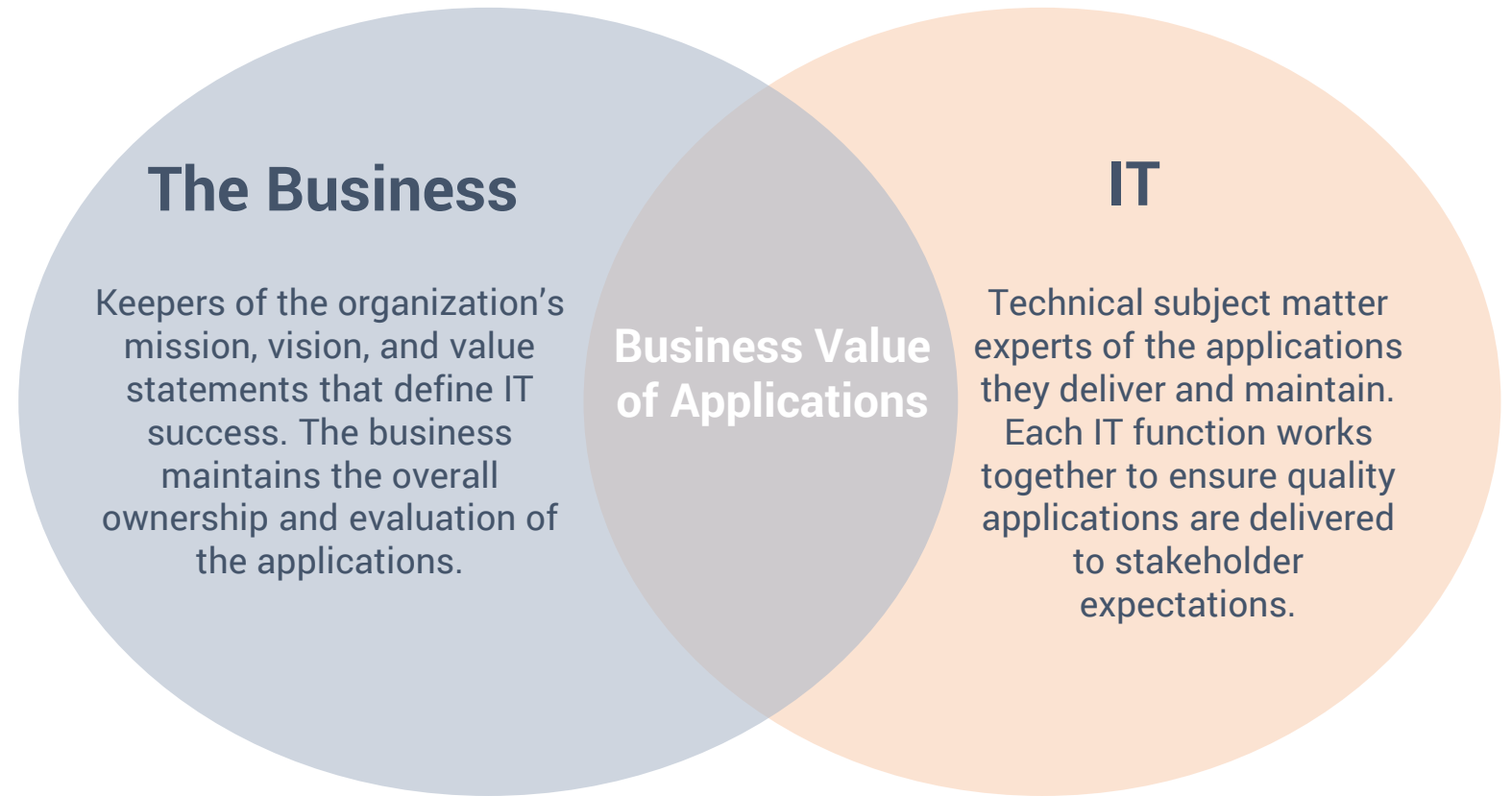
business value is

the value of the business outcome that the application produces and how effective the application is at producing that outcome.

Business value IS NOT

the user's experience or satisfaction with the application.

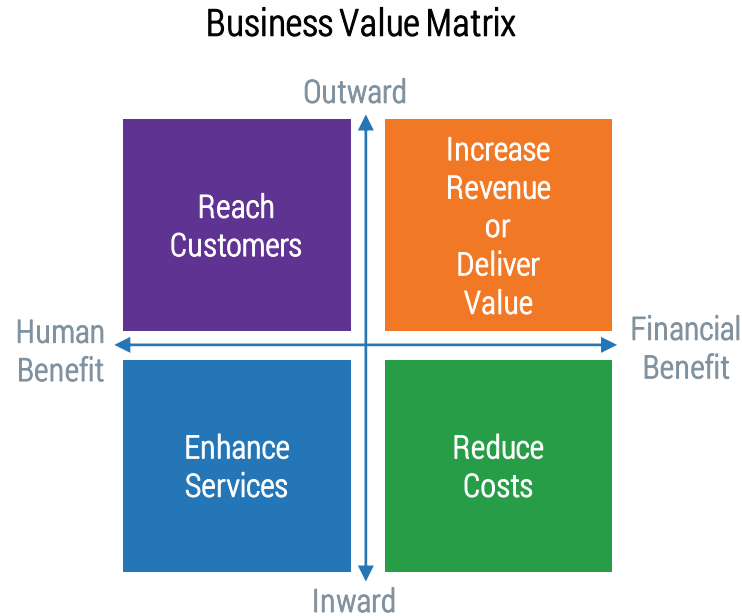
Assessing application business value



First, the authorities on business value need to define and weigh their **value drivers** that describe the priorities of the organization.

This will then allow the applications team to apply a **consistent, objective, and strategically aligned** evaluation of applications across the organization.

Review the value drivers of your applications



Financial vs. Human Benefits

Financial benefits refer to the degree to which the value source can be measured through monetary metrics and are often quite tangible.

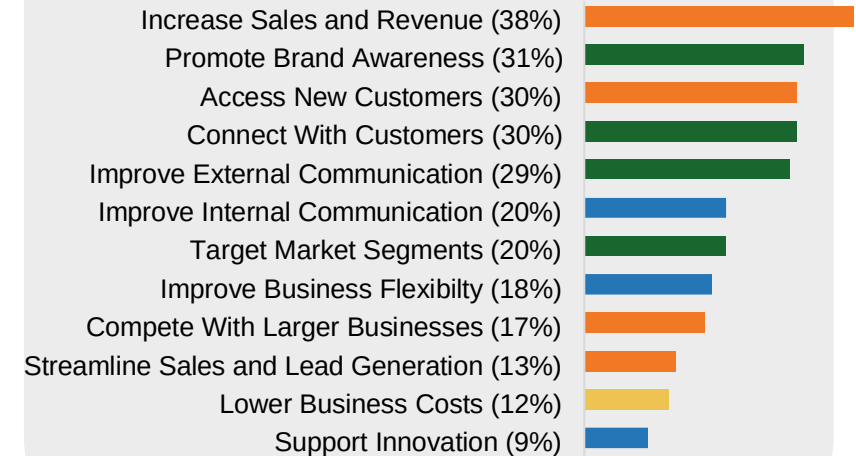
Human benefits refer to how an application can deliver value through a user's experience.

Inward vs. Outward Orientation

Inward orientation refers to value sources that have an internal impact and improve your organization's effectiveness and efficiency in performing its operations.

Outward orientation refers to value sources that come from your interaction with external factors, such as the market or your customers.

Perceived business benefits from using digital tools



Deloitte, 2017

Increased Revenue

Application functions that are specifically related to the impact on your organization's ability to generate revenue and deliver value to your customers.

Reduced Costs

Reduction of overhead. The ways in which an application limits the operational costs of business functions.

Enhanced Services

Functions that enable business capabilities that improve the organization's ability to perform its internal operations.

Reach Customers

Application functions that enable and improve the interaction with customers or produce market information and insights.

3.1 Assess business value

Estimated time: 1 -4 hours

1. Review Info-Tech's four quadrants of business value: increase revenue/value, reduce costs, enhance services, and reach customers. Edit your value drivers, description, and scoring on the "Rationalization Inputs" worksheet. For each value driver, update the key indicators specific to your organization's priorities. When editing the scoring descriptions, keep only the one you are using.
2. (Optional) Add an additional value driver if your organization has distinct value drivers (e.g. compliance, sustainability, innovation, and growth).
3. For each application, score on a scale of 0 to 5 how impactful the application is for each value driver. Use the indicators set in Phase 1 to guide your scoring.
4. For each value driver, adjust the criteria weighting to match its relative importance to the organization. Start with a balanced or low weighting. Adjust the weights to ensure that the category score matches your relative values and priorities.



Record the results in the
APM Snapshot and Foundations Tool

Input	Output
• Knowledge of organizational priorities • (Optional) Existing mission, vision, and value statements	• Scoring scheme for assessing business value
Materials	Participants
• Whiteboard and markers • <i>APM Snapshot and Foundations Tool</i>	• Applications Lead • Key Corporate Stakeholders

3.1 Weigh value drivers: Example

Example:

Value Driver	Weight
Generate Revenue - Financial results - Higher profit margins - Improve cash flow	5
Reduce Costs - Improve operational efficiency - Minimize problems or stoppages - Minimize overhead	3
Enhance Services - Develop skills and knowledge - Increase collaboration - Increase innovation	2
Reach Customers - Provide direct value to customers - Improve customer experience - Provide customer insights	4
Adhere to Compliance - Align to regulations - Build trust and reputation - Mitigate risk of audit	2

How it gets applied via the balanced scorecard:

Established by Applications lead and consultations with business owners

Set by key corporate stakeholder

ERP	Impact	Weight	Weighted scores
Generate Revenue	Very High – 5	5	25
Reduce Costs	Very High – 5	3	15
Enhance Services	Medium – 3	2	6
Reach Customers	Medium – 1	4	4
Adhere to Compliance	Very Low – 1	2	2
Balanced Score			52
CRM	Impact	Weight	Weighted scores
Generate Revenue	Medium – 3	5	15
Reduce Costs	Very Low – 1	3	3
Enhance Services	Low – 2	2	4
Reach Customers	Very High – 5	4	20
Adhere to Compliance	Low – 2	2	4
Balanced Score			46

For additional support in implementing a balanced value framework, refer to [*Build a Value Measurement Framework*](#).

Understand the back end and technical health of your applications

Unfortunately, the business only cares about what they can see or experience.

Rationalization is your opportunity to get risk on the business' radar and gain buy-in for the necessary action.

Technical health identifies the extent of technology risk to the organization.

MAINTAINABILITY (RAS)

RAS refers to an app's reliability, availability, and serviceability. How often, how long, and how difficult is it for your resources to keep an app functioning, and what are the resulting continuity risks? This can include root causes of maintenance challenges.

- [*Optimize Systems Management to Improve IT Resilience and Proactivity*](#) and [*Establish a Program to Enable Effective Performance Monitoring*](#)

SECURITY

Applications should be aligned and compliant with ALL security policies. Are there vulnerabilities or is there a history of security incidents? Remember that threats are often internal and non-malicious.

- [*Build an Information Security Strategy*](#)

ADAPTABILITY

How easily can the app be enhanced or scaled to meet changes in business needs? Does the app fit within the business strategy?

- [*Deliver on Your Digital Product Vision*](#)

INTEROPERABILITY

The degree to which an app is integrated with current systems. Apps require comprehensive technical planning and oversight to ensure they connect within the greater application architecture. Does the app fit within your enterprise architecture strategy?

- [*Design an Enterprise Architecture Strategy*](#)

BUSINESS CONTINUITY/DISASTER RECOVERY

The degree to which the application is compatible with business continuity/disaster recovery (BC/DR) policies and plans that are routinely tested and verified.

- [*Create a Right-Sized Disaster Recovery Plan*](#)

3.2 Assess technical health

Estimated time: 1-4 hours

- 1. Review Info-Tech’s suggested technical health criteria. Edit your criteria, descriptions, and scoring on the “Rationalization Inputs” worksheet. For each criterion, update the key indicators specific to your organization’s priorities.
- 2. For each application, score on a scale of 1 to 5 on how impactful the application is for each criterion.
- 3. For each criterion, adjust the weighting to match its relative importance to the organization. Start with a balanced or low weighting. Adjust the weights to ensure that the category score matches your relative values and priorities.

↓

Record the results in the
APM Snapshot and Foundations Tool

Input	Output
• Familiarity of technical health perspective for applications within this subset • Maintenance history, architectural models	• Technical health scores for each application
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Technical SMEs • Applications Lead • Any Applications Team Members

End users provide valuable perspective



Your end users are your best means of determining front-end issues.

Data Quality

To what degree do the end users find the data quality sufficient to perform their role and achieve their desired outcome?

Effectiveness

To what degree do the end users find the application effective for performing their role and desired outcome?

Usability

To what degree do the end users find the application reliable and easy to use to achieve their desired outcome?

Satisfaction

To what degree are end users satisfied with the features of this application?

What else matters to you?

Tune your criteria to match your values and priorities.

Info-Tech Best Practice

When facing large user groups, do not make assumptions or use lengthy methods of collecting information. Use Info-Tech's [Application Portfolio Assessment](#) to collect data by surveying your end users' perspectives.

3.3 Assess end-user perspective

Estimated time: 1-4 hours

- 1. Review Info-Tech’s suggested end-user perspective criteria. Edit your criteria, descriptions and scoring on the “Rationalization Inputs” worksheet. For each criterion, update the key indicators specific to your organization’s priorities.
- 2. For each application, score on a scale of 1 to 5 on how impactful the application is for each criterion.
- 3. For each criterion, adjust the weighting to match its relative importance to the organization. Start with a balanced or low weighting. Adjust the weights to ensure that the category score matches your relative values and priorities.

Input	Output
• Familiarity of end user’s perspective for applications within this subset	• User satisfaction scores for each application
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Business Owners, Key Users • Applications Lead • Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

Consider the spectrum of application cost



An application's cost extends past a vendor's fee and even the application itself.

LICENSING AND SUBSCRIPTIONS: *Your recurring payments to a vendor.*

Many commercial off-the-shelf applications require a license on a per-user basis. Review contracts and determine costs by looking at per-user or fixed rates charged by the vendor.

MAINTENANCE COSTS: *Your internal spending to maintain an app.*

These are the additional costs to maintain an application such as support agreements, annual maintenance fees, or additional software or hosting expenses.

INDIRECT COSTS: *Miscellaneous expenses necessary for an app's continued use.*

Expenses like end-user training, developer education, and admin are often neglected, but they are very real costs organizations pay regularly.

RETURN ON INVESTMENT: *Perceived value of the application related to its TCO.*

Some of our most valuable applications are the most expensive. ROI is an optional criterion to account for the value and importance of the application.

Info-Tech Best Practice

The TCO assessment is one area where what you are considering the "application" matters quite a bit. An application's peripherals or software components need to be considered in your estimates. For additional help calculating TCO, use the [Application TCO Calculator](#) from [Build a Rationalization Framework](#).

3.4 Assess total cost of ownership

Estimated time: 1-4 hours

- 1. Review Info-Tech’s suggested TCO criteria. Edit your criteria, descriptions, and scoring on the “Rationalization Inputs” worksheet. For each criterion, update the key indicators specific to your organization’s priorities.
- 2. For each application, score on a scale of 1 to 5 on how impactful the application is for each criterion.
- 3. For each criterion, adjust the weighting to match its relative importance to the organization. Start with a balanced or low weighting. Adjust the weights to ensure that the category score matches your relative values and priorities.

Input	Output
• Familiarity with the TCO for applications within this subset • Vendor contracts, maintenance history	• TCO scores for each application
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Business Owners, Vendor Managers, Operations Managers • Applications Lead • Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

Phase 4

Populate Your Roadmap

Phase 1

- 1.1 Assess Your Current Application Portfolio
- 1.2 Determine Narrative
- 1.3 Define Goals and Metrics
- 1.4 Define Application Categories
- 1.5 Determine APM Steps and Roles

Phase 2

- 2.1 Populate Your Inventory
- 2.2 Align to Business Capabilities

Phase 3

- 3.1 Assess Business Value
- 3.2 Assess Technical Health
- 3.3 Assess End-User Perspective
- 3.4 Assess Total Cost of Ownership

Phase 4

- 4.1 Review APM Snapshot results
- 4.2 Review APM Foundations results
- 4.3 Determine Dispositions
- 4.4 Assess Redundancies (Optional)
- 4.5 Determine Dispositions for Redundant Applications (Optional)
- 4.6 Prioritize Initiatives
- 4.7 Determine Ongoing APM Cadence

This phase involves the following participants:

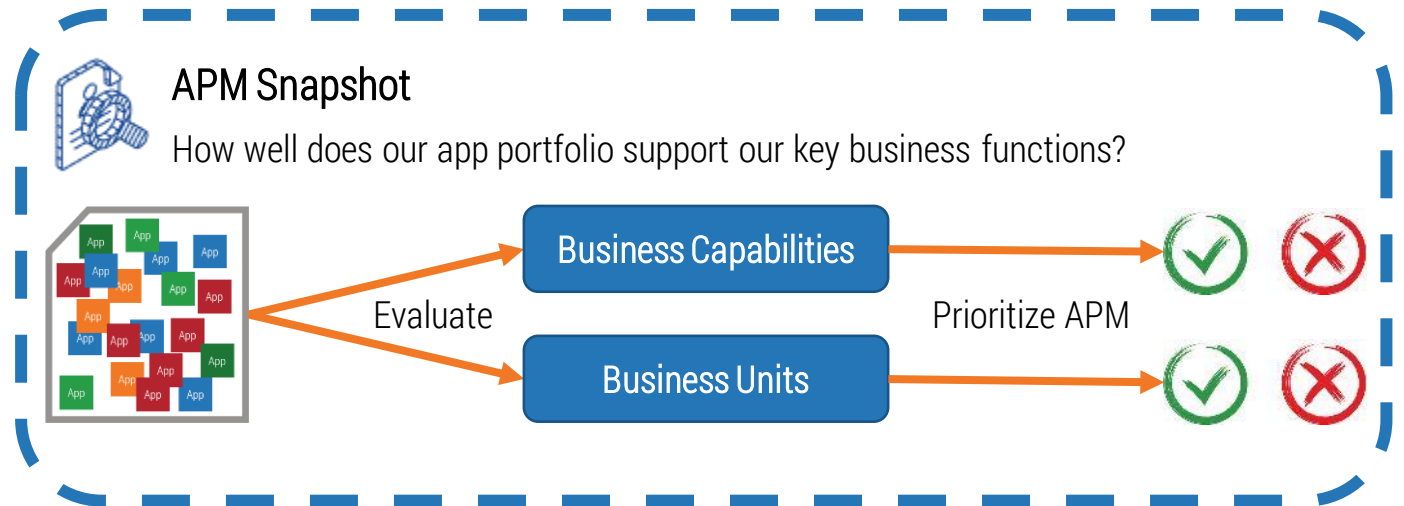
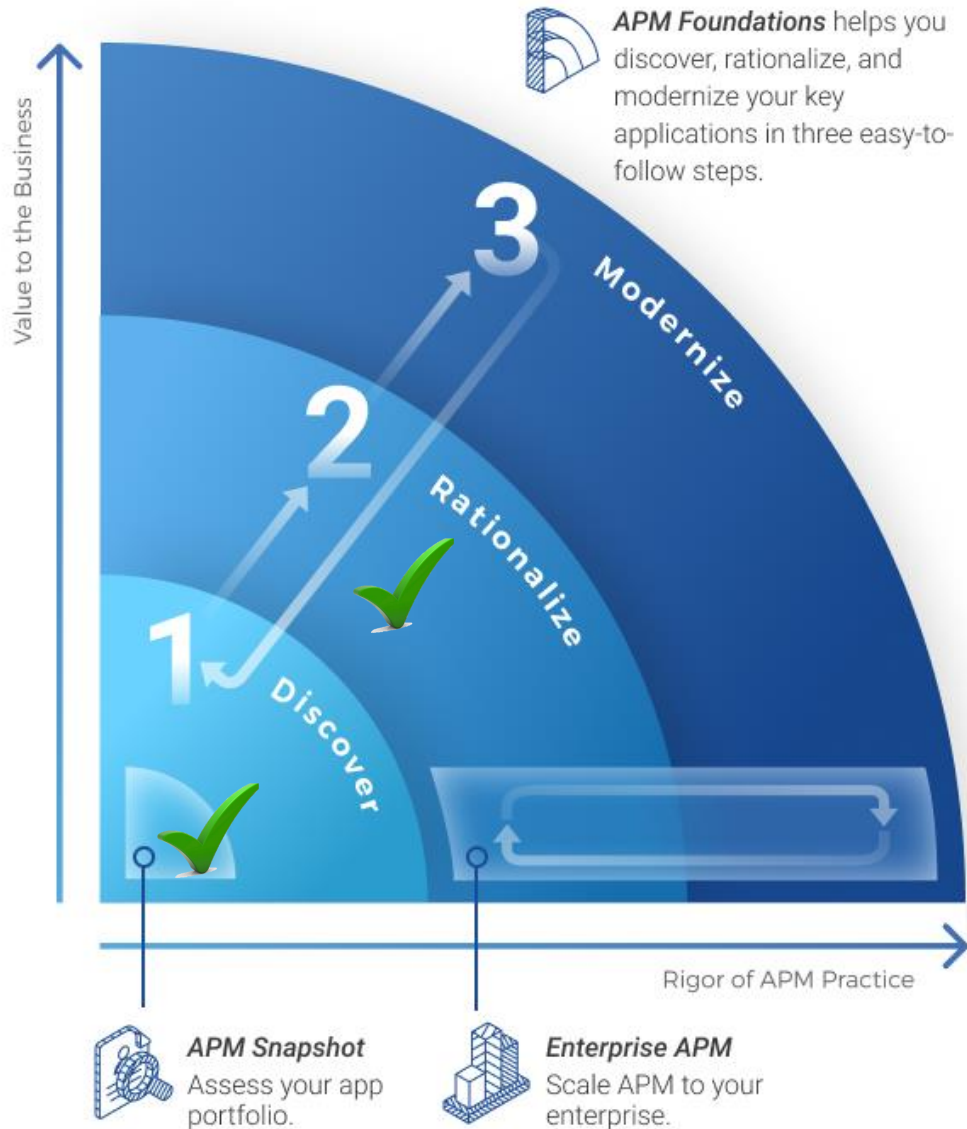
- Applications Lead
- Delivery Leads

Additional Resources

- [*Disposition Prioritization Tool*](#)
- [*Application Rationalization Tool*](#)

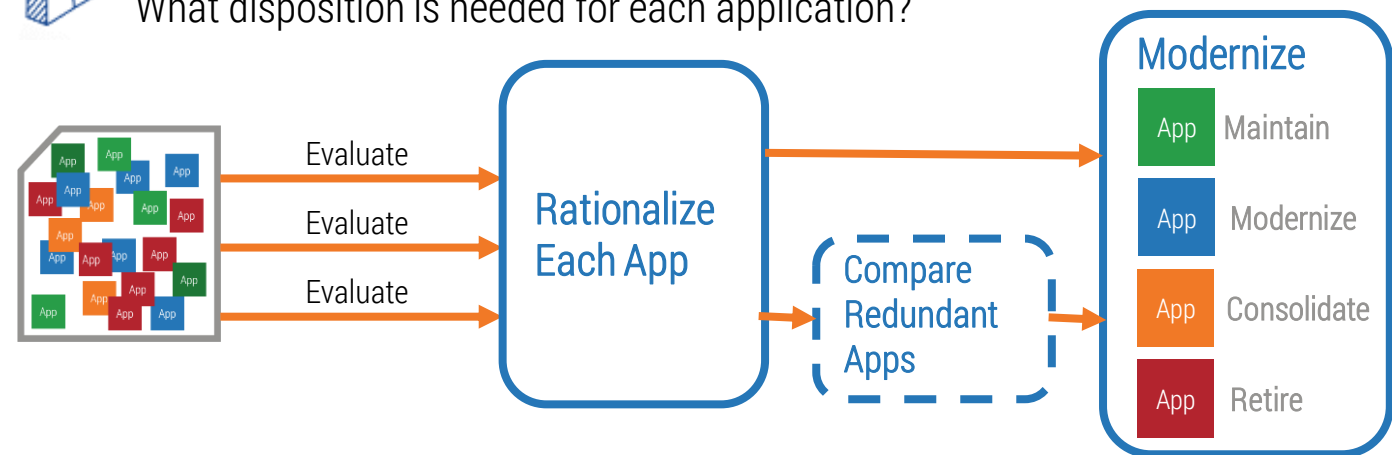
Application Portfolio
Management Foundations

Review your APM Snapshot



Application Portfolio Management Foundations

What disposition is needed for each application?



4.1 Review your APM Snapshot results

Estimated time: 1-2 hours

1. The APM Snapshot provides a dashboard to support your APM program's focus and as an input to demand planning. Unhide the "Group 3" worksheet if you completed the alignment matrix.
2. For each grouping area, review the results to determine underperforming areas. Use this information to prioritize your application root cause analysis and demand planning. Use the key on the following slide to guide your analysis.
3. Analysis guidance:
 - a) Start with the quartile grouping to find areas scoring in Remediate or Critical Need and focus follow-up actions on these areas.
 - b) Use the lens/category heat map to determine which lenses are underperforming. Use this to then look up the individual app scores supporting that group to identify application issues.
 - c) Use the "Application Comparison" worksheet to select and compare applications for the group to make your review and comparison easier.
 - d) Work with teams in the group to provide root cause analysis for low scores.
 - e) Build a plan to address any apps not supported by IT.

Input	Output
• Application list • Application to Group mapping • Rationalization scores	• Awareness of application support for each grouping
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Business Owners • Applications Lead • Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

Interpreting your APM Snapshot

The total number of apps isn't necessarily bad, but it indicates increased complexity and support.

Apps not adequately supported by IT are a cause for concern and action.

The category weighting can be adjusted to match your values and priorities.

Each grouping item has a weighted total to give an overall relative score.

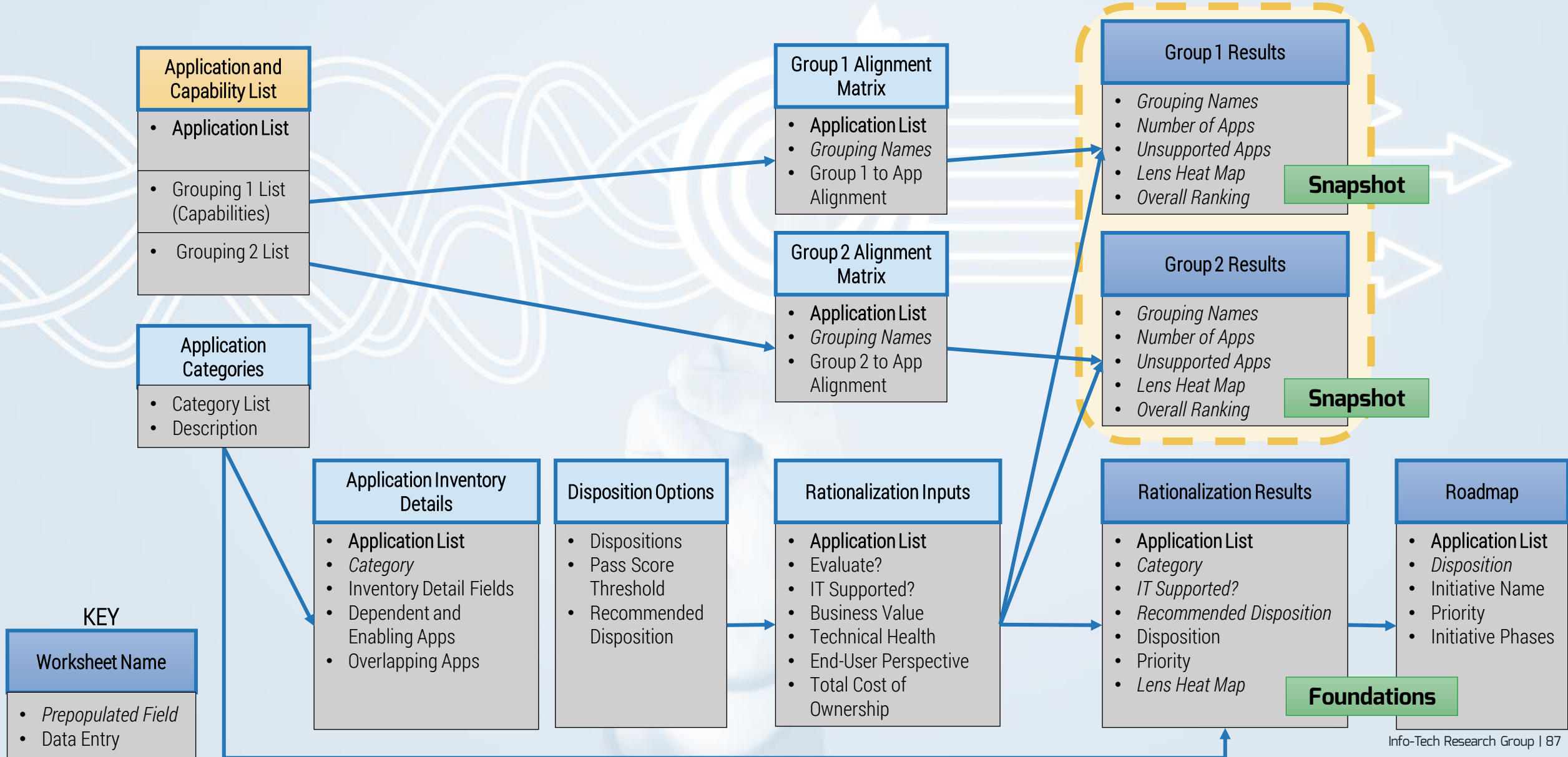
Total Weighting (must equal 100%) = 100%		Category Weighting (must equal 100%)					Key	
			30%	40%	20%	10%	Reward > 75%	Improve 50-75%
							Remediate 25-50%	Critical Need 0-25%
Business Capabilities	Total Number of Apps	Number of Apps Not Managed by IT	Business Value	Technical Health	End-User Perspective	Total Cost of Ownership	Overall Score (5-point scale)	Grouped Score (5-point score quartiles)
Enrollment	6	1	2.77	3.07	3.20	4.15	3.11	62%
Eligibility	3	1	1.89	2.86	2.17	3.21	2.46	49%
Service Management	5	1	2.75	3.36	3.44	4.56	3.31	66%
Service Reporting	5	1	2.57	3.07	3.13	4.08	3.03	61%
CRM	5	1	2.75	3.36	3.44	4.56	3.31	66%
Fraud Management	6	0	3.00	2.82	3.33	4.15	3.11	62%
Corporate Operations	2	0	3.58	3.71	3.44	3.88	3.64	73%
Finance	3	0	3.06	4.05	3.08	4.25	3.58	72%
HR	2	0	3.58	3.71	3.44	3.88	3.64	73%
IT	2	0	4.00	4.43	4.63			

Use the heat map to identify strengths and gaps supporting each grouping.

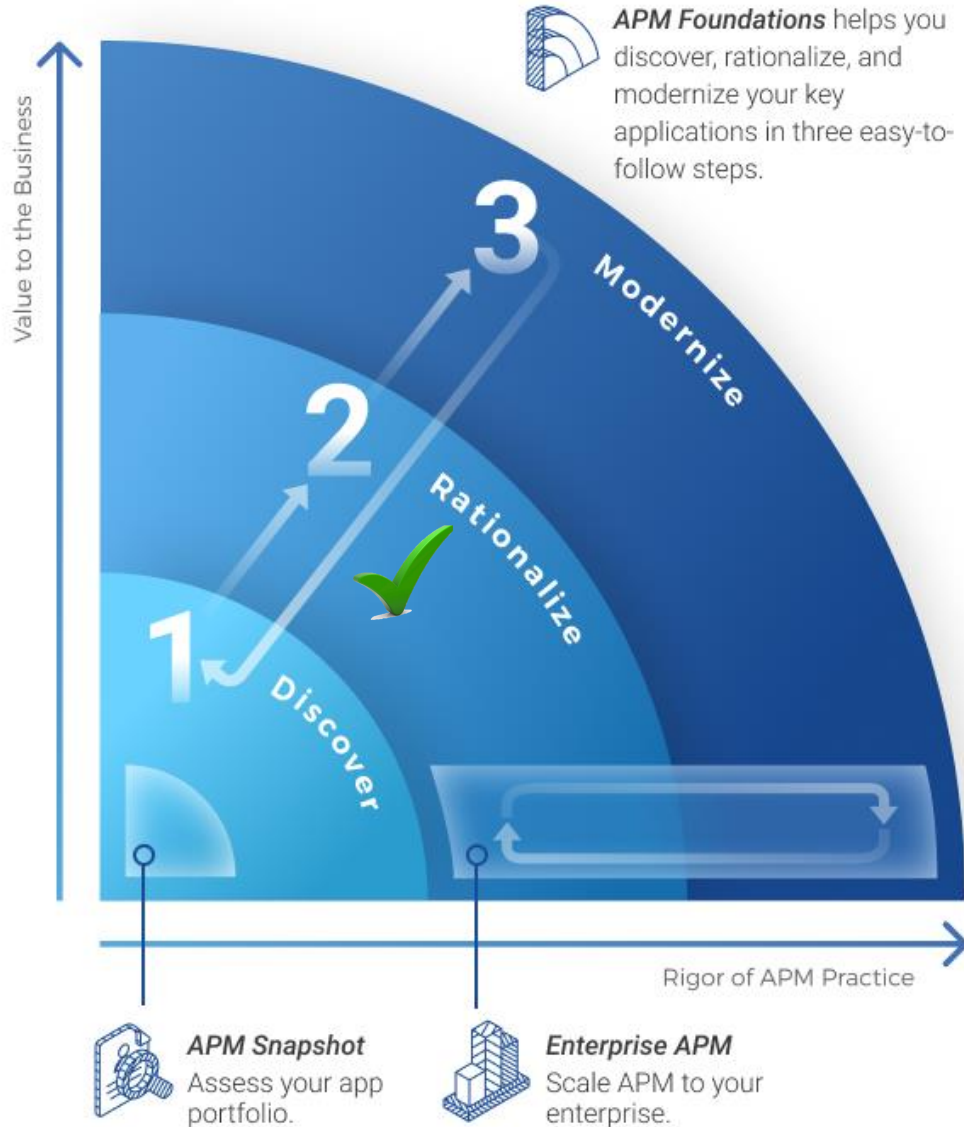
Each grouping is shown on a 100-point scale to identify where it falls by quartile. Use this to prioritize your root cause activities.

4.1 APM worksheet data journey map

We are here

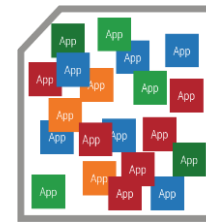


Review your APM rationalization results



APM Snapshot

How well does our app portfolio support our key business functions?



Evaluate

Business Capabilities

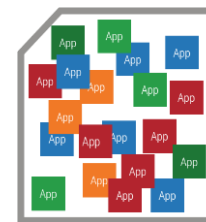
Prioritize APM

Business Units



Application Portfolio Management Foundations

What disposition is needed for each application?



Evaluate

Evaluate

Evaluate

Rationalize
Each App

Compare
Redundant
Apps

Modernize

App Maintain

App Modernize

App Consolidate

App Retire

4.2 Review your APM Foundations results

Estimated time: 1-2 hours

The APM Foundations Results dashboard (“App Rationalization Results” worksheet) provides a detailed summary of your relative app scoring to serve as input to demand planning.

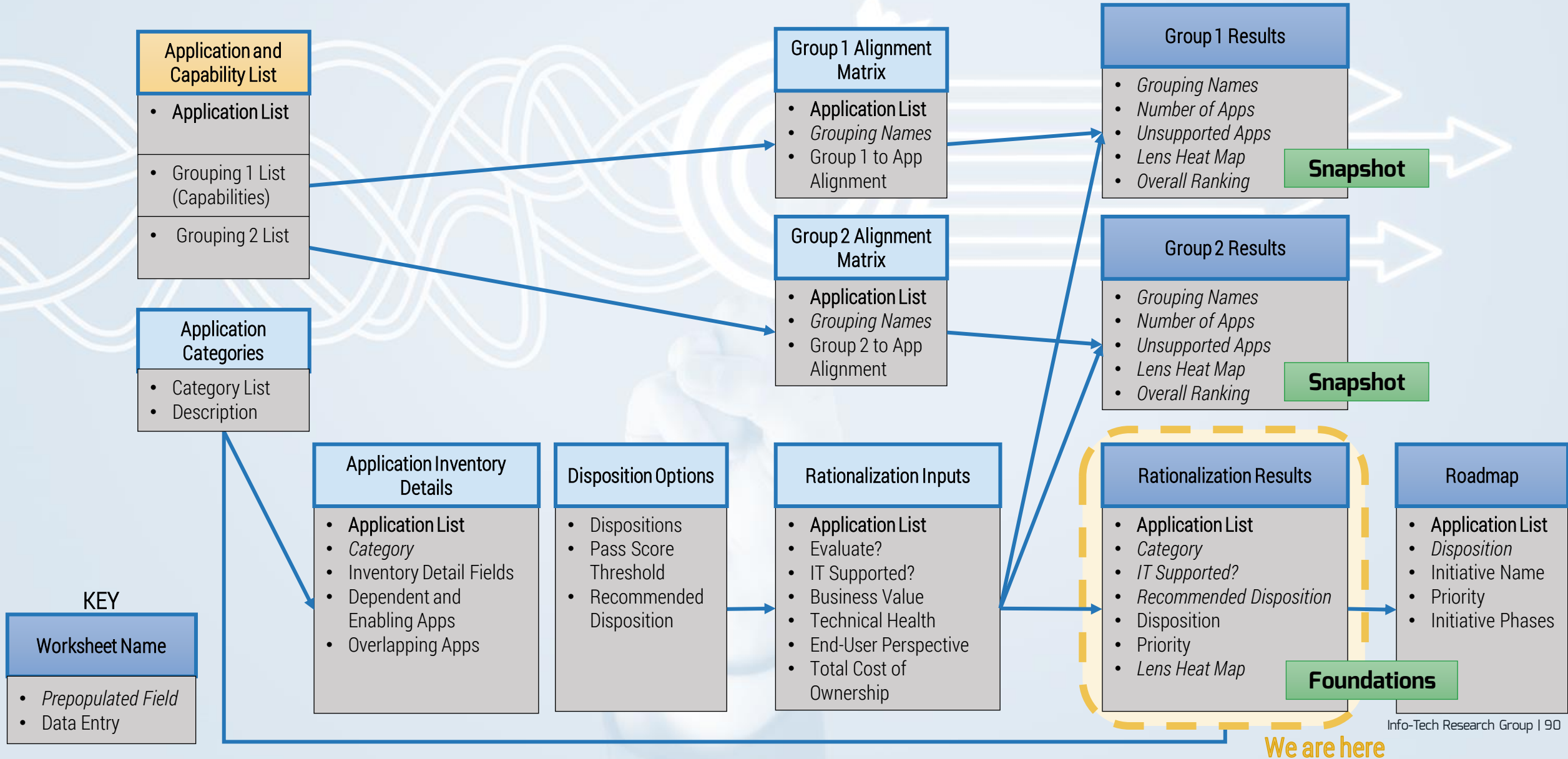
1. For each grouping, review the results to determine underperforming app support. Use this information to prioritize your application root cause analysis using the individual criteria scores on the “Rationalization Inputs” worksheet.
2. Use guidance on the following example slides to understand each area of the results.
3. Any applications marked as N/A for evaluation will display N/A on the results worksheet and will not be displayed in the chart. You can still enter dispositions.
4. Use the column filters to compare a subset of applications or use the “App Comparison” worksheet to maintain an ongoing view by grouping, redundancy, or category.
5. Any applications marked as N/A for evaluation will display N/A on the results worksheet and will not be displayed in the chart. You can still enter dispositions.

Input	Output
• Application list • Rationalization scores	• Application awareness
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Business Owners • Applications Lead • Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

4.2 APM worksheet data journey map



Interpreting your APM Foundations results

Use the column filters to see smaller groupings of applications.

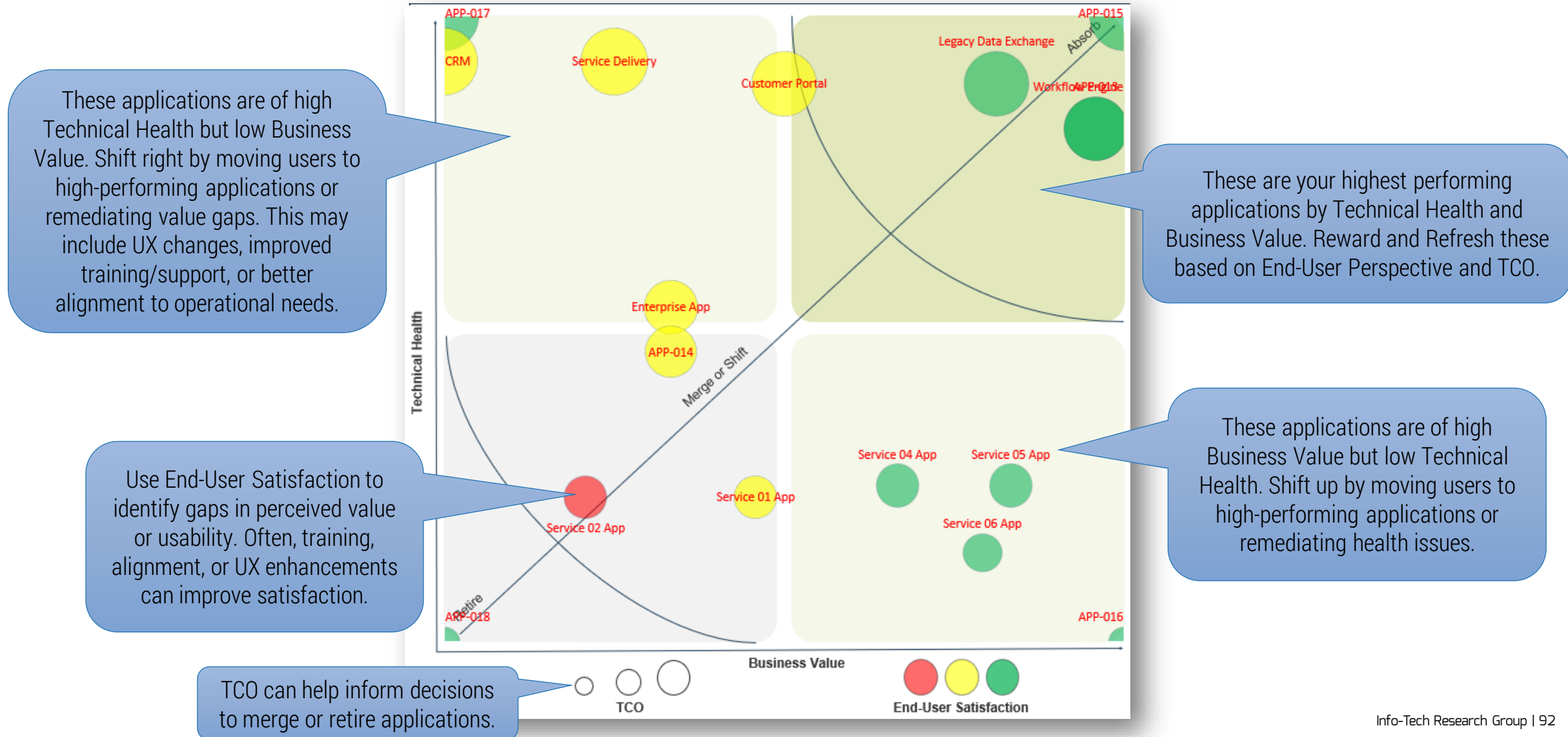
The Disposition and Priority are populated from the "Disposition Options" worksheet and the individual application category scores. You can adjust the final Disposition and Priority in the white cells.

No.	Application Name	Chart Name	Category	IT Supported	Recommended Disposition	Recommended Priority	Disposition	Priority	Business Value	Technical Health	End-User Perspective	Total Cost of Ownership
10	Service Delivery	Service Delivery	Partner Applications	Y	Refocus	High	Refocus	High	2.0	4.7	2.4	5.0
11	Customer Portal	Customer Portal	Partner Applications	Y	Refocus	High	Refocus	High	3.0	4.6	2.3	5.0
12	Legacy Data Exchange	Legacy Data Exchange	Shadow IT	Y	Reward	Moderate	Reward	Moderate	4.3	4.6	4.4	4.8
13	APP-013	APP-013	0	Y	Reward	Moderate	Reward	Moderate	4.8	4.3	4.9	4.4
14	APP-014	APP-014	0	Y	Retire	Very High	Retire	Very High	2.3	2.9	2.0	3.4
15	APP-015	APP-015	0	Y	Reward	Moderate	Reward	Moderate	5.0	5.0	5.0	5.0
16	APP-016	APP-016	0	Y	Remediate	Very High	Remediate	Very High	5.0	1.0	5.0	5.0
17	APP-017	APP-017	0	Y	Refocus	Very Low	Refocus	Very Low	1.0	5.0	5.0	5.0
18	APP-018	APP-018	0	Y	Retire	Very High	Retire	Very High	1.0	1.0	5.0	5.0

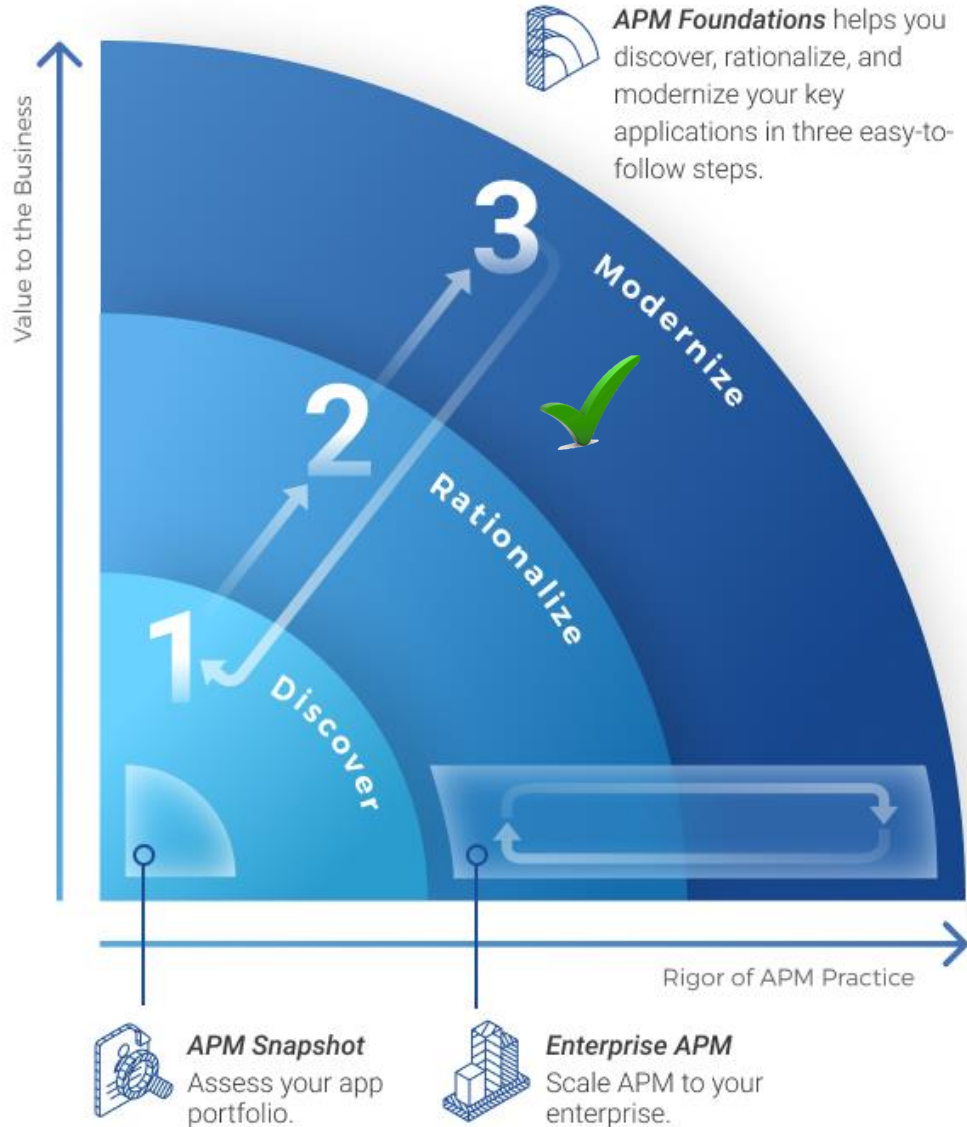
Applications marked as N/A in the "Rationalization Inputs" worksheet will show as N/A in the results and are not calculated in the grouping results.

Use the heat map to quickly identify strengths and gaps for each application.

Interpreting your APM Foundations chart

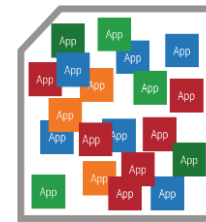


Modernize your applications



APM Snapshot

How well does our app portfolio support our key business functions?



Evaluate

Business Capabilities

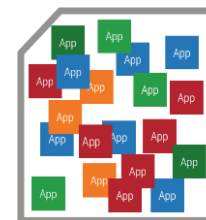
Prioritize APM

Business Units



Application Portfolio Management Foundations

What disposition is needed for each application?



Evaluate

Evaluate

Evaluate

Rationalize
Each App

Compare
Redundant
Apps

Modernize

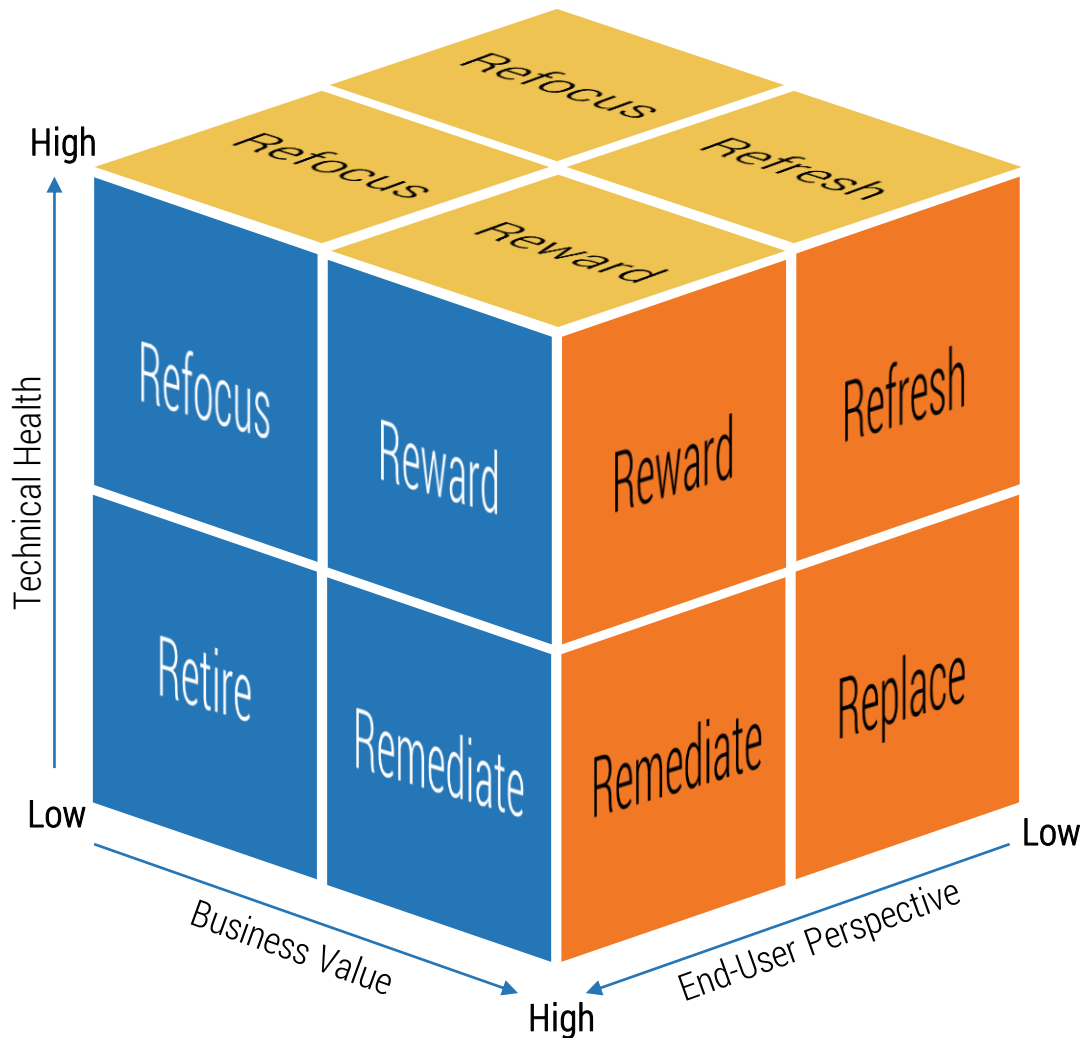
App Maintain

App Modernize

App Consolidate

App Retire

Apply Info-Tech's 6 R's Rationalization Disposition Model



Disposition	Description
Reward	Prioritize new features or enhancement requests and openly welcome the expansion of these applications as new requests are presented.
Refresh	Address the poor end-user satisfaction with a prioritized project. Consult with users to determine if the UX requires improvement to address satisfaction.
Refocus	Determine the root cause of the low value. Refocus, retrain, or refresh the UX to improve value. If there is no value found, aim to "keep the lights on" until the app can be decommissioned.
Replace	Replace or rebuild the application as technical and user issues are putting important business capabilities at risk. Decommission application alongside replacement.
Remediate	Address the poor technical health or risk with a prioritized project. Further consult with development and technical teams to determine if migration or refactoring is suited to address the technical issue.
Retire	Cancel any requested features and enhancements. Schedule the proper decommission and transfer end users to a new or alternative system if necessary.

TCO, compared relatively to business value, helps determine the practicality of a disposition and the urgency of any call to action. Application alignment is factored in when assessing redundancies and has a separate set of dispositions.

4.3 Determine dispositions

Estimated time: 1-4 hours

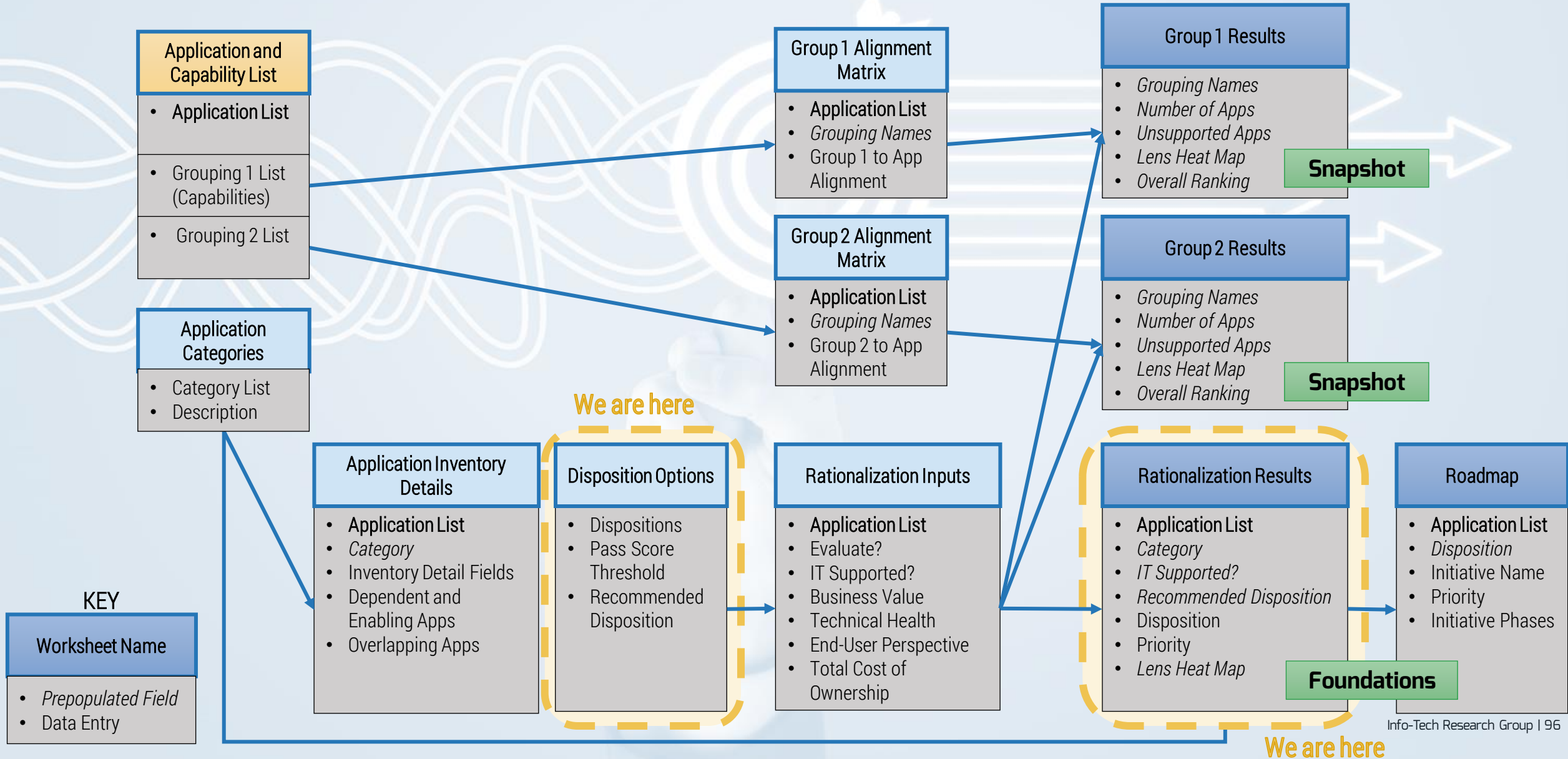
1. The Recommended Disposition and Priority fields are prepopulated from your scoring thresholds and options on the “Disposition Options” worksheet. You can update any individual application disposition or priority using the drop-down menu and it will populate your selection on the “Roadmap” worksheet.
2. Question if that disposition is appropriate. Be sure to consider:
 - a) TCO – cost should come into play for any decisions.
 - b) Alignment to strategic goals set for the overarching organizational, IT, technology (infrastructure), or application portfolio.
 - c) Existing organizational priorities or funded initiatives impacting the app.
3. Some dispositions may imply a call to action, new project, or initiative. Ideate and/or discuss with the team any potential initiatives. You can use different dispositions and priorities on the “App Rationalization Results” and “Roadmap” worksheets.
4. Note: Modify the list of dispositions on the “Disposition Options” worksheet as appropriate for your rationalization initiative. Any modifications to the Disposition column will be automatically updated in the “App Rationalization Results” and “Roadmap” worksheets.

Input	Output
• Rationalization results	• Assigned dispositions for applications
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Business Owners • Applications Lead • Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

4.3 APM worksheet data journey map



Redundancies require a different analysis and set of dispositions

Solving application redundancy is a lot more complicated than simply keeping one application and eliminating the others.

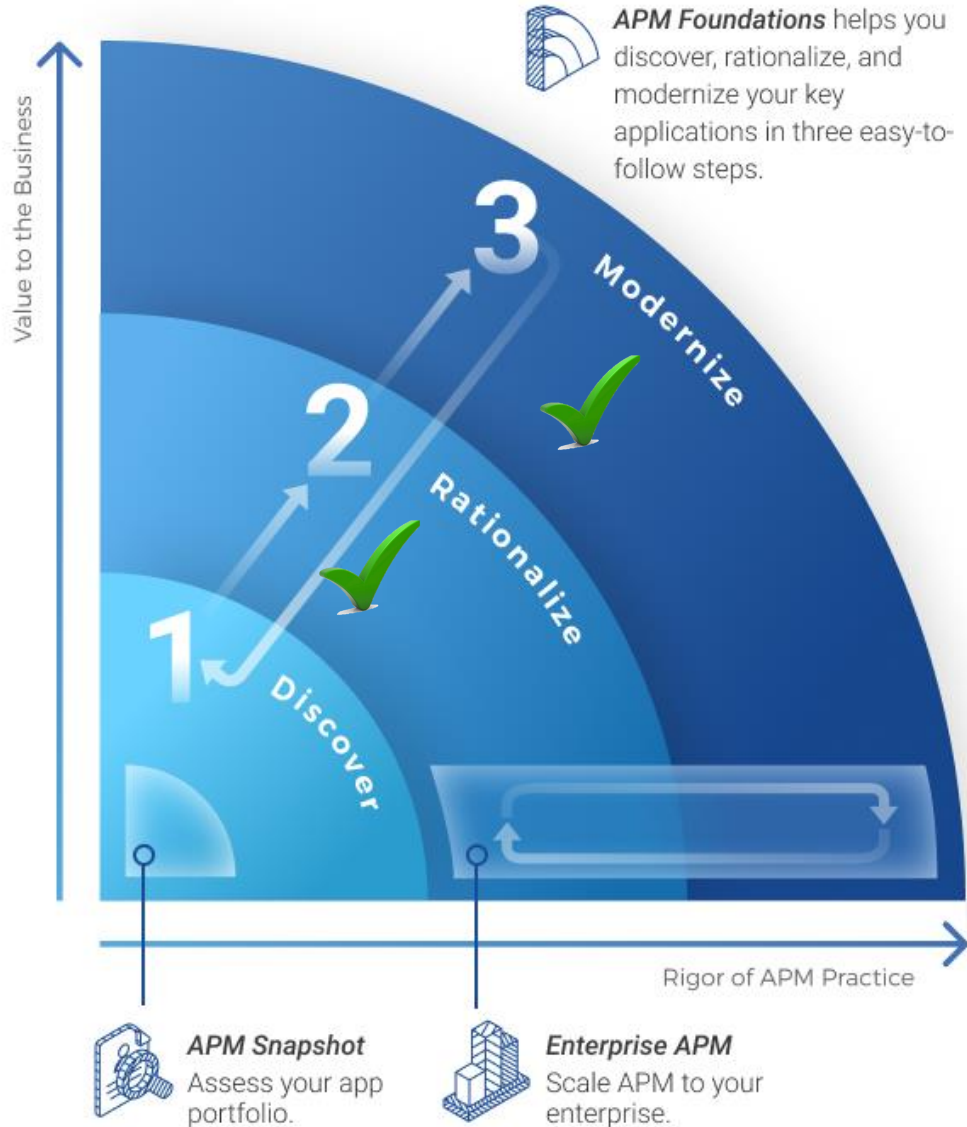
First, you need to understand the extent of the redundancy. The applications may support the same capability, but do they offer the same functions? Determine which apps offer which functions within a capability. This means you cannot accurately arrive at a disposition until you have evaluated all applications.

Next, you need to isolate the preferred system. This is completed by comparing the same data points collected for rationalization and the application alignment analysis. Cost and coverage of all necessary functions become the more important factors in this decision-making process.

Lastly, for the non-preferred redundant applications you need to determine: *What will you do with the users? What will you do with the data? And what can you do with the functionality* (can the actual coding be merged onto a common platform)?

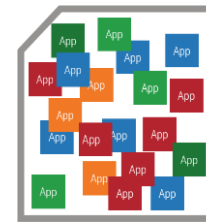
Disposition	Description & Additional Analysis	Call to Action (Priority)
Keep & Absorb Higher value, health satisfaction, and cost than alternatives	These are the preferred apps to be kept. However, additional efforts are still required to migrate new users and data and potentially configure the app to new processes.	Application or Process Initiative (Moderate)
Shift & Retire Lower value, health satisfaction, and cost than alternatives	These apps will be decommissioned alongside efforts to migrate users and data to the preferred system. *Confirm there are no unique and necessary features.	Process Initiative & Decommission (Moderate)
Merge Lower value, health satisfaction, and cost than alternatives but still has some necessary unique features	These apps will be merged with the preferred system onto a common platform. *Determine the unique and necessary features. *Determine if the multiple applications are compatible for consolidation.	Application Initiative (Moderate)

Compare groups of applications



APM Snapshot

How well does our app portfolio support our key business functions?



Evaluate

Business Capabilities

Prioritize APM

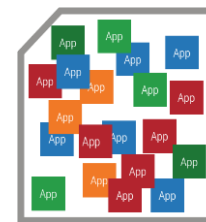


Business Units



Application Portfolio Management Foundations

What disposition is needed for each application?



Evaluate

Evaluate

Evaluate

Rationalize
Each App

Compare
Redundant
Apps

Modernize

App Maintain

App Modernize

App Consolidate

App Retire

4.4 Assess redundancies (optional)

Estimated time: 1 hour per group

This exercise is best performed after aligning business capabilities to applications across the portfolio and identifying your areas of redundancy. At this stage, this is still an information collection exercise, and it will not yield a consolidation-based disposition until applied to all relevant applications. Lastly, this exercise may still be at too high a level to outline the full details of redundancy, but it is still vital information to collect and a starting point to determine which areas require more concentrated analysis.

1. Determine which areas of redundancy or comparisons are desired. Duplicate the “App Comparison” worksheet for each grouping or comparison.
2. Extend the comparison to better identify redundancy.
 - a) For each area of redundancy, identify the high-level features. Aim to limit the features to ten, grouping smaller features if necessary. [SoftwareReviews](#) can be a resource for identifying common features.
 - b) Label features using the MoSCoW model: must have, should have, could have, will not have.
 - c) For each application, identify which features they support. You can use the grouping alignment matrix as a template for feature alignment comparison. Duplicate the worksheet, unlock it, and replace the grouping cell references with your list of features.

Input	Output
• Areas of redundancy • Familiarity with features for applications within this subset	• Feature-level review of application redundancy
Materials	Participants
• Whiteboard and markers • <i>APM Snapshot and Foundations Tool</i>	• Business Owners • Applications Lead • Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

4.4 Assess redundancies (optional)

	Account Management	Call Management	Order/Transaction Processing	Contract Management	Lead/Opportunity Management	Forecasting/ Planning	Customer Surveying	Email Synchronization
	M	M	M	M	S	S	C	W
CRM 1	✓	✓	✓	✓	✓		✓	✓
CRM 2	✓	✓		✓			✓	
CRM 3			✓		✓	✓		

4.5 Determine dispositions for redundant applications (optional)

Estimated time: 1 hour per group

1. Based on the feature-level assessment, determine if you can omit applications if they don't truly overlap with other applications.
2. Make a copy of the "App Comparison" worksheet and select the applications you want to compare based on your functional analysis.
3. Determine the preferred application(s). Use the diagram to inform your decision. This may be the application closest to the top right (strong health and value). However, less expensive options or any options that provide a more complete set of features may be preferable.
4. Open the "App Rationalization Results" worksheet. Update your disposition for each application.
5. Use these updated dispositions to determine a call to action, new project, or initiative. Ideate and/or discuss with the team any potential initiatives. Update your roadmap with these initiatives in the next step.



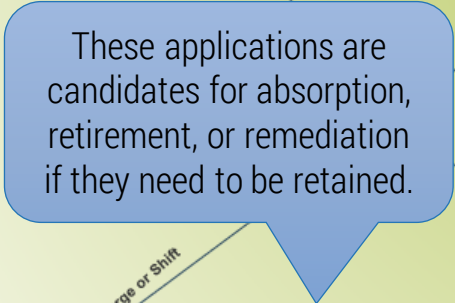
Record the results in the
APM Snapshot and Foundations Tool

Input	Output
• Feature-level review of application redundancy • Redundancy comparison	• Assigned dispositions for redundant applications
Materials	Participants
• <i>APM Snapshot and Foundations Tool</i>	• Business Owners • Applications Lead • Any Applications Team Members

Group comparison can be used for more than just redundant/overlapping applications.

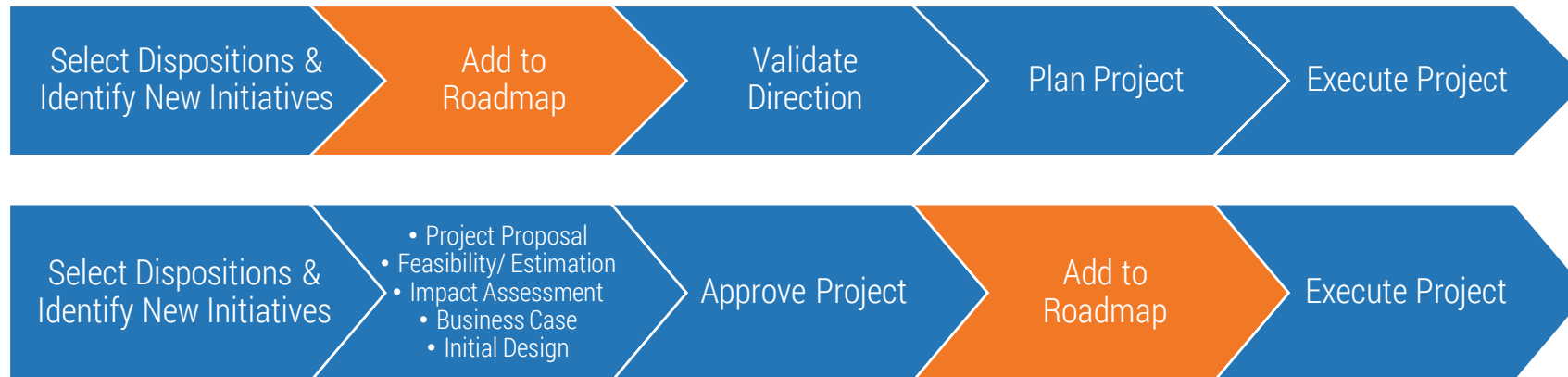
Use the drop-down menu of applications to select the ones you want to compare. You can duplicate this spreadsheet for different groupings and comparisons of applications.

Any apps in the lower-left should be prioritized for retirement based on TCO and End-User Satisfaction.



Roadmaps are used for different purposes

Roadmaps are used for different communication purposes and at varying points in your application delivery practice. Some use a roadmap to showcase strategy and act as a feedback mechanism that allows stakeholders to validate any changes (process 1). Others may use it to illustrate and communicate approved and granular elements of a change to an application to inform appropriate stakeholders of what to anticipate (process 2).



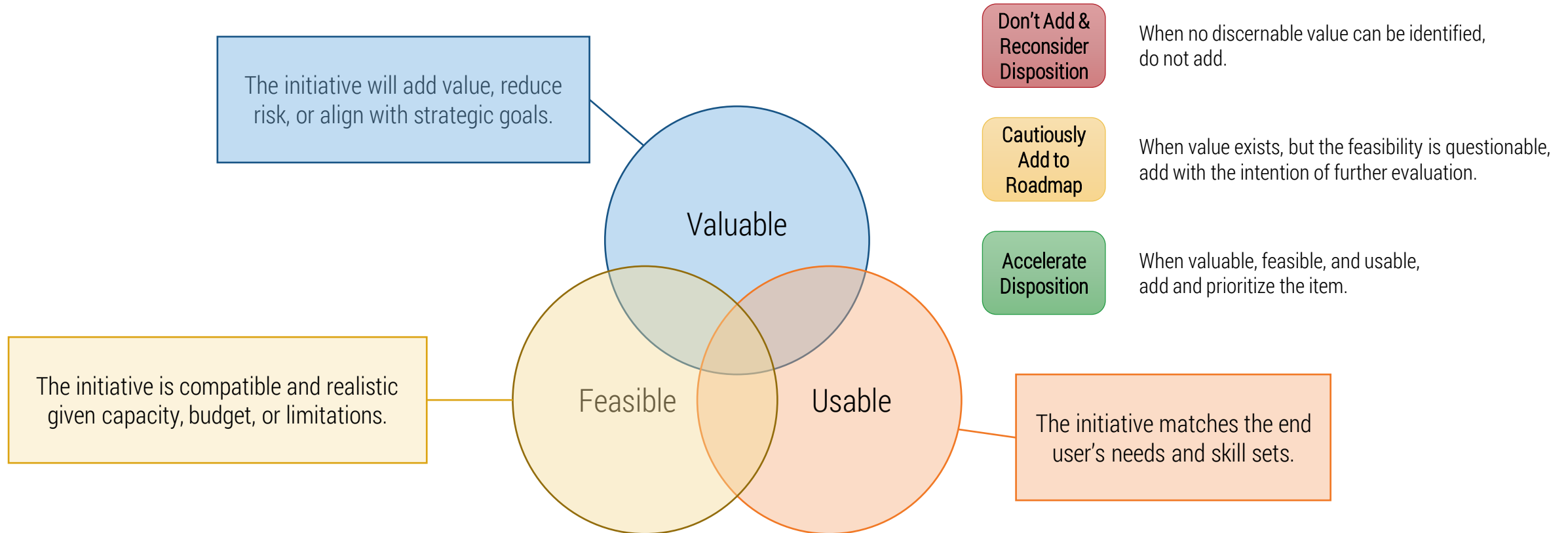
The steps between selecting a disposition and executing on any resulting project will vary based on the organization's project intake standards (or lack thereof).

This blueprint focuses on building a **strategic portfolio roadmap** prior to any in-depth assessments related to initiative/project intake, approval, and prioritization. For in-depth support related to intake, approval, prioritization, or planning, review the following resources.



Determine what makes it onto the roadmap

A roadmap should not be limited to what is approved or committed to. A roadmap should be used to present the items that need to happen and begin the discussion of how or if this can be put into place. However, not every idea should make the cut and end up in front of key stakeholders.



4.6 Prioritize initiatives

Estimated time: 1-4 hours

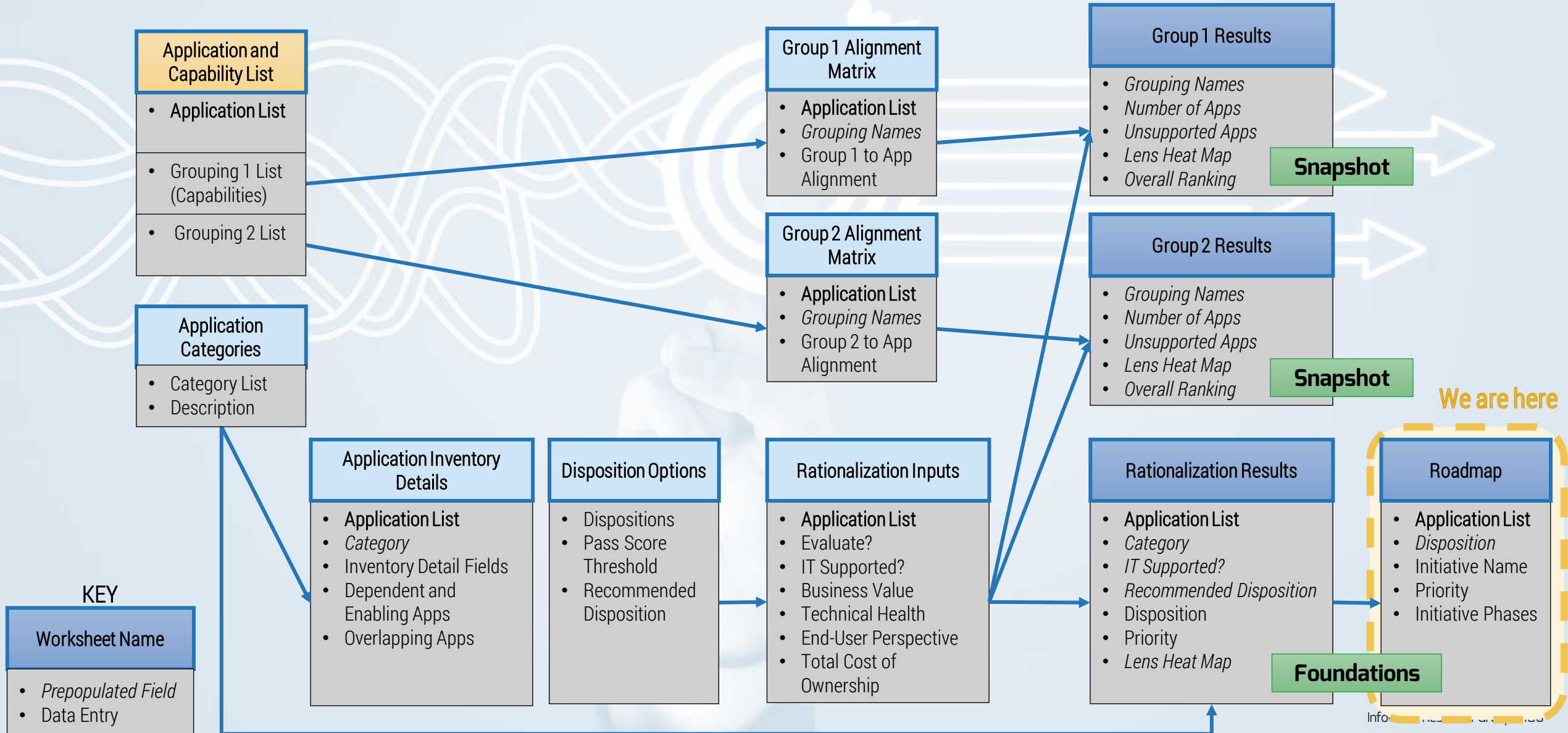
1. This is a high-level assessment to provide a sense of feasibility, practicality, and priority as well as an estimated timeline of a given initiative. Do not get lost in granular estimations. Use this as an input to your demand planning process.
2. Enter the specific name or type of initiative.
 - a) Process Initiative: Any project or effort focused on process improvements without technical modification to an app (e.g. user migration, change in SLA, new training program). Write the application and initiative name on a blue sticky note.
 - b) App Initiative: Any project or effort involving technical modification to an app (e.g. refactoring, platform migration, feature addition or upgrade). Write the application and initiative name on a yellow sticky note.
 - c) Decommission Initiative: Any project and related efforts to remove an app (e.g. migrating data, removal from server). Write the application and initiative name on a red sticky note.
3. Prioritize the initiative to aid in demand planning. This is prepopulated from your selected application disposition, but you can set a different priority for the initiative here.
4. Select the Initiative Phase in the timeline to show the intended schedule and sequencing of the initiative.

Input	Output
- Assigned dispositions - Rationalization results	Prioritized initiatives
Materials	Participants
- Whiteboard and markers <i>APM Snapshot and Foundations Tool</i>	- Delivery Leads - Applications Lead - Any Applications Team Members

↓

Record the results in the *APM Snapshot and Foundations Tool*

4.6 APM worksheet data journey map



4.6 Populate roadmap example

Review your application's disposition.

List initiatives related to your applications.

Review and update the priority for the initiative.

Build the timeline for your initiatives.

You can adjust initiative phase names here.

Initiative Phase	Short Name
Planning	Plan
Implementation	Build
Maintain and Enhance	Run
Decommission	End

#	Application Name	Disposition	Initiative Details	Priority	Year 1				Year 2				Year 3				Y 4	Y 5
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Enterprise App	Retire		Low	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run
2	Workflow Engine	Reward		Low	Run	Run	Run	Run	Run	Run	Plan	Build	Build	Run	Run	Run	Run	Run
3	Service 01 Management System	Retire	Project Omega	Very High		Plan	Build	End										
4	Service 02 Management System	Retire	Project Omega	Very High	Plan	Build	End											
5	Service 03 Management System		Evaluate	Low				Plan	Build	Run	Run	Run	Run	Run	Run	Run	Run	Run
6	Service 04 Management System	Retire	Project Delta	Very High	Plan	Plan	Build	Build	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run
7	Service 05 Management System	Remediate	Project Delta	Very High			Plan	Build	Run	Run	Run	Run	Run	Run	Run	Run	Run	Run
8	Service 06 Management System	Remediate	Project Delta	Very High	Plan	Build	Run	Run	Run	Run	Plan	Plan	Build	Build	End			
9	Customer Management System	Refocus	External System	Very Low														
10	Service Delivery	Refocus	External System	Very Low														
11	Customer Portal	Refocus	External System	Very Low														
12	Legacy Data Exchange	Reward	Cloud Exchange	Very Low	Run	Run	Run	Run	Plan	Run	Run	Run	Run	Run	Run	Run	Run	Run
13	APP 012	Reward		Moderate														

Create a recurring update plan

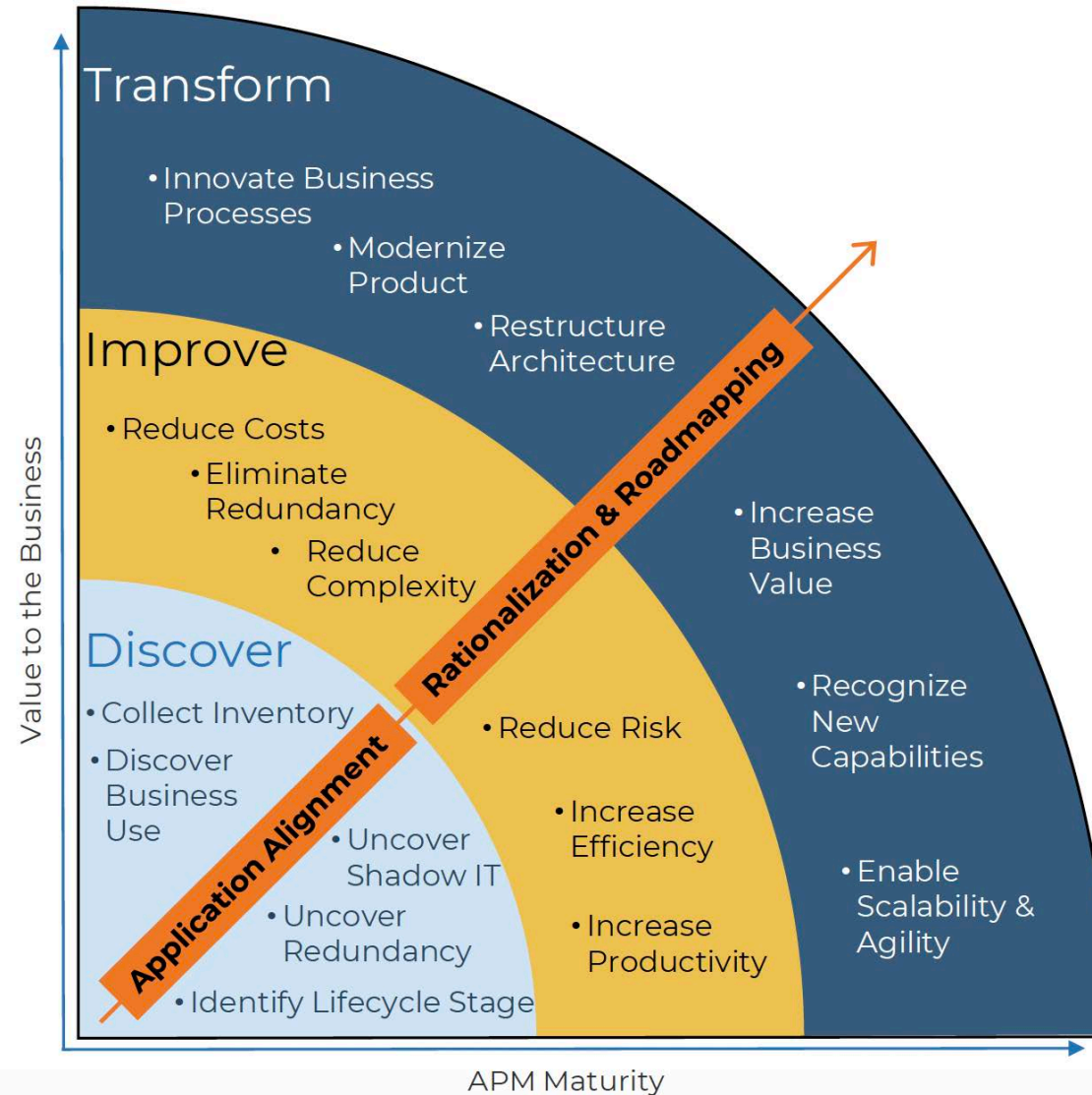
- **Application inventories** become stale before you know it. Build steps in your procurement process to capture the appropriate information on new applications. Also, build in checkpoints to revisit your inventory regularly to assess the accuracy of inventory data.
- **Rationalization** is not one and done; it must occur with an appropriate cadence.
 - Business priorities change, which will impact the current and future value of your apps.
 - Now more than ever, user expectations evolve rapidly.
 - Application sprawl likely won't stop, so neither will shadow IT and redundancies.
 - Obsolescence, growing technical debt, changing security threats, or shifting technology strategies are all inevitable, as is the gradual decline of an app's health or technical fit.
- An application's disposition changes quicker than you think, and rationalization requires a structured cadence. You need to plan to minimize the need for repeated efforts. Conversely, many use preceding iterations to increase the analysis (e.g. more thorough TCO projections or more granular capability-application alignment).
- **Portfolio roadmaps** require a cadence for both updates and presentations to stakeholders. Updates are often completed semiannually or quarterly to gauge the business adjustments that affect the timeline of the domain-specific applications. The presentation of a roadmap should be completed alongside meetings or gatherings of key decision makers.
- M&A or other restructuring events will prompt the need to address all the above.

How frequently should you rationalize the portfolio and update your roadmap?

Small Portfolio	Rationalize every 2 years Roadmap quarterly	Rationalize every 2-3 years Roadmap every 2 years
	Rationalize biannually Roadmap monthly	Rationalize annually Roadmap annually
Dynamic Strategy		Stable Strategy

Info-Tech's **Build an Application Rationalization Framework** provides additional TCO and value tools to help build out your portfolio strategy.

Build your APM maturity by taking the right steps at the right time



APM is an iterative and evergreen process

APM provides oversight and awareness of your application portfolio's performance and support for your business operations and value delivery to all users and customers.



4.7 Ongoing APM cadence

Estimated time: 1-2 hours

1. Determine how frequently you will update or present the artifacts of your APM practice: Application Inventory, Rationalization, Disposition, and Roadmap.
2. For each artifact, determine the:
 - a) Owner: Who is accountable for the artifact and the data or information within the artifact and will be responsible for or delegate the responsibility of updating or presenting the artifact to the appropriate audience?
 - b) Update Cadence: How frequently will you update the artifact? Include what regularly scheduled meetings this activity will be within.
 - c) Update Scope: Describe what activities will be performed to keep the artifact up to date. The goal here is to minimize the need for a full set of activities laid out within the blueprint. Optional: How will you expand the thoroughness of your analysis?
 - d) Audience: Who is the audience for the artifact or assessment results?
 - e) Presentation Cadence: How frequently and when will you review the artifact with the audience?

Input	Output
- Initial experience with APM - Strategic meetings schedule	Ongoing cadence for APM activities
Materials	Participants
- Whiteboard and markers <i>APM Snapshot and Foundations Tool</i>	- Applications Lead - Any Applications Team Members



Record the results in the
APM Snapshot and Foundations Tool

4.7 Ongoing APM cadence

Artifact	Owner	Update Cadence	Update Scope	Audience	Presentation Cadence
Inventory	Greg Dawson	- As new applications are acquired - Annual review	- Add new application data points (this is added to implementation standards) - Review inventory and perform a data health check - Validate with app's SME	Whole organization	Always available on team site
Rationalization Tool	Judy Ng	Annual update	- Revisit value driver weights - Survey end users - Interview support owners - Interview business owners - Update TCO based on change in operational costs; expand thoroughness of cost estimates - Rescore applications	- Business owners of applications - IT leaders	Annually alongside yearly strategy meeting
Portfolio Roadmap	Judy Ng	Monthly update alongside project updates	- Shift the timeline of the roadmap to current day 1 - Carry over project updates and timeline changes - Validate with PMs and business owners	- Steering Committee - Business owners of applications - IT leaders	- Quarterly alongside Steering Committee meetings - Upon request

Appendices

- Additional support slides
- Bibliography

The APM tool provides a single source of truth and global data sharing

The table shows where source data is used to support different aspects of APM discovery, rationalization, and modernization.

Worksheet Data Mapping	Application and Capability List	Group Alignment Matrix (1-3)	Rationalization Inputs	Group 1-3 Results	Application Inventory Details	App Rationalization Results	Roadmap	App Redundancy Comparison
Application and Capability List		App list, Groupings	App list	App list, Groupings	App list, Categories	App list, Categories	App list	App list
Groups 1-3 Alignment Matrix	App to Group Tracing							
Application Categories	Category drop-down				Category	Category		
Rationalization Inputs				Lens Scores (weighted input to Group score)		Lens Scores (weighted input)		Lens Scores (weighted input)
Disposition Options						Disposition list, Priorities list, Recommended Disposition and Priority		
App Rationalization Results							Disposition	

Common application inventory attributes

Attribute	Description	Common Collection Method
Name	Organization's terminology used for the application.	Auto-discovery tools will provide names for the applications they reveal. However, this may not be the organizational nomenclature. You may adapt the names by leveraging pre-existing documentation and internal knowledge or by consulting business users.
ID	Unique identifiers assigned to the application (e.g. app number).	Typically an identification system developed by the application portfolio manager.
Description	A brief description of the application, often referencing core capabilities.	Typically completed by leveraging pre-existing documentation and internal knowledge or by consulting business users.
Business Units	A list of all business units, departments, or user groups.	Consultation, surveys, or interviews with business unit representatives. However, this doesn't always expose hidden applications. Application-capability mapping is the most effective way to determine all the business units/user groups of an app.
Business Capabilities	A list of business capabilities the application is intended to enable.	Application capability mapping completed via interviews with business unit representatives.
Criticality	A high-level grading of the importance of the application to the business, typically used for support prioritization purposes (i.e. critical, high, medium, low).	Typically the criticality rating is determined by a committee representing IT and business leaders.
Ownership	The individual accountable for various aspect of the application (e.g. product owner, product manager, application support, data owner); typically includes contact information and alternatives.	If application ownership is an established accountability in your organization, typically consulting appropriate business stakeholders will reveal this information. Otherwise, application capability mapping can be an effective means of identifying who that owner should be.
Application SMEs	Any relevant subject matter experts who can speak to various aspects of the application (e.g. business process owners, development managers, data architects, data stewards, application architects, enterprise architects).	Technical SMEs should be known within an IT department, but shadow IT apps may require interviews with the business unit. Application capability mapping will determine the identity of those key users/business process SMEs.
Type	An indication of whether the application was developed in-house, commercial off-the-shelf, or a hybrid option.	Consultation, surveys, or interviews with product owners or development managers.
Active Status	An indication of whether the application is currently active, out of commission, in repair, etc.	Consultation, surveys, or interviews with product owners or operation managers.

Common application inventory attributes

Attribute	Description	Common Collection Method
Vendor Information	Identification of the vendor from whom the software was procured. May include additional items such as the vendor's contact information.	Consultation with business SMEs, end users, or procurement teams, or review of vendor contracts or license agreements.
Links to Other Documentation	Pertinent information regarding the other relevant documentation of the application (e.g. SLA, vendor contracts, data use policies, disaster recovery plan). Typically includes links to documents.	Consultation with product owners, service providers, or SMEs, or review of vendor contracts or license agreements.
Number of Users	The current number of users for the application. This can be based on license information but will often require some estimation. Can include additional items of quantities at different levels of access (e.g. admin, key users, power users).	Consultation, surveys, or interviews with product owners or appropriate business SMEs or review of vendor contracts or license agreements. Auto-discovery tools can reveal this information.
Software Dependencies	List of other applications or operating components required to run the application.	Consultation with application architects and any architectural tools or documentation. This information can begin to reveal itself through application capability mapping.
Hardware Dependencies	Identification of any hardware or infrastructure components required to run the application (i.e. databases, platform).	Consultation with infrastructure or enterprise architects and any architectural tools or documentation. This information can begin to reveal itself through application capability mapping.
Development Language	Coding language used for the application.	Consultation, surveys, or interviews with development managers or appropriate technical SMEs.
Platform	A framework of services that application programs rely on for standard operations.	Consultation, surveys, or interviews with infrastructure or development managers.
Lifecycle Stage	Where an application is within the birth, growth, mature, end-of-life lifecycle.	Consultation with business owners and technical SMEs.
Scheduled Updates	Any major or minor updates related to the application, including the release date.	Consultation with business owners and vendor managers.
Planned or In-Flight Projects	Any projects related to the application, including estimated project timeline.	Consultation with business owners and project managers.

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