Deliver on Your Digital Product Vision

Build a product vision your organization can take from strategy through execution!

INFO~TECH RESEARCH GROUP

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Analyst Perspective

Your product vision isn't valuable unless you can deliver on it!

Vision and tactics are entangled.

A great vision is continually informed by incremental delivery of value to customers, stakeholders, and the organization.

Without considering your vision, your strategy, and your delivery, you are ignoring a critical perspective. This will lead to solutions that do not provide the right value to stakeholders – or do not provide any value at all!

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EXECUTIVE BRIEF

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Executive Summary

Your Challenge

- Product organizations are under pressure to align the value they provide with the organization's goals and overall company vision.

- You need to clearly convey the direction, strategy, and tactics in order to gain alignment, support, and funding from your organization.

- Products require continuous additions and enhancements to sustain their value. This requires detailed yet simple communication to a variety of stakeholders.

Common Obstacles

- Changing definitions of value and being unclear about requirements for alignment makes it challenging to covey an effective product direction.

- Direction and strategy have traditionally been separated from tactics and the management of capacity constraints.

- Stakeholders have drastically different communication requirements, priorities, and technical understanding of development, and this demands different views of the product.

Info-Tech's Approach

- Leverage a vision-first approach for your overall product strategy. You cannot succeed without a goal!

- Recognize that a vision is only as good as the data that backs it up – lay out a comprehensive backlog with quality built-in that can be effectively communicated and understood through roadmaps.

- Your vision is only a dream if it cannot be implemented – define what goes into a release plan via the release canvas.

- Define a communication approach that lets everyone know where you are heading.

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A vision without tactics is an unsubstantiated dream, while tactics without a vision is working without a purpose. You need to have a handle on both to achieve outcomes that are aligned with the needs of your organization.

Your Product Transformation Journey

2. Lead and Manage Product Owners

One-Day Executive Workshop – Align and Prepare Your Leadership

4. Deliver Digital Products at Scale

Scale Product Families to Align Enterprise Goals

1. Make the Case for Product Delivery

Align Your Organization With the Practices to Deliver What Matters Most

3. Deliver on Your Digital Product Vision

Enhance Product Backlogs, Roadmapping, and Strategic Alignment

We are here

5. Build a Better Product Owner

Assess and Develop Your Product Owners

Executives and leadership are satisfied with IT when there is alignment between tactics and goals

Info-Tech's CIO Business Vision Survey data highlights the importance of IT projects in supporting the business to achieve its strategic goals.

However, Info-Tech's CEO-CIO Alignment Survey (*N=124*) data indicates that CEOs perceive IT to be poorly aligned to business's strategic goals.

Info-Tech's CIO-CEO Alignment Diagnostics
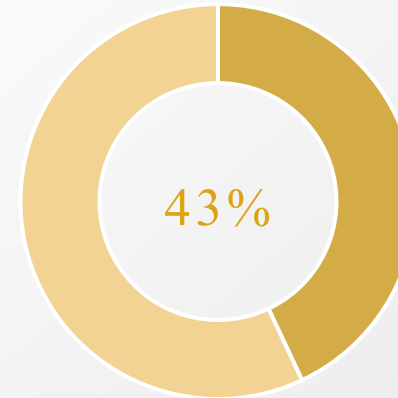
43%
of CEOs believe that **business goals are going unsupported by IT.**
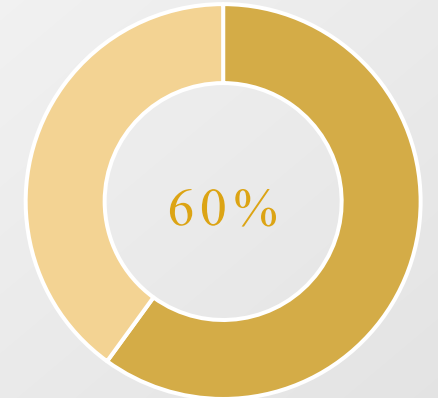
60%
of CEOs believe that **improvement is required** around IT's understanding of business goals.
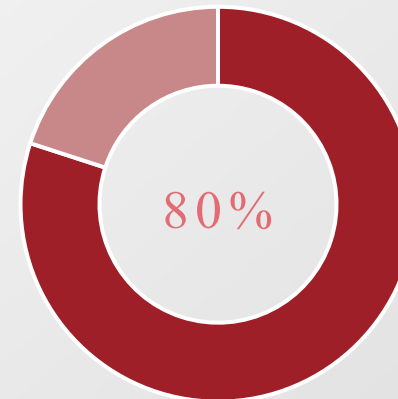
80%
of CIOs/CEOs are **misaligned on the target role for IT.**
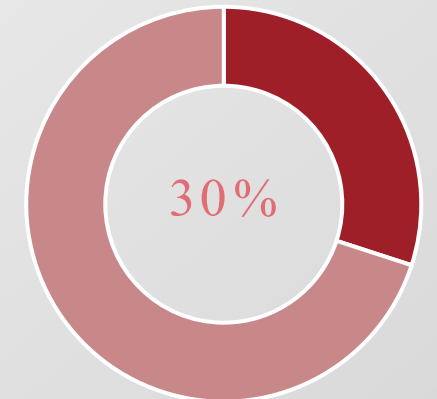
30%
of business stakeholders are **supporters*** of their IT departments

* N=32,536

Aligning to your digital product vision has benefits that are not always apparent

#1

COMMUNICATION

Top driver of throughput in the delivery process is the quality of artifacts used to communicate delivery objectives, including roadmaps and backlogs

(Source: Info-Tech, N=1,287)
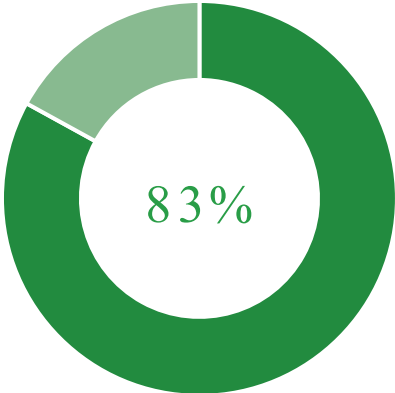
83% of organizations require IT to improve the effectiveness and consistency of the reporting of value delivered by their products. *(Source: Info-Tech, N=469)*
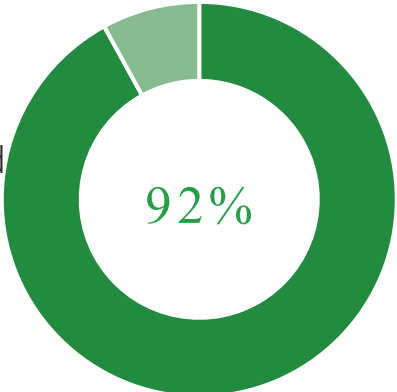
92% of organizations have high IT satisfaction when teams are aligned to the same desired outcome, understanding, and value proposition of their products. *(Source: Info-Tech, N=230)*

What makes up a viable product vision?

Who is

the **target customer** ?

What do they need?

What is

the **key benefit**

What is the

differentiator ?
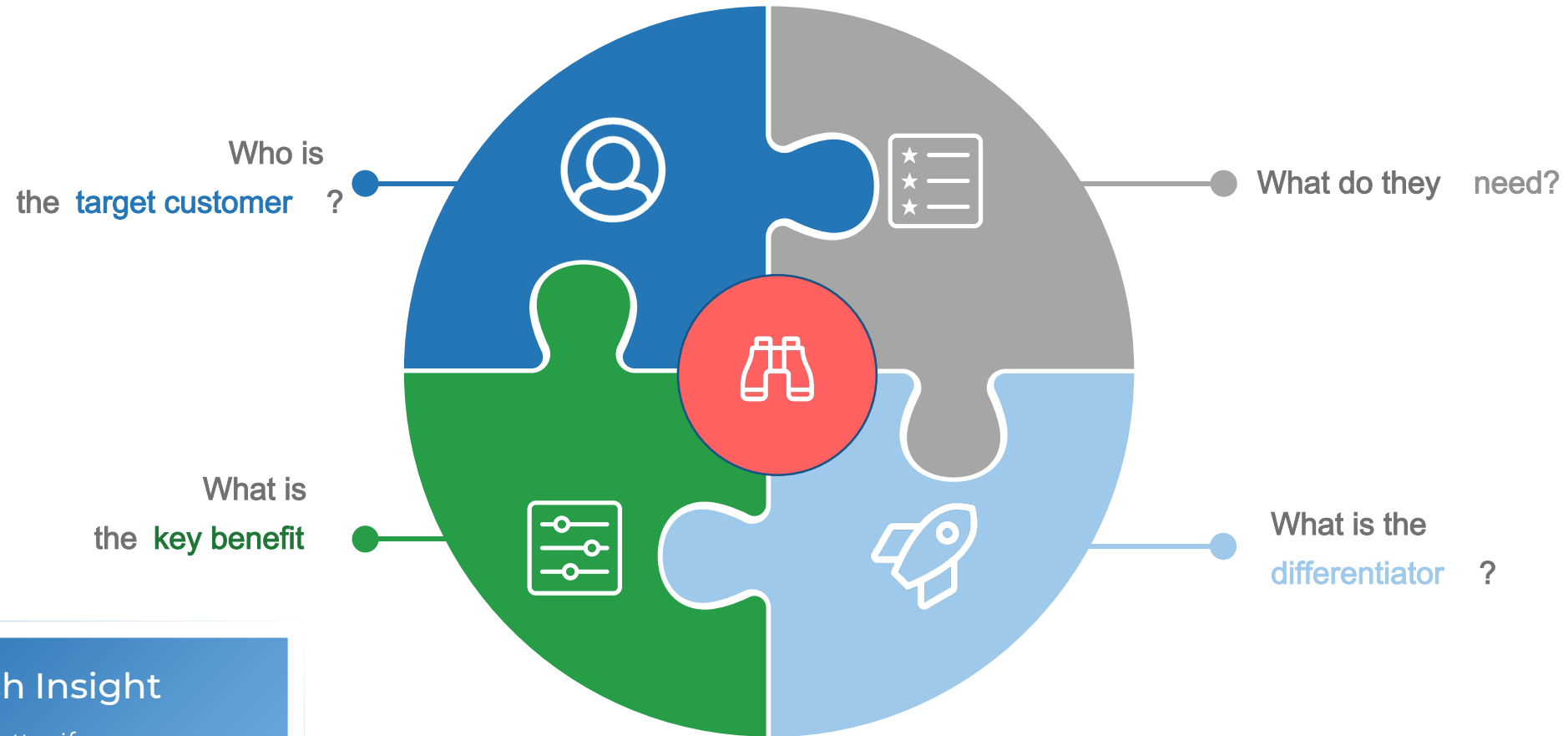
Info-Tech Insight

It doesn't matter if you are delivering value to internal or external stakeholders, you need a product vision to ensure everyone understands the "why."

Adapted from: Crossing the Chasm

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1 What makes up a viable product vision?

- Who is the target customer?
- What do they need?
- What is the key benefit?
- What is the differentiator?

2 What informs the product vision?

Goals
Product goals to achieve your vision.

Metrics
Criteria to determine if we attained our goals.

Value
The value that needs to be provided to meet your goals.

Audience
Who is interested in vision attainment?

Personas
Who is the value being provided for? How is it being provided?

3 How do you refine the product vision?

The vision is developed through four key product artifacts:

Product Canvas
Asserts the overall product vision through organizing your thoughts based on the elements of the vision.

Product Backlog
Defines the prioritization of features and requirements to be implemented.

Product Roadmap
Communicates the backlog to stakeholders (internal and external).

Release Canvas
Based on the roadmap and backlog, lays out the elements to drive the next release(s).

4 Enable delivery of your product vision!

All enablers are part of an evergreen product management process.

A backlog is enabled via continual and regular **stakeholder engagement.**

Applying **quality standards** is important in helping to refine the roadmap.

Operational engagement is required to lay out a release canvas.

Your release plan combined with **value definition** will confirm alignment to your goals and vision in the product canvas.

Diagram labels

- Value Definition & Assessment
- Business Engagement
- Product Canvas
- Product Backlog
- Product Roadmap
- Release Canvas
- Operational Engagement
- Application of Quality Standards
- Goals
- Metrics
- Value
- Audience
- Personas
- Target Customer
- What They Need
- Differentiator
- Key Benefit

Why should I care about my product vision?

If you start off by saying "I want to build..." you've already lost. Remember what a vision is for!

- Your product vision serves as the single fixed point for product development and delivery. This is the outcome that you want to seek.
- Without your product vision, teams will not know what they should be doing – and more importantly, why they should be doing it. People want to know how they are making a difference!

- The best product ideas and concepts won't matter if your stakeholders don't care.

- A well-written product vision helps articulate what you want to do, but almost more importantly, what you DON'T want to do.

- It is a key part of the strategic planning process.

Think about how flexible you need to be in your long-term, detailed planning
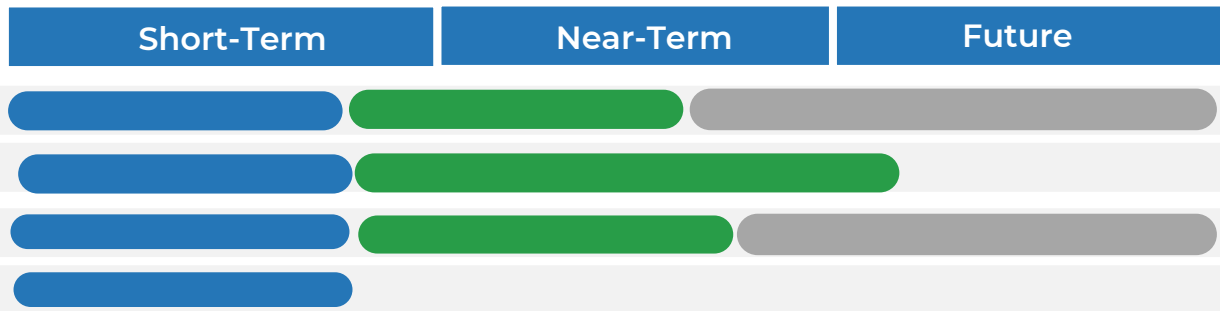
Short-Term	Near-Term	Future

In an ideal scenario:

A roadmap that illustrates detailed, committed, and long-term plans can be immensely valuable, allowing you to align your teams and stakeholders and to increase your ability to project costs, required skills, and delivery dates.

In reality, things change!

Your strategic intentions are subject to volatility, especially those planned within a further timeline. The more costs you incur in planning, the more you leave yourself exposed to inefficiency and waste if those plans change.

Short-Term	Near-Term	Future

Strategy Change

Market Volatility

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A good roadmap is intended to manage and communicate the inevitable changes as a result of market volatility and changes in strategy. These variables will range from app to app or product to product. You will need to do some analysis to know which approach will garner the most value. **You need to decide how flexible you need to be.**

ultiple roadmap views can communicate differently, yet tell e same truth

Product managers and product owners have many responsibilities, and a roadmap can be a useful tool to complete those objectives through communication or organization of tasks.

However, not all roadmaps address the correct audience and achieve those objectives. Care must be taken to align the view to the given audience.

	Business/ IT leaders	**Users/Customers**	**Delivery teams**
Audience			
Roadmap View	**Portfolio**	**Product**	**Technology**
Objectives	To provide a snapshot of the portfolio and priority apps	To visualize and validate product strategy	To coordinate and manage teams and show dev. progress
Artifacts	Line items or sections of the roadmap are made up of individual apps, and an artifact represents a disposition at its highest level.	Artifacts are generally grouped by various product teams and consist of strategic goals and the features that realize those goals.	Artifacts are grouped by the teams who deliver that work and consist of features and technical enablers that support those features.

Pie chart segments:
- Manage product backlog
- Communicate a strategy
- Get consensus on product direction
- Plan and prioritize
- Communicate milestones and releases

Surveyed **most important reason** for using a product roadmap
Source: ProductPlan, 2018

A well-formed backlog can be thought of as a **DEEP** backlog.

Detailed Appropriately: PBIs are broken down and refined as necessary.

Emergent: The backlog grows and evolves over time as PBIs are added and removed.

Estimated: The effort a PBI requires is estimated at each tier.

Prioritized: The PBI's value and priority are determined at each tier.

(Perforce, 2018)

A backlog stores and organizes PBIs at various stages of readiness

Your backlog must give you a holistic understanding of demand for change in the product.

3 – IDEAS

Composed of raw, vague, and potentially large ideas that have yet to go through any formal valuation.

2 – QUALIFIED

Researched and qualified product backlog items (PBIs) awaiting refinement.

1 – READY

Discrete, refined PBIs that are ready to be placed in your development team's sprint plans.
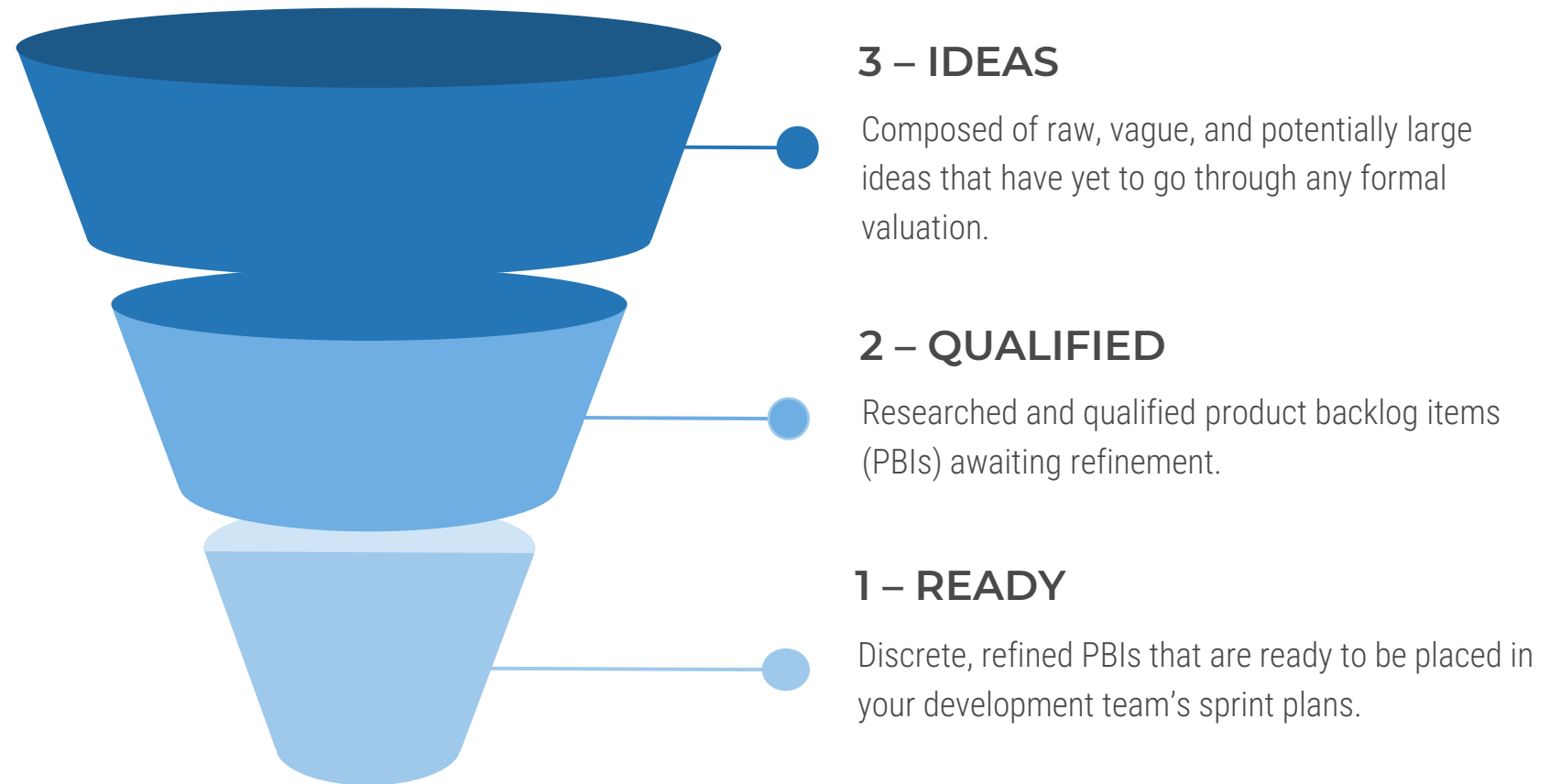
Adapted from *Essential Scrum*

Info-Tech's methodology for Deliver on Your Digital Product Vision

	1. Define a Digital Product Vision	2. Build a Better Backlog	3. Build a Product Roadmap	4. Release and Deliver Value	5. Communicate the Strategy – Make It Happen!
Phase Steps	1. Understanding your product capabilities. 2. Articulate your vision by building your product canvas.	1. Define your backlog structure. 2. Define your "Intake" backlog process. 3. Define your "Analysis" backlog process. 4. Define your "Refinement" backlog process.	1. Define your roadmap structure. 2. Populate your roadmap.	1. Turn your milestones into releases. 2. Understand what you need to define your next release via the release canvas.	1. How to introduce your product vision. 2. Communicate changes via updates to your roadmap. 3. Your next steps.
Phase Outcomes	A digital product vision that has been articulated and organized in a product canvas.	A defined backlog structure and process already validated with sample items.	Your preferred roadmap structure and visualization with a working example based on your backlog.	A view of upcoming releases along with a detailed understanding of your next release via the release canvas.	• A plan for how to articulate your vision to stakeholders. • How to communicate changes and updates. • An understanding of how to make this a reality.

Phase 1

Define a Digital Product Vision

Phase 1	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**
1.1 Understand your product capabilities	2.1 Define your backlog structure	3.1 Define your roadmap structure	4.1 Turn your milestones into releases	5.1 Learn how to introduce your digital product strategy
1.2 Articulate your vision by building your product canvas	2.2 Define your "intake" backlog process	3.2 Populate your roadmap	4.2 Understand what you need to define your next release via the release canvas	5.2 Communicate changes on updates to your strategy
	2.3 Define your "analysis" backlog process			5.3 Determine your next steps
	2.4 Define your "refinement" backlog process			

This phase will walk you through the following activities:

- Determine the important product capabilities to consider when laying out your product vision

- Build a complete product canvas through several steps including stakeholder analysis, goal setting with metrics, and articulating value

This phase involves the following participants:

- Product owners

- Stakeholders

Deliver on Your Digital Product Vision

Product does not mean the same thing to everyone

Do not expect a universal definition of products. Each organization and industry body of knowledge will have a different understanding of what a product is, and organizations will structure their people, processes, and technologies according to their unique interpretation. Misunderstanding of product definitions within business and IT teams can lead to further confusion behind the rationale of product roadmaps.

"A product is something that is created and then made available to customers, usually with a distinct name or order number."
– TechTarget

"A product [is] something (physical or not) that is created through a process and that provides benefits to a market."
– Mike Cohn, Founding Member of Agile Alliance and Scrum Alliance

"A product is the physical object, software or service from which a customer gets direct utility plus a number of other factors, services, and perceptions that make the product (i.e. useful, desirable, convenient)."
– Mark Curphey

"There is not a lot of guidance in the industry on how to define [products]. This is dangerous because what will happen is that product backlogs will be formed in too many areas. All that does is create dependencies and coordination across teams…and backlogs."

– Chad Beier

("How Do You Define a Product?" Scrum.org)

Product capabilities deliver v

In *Transition to Product Delivery,* we identified the facets of a product. As a product o
are responsible for managing these facets through your capabilities and activities.
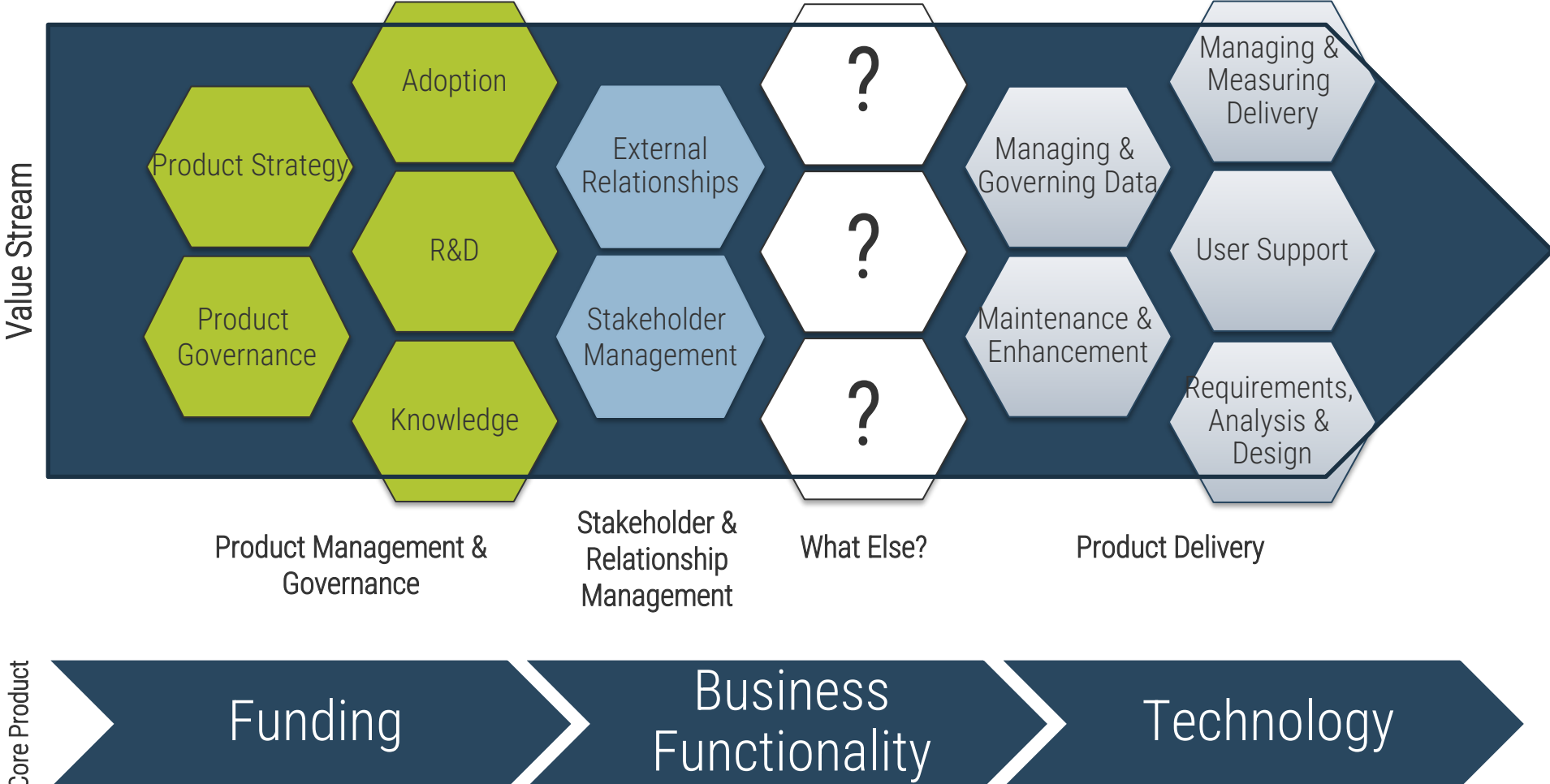
It is easy to lose sight of what matters when we look at a product from a single point of view. Despite what "The Agile Manifesto" says, working software is not valuable without the knowledge and support that people need in order to adopt, use, and maintain it. If you build it, they will **not** come. Product leaders must consider the needs of all stakeholders when designing and building products.

A key part of your vision: Value

Business value is the value of the business outcome the application produces and how effective the product is at producing that outcome. Dissecting value by the benefit type and the value source allows you to see the many ways in which a product or service brings value to your organization. **Capture the value of your products in short, concise statements,** like an elevator pitch.

Business Value Matrix

Outward

| Reach Customers | Increase Revenue |

Human Benefit ←———————————→ Financial Benefit

| Enhance Services | Reduce Costs |

Inward

Financial Benefits vs. Improved Capabilities

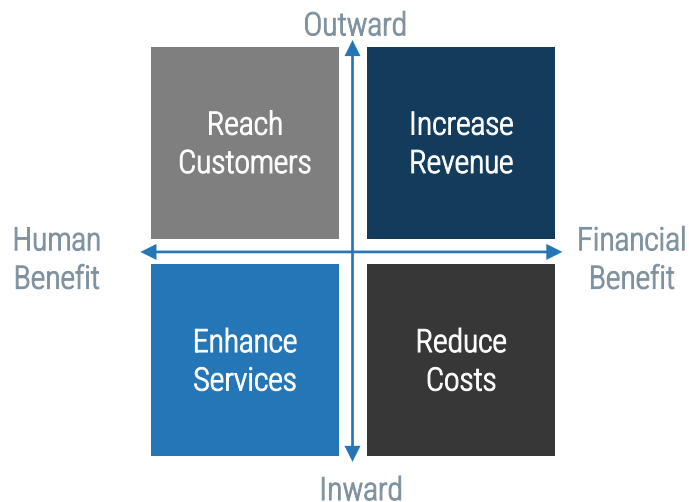- **Financial Benefits** refers to the degree to which the value source can be measured through monetary metrics and is often quite tangible.
- **Human Benefits** refers to how a product or service can deliver value through a user's experience.

Inward vs. Outward Orientation

- **Inward** refers to value sources that have an internal impact and improve your organization's effectiveness and efficiency in performing its operations.
- **Outward** refers to value sources that come from your interaction with external factors, such as the market or your customers.

Increase Revenue	Reduce Costs	Enhance Services	Reach Customers
Product or service functions that are specifically related to the impact on your organization's ability to generate revenue.	Reduction of overhead. The ways in which your product limits the operational costs of business functions.	Functions that enable business capabilities that improve the organization's ability to perform its internal operations.	Application functions that enable and improve the interaction with customers or produce market information and insights.

Example: Identify your business value sources

Example:

Reach Customers and Markets
- Provide Market Insights
- Enhance Customer Experience

Generate Profit
- Produce Revenue
- Monetize Data

Outward Facing

Improved Capabilities

Enhance Services
- Enable Business Scalability
- Enable Business Agility
- Enable Compliance
- Increase Collaboration
- Increase Knowledge Transfer
- Reduce Risk

Reduce Costs
- Reduce Labor Costs
- Automate an Activity

Inward Facing

Remember: Your goal is not your vision!

Not knowing the difference will prevent you from both dreaming big and achieving your dream.

Your goals represent HOW you want to achieve your product vision.

- A key element of *operationalizing* your vision.

- Your strategy, initiatives, and features will align with one or more goals.

Your product vision represents your "north star" – where you want to go.

- It represents WHAT you want to do.

When thinking about product metrics, be careful what you ask for…

As the saying goes, "Be careful what you ask for, because you will probably get it."

Metrics are powerful because they drive behavior.

- Metrics are also dangerous because they often lead to unintended negative outcomes.

- Choose your metrics carefully to avoid getting *what you asked for* instead of *what you intended.*

It's a cautionary tale that also offers a low-risk path through the complexities of metrics use.

For more information on the use (and abuse) of metrics, please see *Select and Use SDLC Metrics Effectively*.

Some best practices for metrics selection

1. Before choosing metrics, identify the team's business-aligned goals that your metrics must support.[2,4,7]
2. Choose metrics that come closest to measuring value delivery, and attainment of your specified goals whenever possible.
3. Use the fewest metrics possible (three-to-five rule) and choose the highest value metrics possible (i.e. those that help achieve goals). The more metrics you choose, the more difficult it will be to measure success in attainment.
4. Choose metrics that are easy to gather and report (automated whenever possible).[1,5]
5. Choose metrics that are least likely to suffer from gaming, ambivalence, reduced productivity, or unintended consequences.[5,6,7]
6. As your goals change, review and adapt your metrics over time.[2,4,7]

1. "What Are Software Metrics and How Can You Track Them?" Stackify, 2017
2. martinFowler.com, 2013
3. Atlassian, 2019
4. Extreme Uncertainty, 2018
5. OpenView, 2009
6. Fast Company, 2019
7. OpenGov, 2018

Understand who your customer is

Building great products that satisfy and delight your users should be top of mind when thinking about your product vision.

- Developing personas is a common technique used to build an understanding of who your customer is. Doing so will give the organization a clear understanding of the users' needs, behaviors, and overall goals.

- While there are not many limits around what can be in a typical persona, at a minimum you want to have enough information to make them feel real – through a **personal bio, their goals, and their frustrations.**

There is nothing wrong with building an initial persona based on what you know today.

For more details on how to do a thorough analysis of your customers and stakeholders, refer to our Blueprint *Apply Design Thinking to Build Empathy With the Business*.

Samantha O.,
Sales Manager,
Age 35

ABOUT THEM

- B.Comm, MBA.
- Sales manager working in the industry for ten years.
- Active in local community, enjoys networking and being part of a community.

GOALS

- Being people-centric, Samantha is always looking for ways to focus more on customers and less on admin tasks.
- Maintaining and deepening her network and relationships is critical.
- Wants to focus less on details and more on the big pieces at work so she can spend more time with her family.

WHAT IS GETTING IN THE WAY

- Continual changes to well-established processes.
- Lack of documentation and notification around changes.
- Inconsistent and hard-to-use tooling.
- Seems to always work in a culture of "get-it-done" without time permitted to take a breath and evaluate.

Phase 2

Build a Better Backlog

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
1.1 Understand your product capabilities	2.1 Define your backlog structure	3.1 Define your roadmap structure	4.1 Turn your milestones into releases	5.1 Learn how to introduce your digital product strategy
1.2 Articulate your vision by building your product canvas	2.2 Define your "intake" backlog process	3.2 Populate your roadmap	4.2 Understand what you need to define your next release via the release canvas	5.2 Communicate changes on updates to your strategy
	2.3 Define your "analysis" backlog process			5.3 Determine your next steps
	2.4 Define your "refinement" backlog process			

This phase will walk you through the following activities:

- Understanding the fundamentals of the single backlog

- Defining the ownership, structure of your PBIs, and current known process for populating

- Define your process for moving PBIs through the backlog (intake, analysis, refinement)

This phase involves the following participants:

- Product owners

- Application leaders

- Project managers and/or scrum masters

Deliver on Your Digital Product Vision

A product owner and the product backlog are critical to realize the benefits of Agile development

A product owner is accountable for defining and prioritizing the work that will be of the greatest value to the organization and its customers. The backlog is the key to facilitating this process and accomplishing the most fundamental goals of delivery.

For more information on the role of a product owner see *Build a Better Product Owner*.

Highly effective Agile teams spend **28%** of their time on product backlog management and roadmapping (Quantitative Software Management, 2015).

2. Inform and Protect the Team
The product owner is a servant leader of the team. He or she needs to protect the team from all the noise and give them the time they need to focus on what they do best: develop.

Product Manager

Business

Tech SMEs

End Users

Customers

Dev Team

Product Backlog

1. Manage Stakeholders
Stakeholders need to be kept up to speed on what the future holds for a product, or at least they should be heard. This task falls to the product owner.
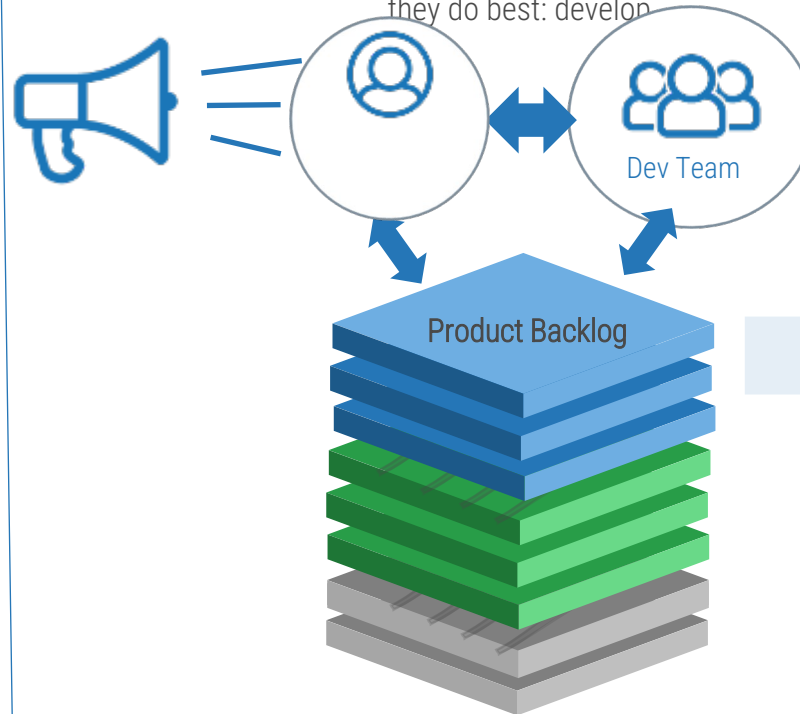
3. Maximize Value to the Product
Sifting through all these voices and determining what is valuable, or what is *most* valuable, falls to the product owner.

Backlogs are only effective when they are prioritized

While new ideas are always "top of the idea funnel," we still need to figure out where they go in the backlog and how much effort is needed to analyze them.

New idea

Ideas

Qualified

Ready

Sprint
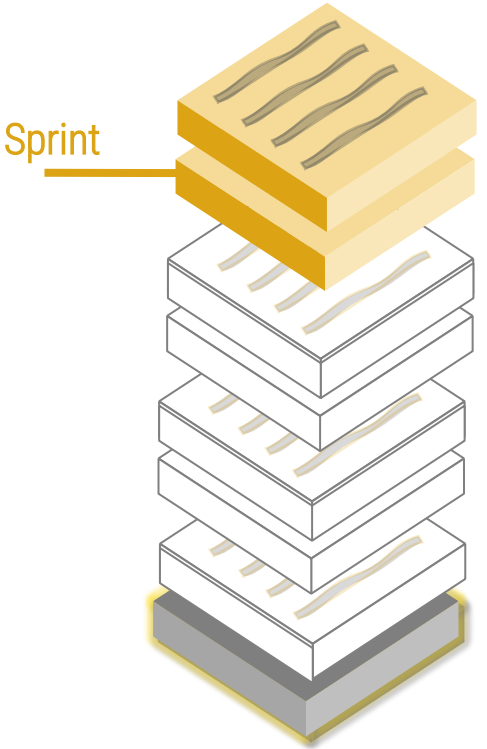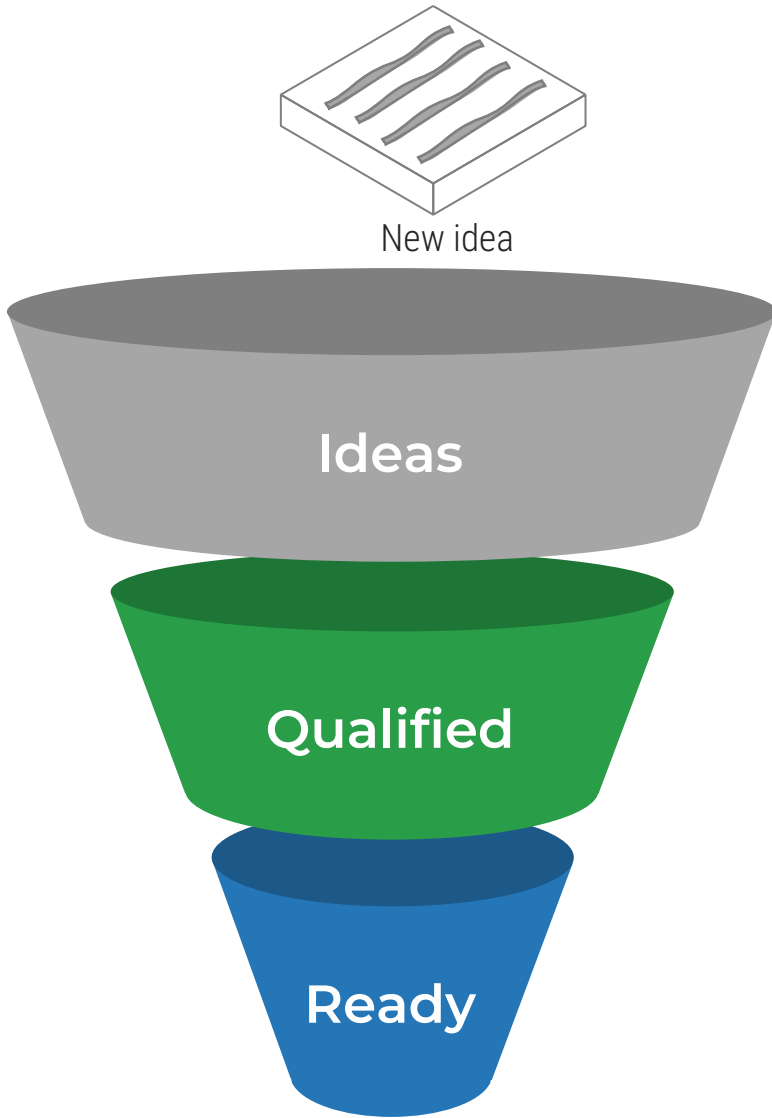
"This item, while interesting, is something we need to look at further and will **consider at a later date**."

"We are aware of this and have seen this come in enough times that we want to **analyze this as soon as possible**"

"We recognize this as being **critically aligned** with our vision so it needs to be brought to development as soon as possible."

Backlog tiers facilitate product planning steps

Ranging from the intake of an idea to a PBI ready for development; to enter the backlog, each PBI must pass through a given quality filter.

Activity Participants

Tier	Backlog Activity	Quality Filter	Product Manager	Product Owner	Dev Team	Scrum Master	Business	Architects
Sprint	Sprint Planning	"Accepted"		✔	✔	✔		
Ready	Refine	"Ready"		✔	✔	✔		
Qualified	Analysis	"Qualified"	✔	✔	✔	✔	✔	✔
Ideas								✔

* Leadership
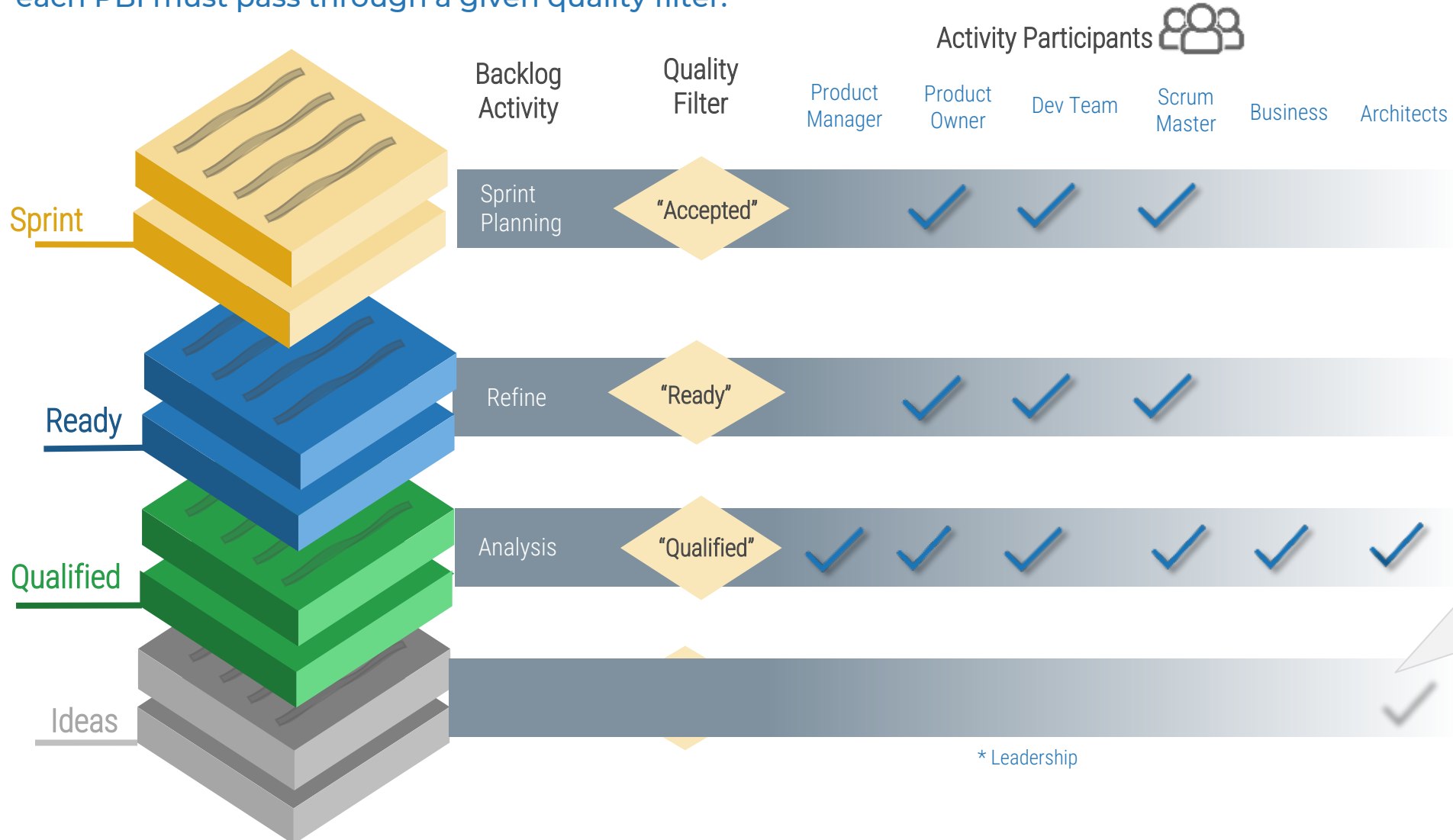
Each activity is a variation of **measuring value** and **estimating effort** in order to **validate** and **prioritize** a PBI.

A PBI successfully completes an activity and passes through to the next backlog tier when it meets the appropriate criteria. **Quality filters** should exist between each tier.

Info-Tech Insight
The most effective backlogs are the ones that don't just "happen to the team." Ensure that your operational teams review incoming items well before refinement!

Intake: Inputs into the backlog can come from anywhere

Listen to every idea, but do not backlog every idea.

End Users
"My process has changed, and so must this product."

Market Researchers
"Trends in the market suggest we need to modify or add features."

Product Team
"I am getting a lot of customer feedback that we should consider."

Business Leaders
"This new opportunity on the horizon may require a change…"

Technical Specialists
"Features don't magically make themselves. What about the technology behind it?"

Backlog

Another aspect to consider is what channels your stakeholders have for submitting requests or ideas. Review *Standardize the Service Desk* for guidance on building a single point of contact.

Some organizations include the requester's influence as a factor in your value criteria. Review *Optimize IT Project Intake, Approval, and Prioritization* for measuring stakeholders' influence.

Consider the following attributes when deciding on what goes into the backlog

- **Fit for Purpose** – Functionalities are designed and implemented for the purpose of satisfying the end users' needs and solving their problems.
- **User Centric** – End users see the application as rewarding, engaging, intuitive, and emotionally satisfying. They want to come back to it.
- **Adaptable** – The application can be quickly tailored to meet changing end user and technology needs with reusable and customizable components.
- **Accessible** – The application is available on demand and on the end user's preferred interface. An end user has a seamless experience across all devices.

Business Value

Fit for Purpose

Relationship & Network Building

User Centric

Seamless Application Connection

Continuous Delivery of Value

Adaptable

Informative & Insightful

Accessible

Private & Secured

- **Private & Secured** – End-user activity and data is protected from unauthorized access.
- **Informative & Insightful** – The application delivers consumable, accurate, trustworthy, and real-time data that is important to the end user.
- **Seamless Application Connection** – The application facilitates direct interactions with one or more other application through an uninterrupted user experience.
- **Relationship & Network Building** – The application enables and promotes the connection and interaction of people.

Info-Tech Best Practice
To ensure you are covering what is necessary, apply these attributes as metadata on your requirements.

Measure product value with metrics tied to your business value sources and objectives

The importance of measuring business value through metrics

The better an organization is at using business value metrics to evaluate IT's performance, the more satisfied the organization is with IT's performance as a business partner. In fact, those that say they're effective at business value metrics have satisfaction scores that are 30% higher than those that believe significant improvements are necessary (Info-Tech's IT Diagnostics).

Assigning metrics to your prioritized values source will allow you to more accurately measure a product's value to the organization and identify optimization opportunities. See Info-Tech's *Related Research: Value, Delivery Metrics, Estimation* blueprint for more information.

Assign metrics to your business value sources

Business Value Category	Source Examples	Metric Examples
Profit Generation	Revenue	Customer Lifetime Value (LTV)
	Data monetization	Average Revenue per User (ARPU)
Cost Reduction	Reduce labor costs	Contract labor cost
	Reduce Overhead	Effective Cost per Install (eCPI)
Service Enablement	Limit failure risk	Mean time to mitigate fixes
	Collaboration	Completion time relative to deadline
Customer and Market Reach	Customer satisfaction	Net Promoter Score
	Customer trends	Number of customer profiles

Acceptance criteria must be defined at this stage

Functional

Specific user tasks, functions, business processes, or business capabilities that must be in place.

Non-Functional

Specific nonfunctional conditions the implementation or change must meet, such as security, regulations, and design elements.

Performance

Specific system performance, user acceptance, or productivity or business metrics of a user story, request, or requirement. A threshold should be clearly defined.

Adapted from Segue Technologies, 2015
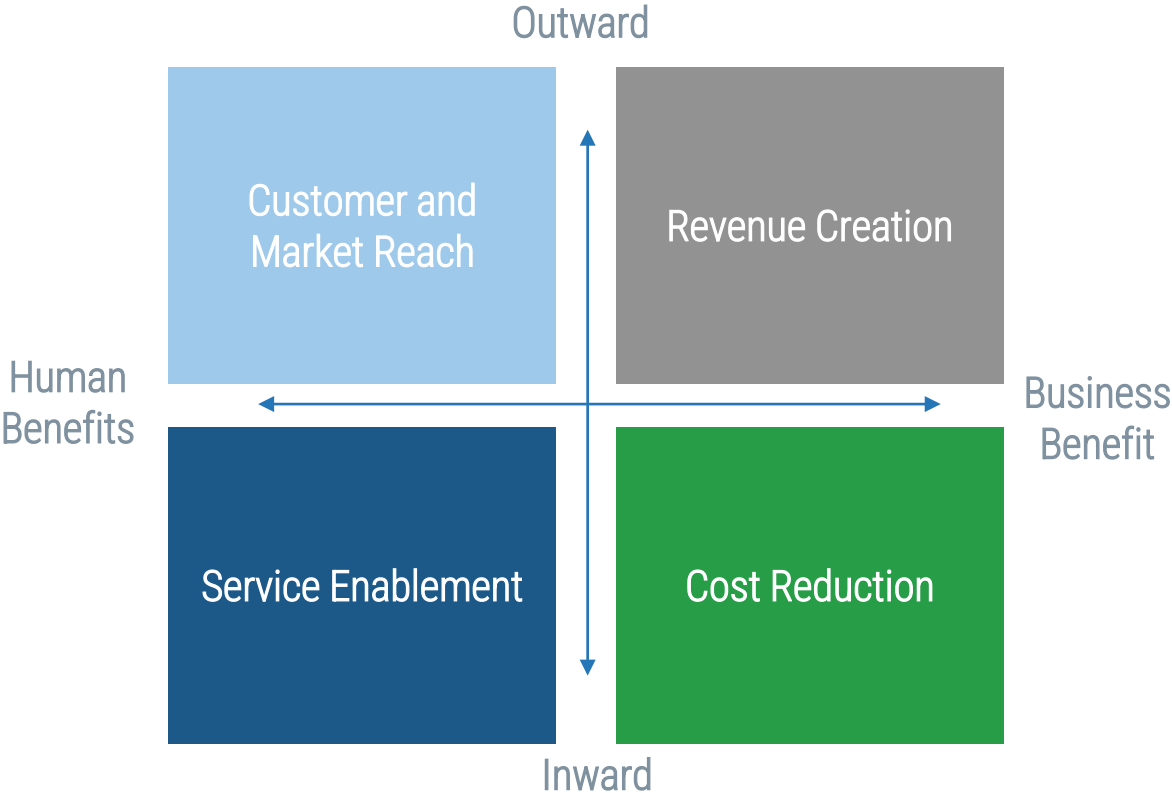
What makes up acceptance criteria?

"Acceptance criteria are a set of statements, each with a clear pass/fail result, that specify both functional (e.g. minimal marketable functionality) and non-functional (e.g. minimal quality) requirements applicable at the current stage of project integration. These requirements represent 'conditions of satisfaction.' There is no partial acceptance: either a criterion is met or it is not."

– Segue Technologies, 2015

Reminder: Your value drivers are defined at the vision level

Valuations need to be rooted in a consistent framework based on your product vision, goals, and priorities.

Leverage the business value matrix to understand the different types of value your digital products deliver.

Outward

| Customer and Market Reach | Revenue Creation |

Human Benefits — Business Benefit

| Service Enablement | Cost Reduction |

Inward

Common types of value drivers

- **Revenue Creation:** The revenue generated from a product or business capability.

- **Cost Reduction:** The below-the-line, operational cost savings achieved by executing business capabilities with a product.

- **Service Enablement:** The productivity and efficiency gains of internal business operations from enhanced products and capabilities.

- **Customer and Market Reach:** Metrics measuring the improved reach and insight of the business in existing or new markets.

See Info-Tech's *Visualize Your Application Portfolio Strategy With a Business Value-Driven Roadmap* blueprint for more information about establishing a business value framework.

Use the INVEST model to create good user stories

At this point your PBIs should be high-level stories. The goal is to refine your PBIs so they are . . .

I **Independent:** Ideally your user stories can be built in any order (i.e. independent from each other). This allows you to prioritize based on value and not get caught up in sequencing and prerequisites.

N **Negotiable:** As per the Agile principle: *collaboration over contracts*. Your user stories are meant to facilitate collaboration between the developer and the business. Therefore, they should be built to allow negotiation between all parties.

V **Valuable:** A user story needs to state the value so it can be effectively prioritized, but also so developers know what they are building.

E **Estimable:** As opposed to higher-level approximation given to epics, user stories need more accuracy in their estimates in order to, again, be effectively prioritized, but also so teams can know what can fit into a sprint or release plans.

S **Small:** User stories should be small enough for a number of them to fit into a sprint. However, team size and velocity will impact how many can be completed. A general guideline is that your teams should be able to deliver multiple stories in a sprint.

T **Testable:** Your stories need to be testable, which means they must have defined acceptance criteria and any related test cases as defined in your product quality standards.

Phase 3

Build a Product Roadmap

Phase 1

1.1 Understand your product capabilities

1.2 Articulate your vision by building your product canvas

Phase 2

2.1 Define your backlog structure

2.2 Define your "intake" backlog process

2.3 Define your "analysis" backlog process

2.4 Define your "refinement" backlog process

Phase 3

3.1 Define your roadmap structure

3.2 Populate your roadmap

Phase 4

4.1 Turn your milestones into releases

4.2 Understand what you need to define your next release via the release canvas

Phase 5

5.1 Learn how to introduce your digital product strategy

5.2 Communicate changes on updates to your strategy

5.3 Determine your next steps

This phase will walk you through the following activities:

- Define the ownership, structure, and objectives of your roadmap.

- Understand the different ways you can visualize your roadmap including time horizons.

This phase involves the following participants:

- Product owners and product managers

- Application leaders

- Stakeholders

Deliver on Your Digital Product Vision

Think about how flexible you need to be in your long-term, detailed planning
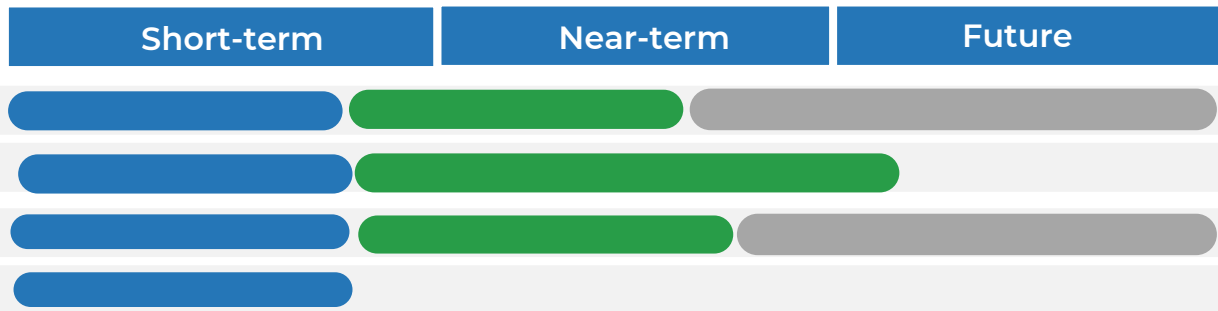
Short-term	Near-term	Future

In an ideal scenario:

A roadmap that illustrates detailed, committed, and long-term plans can be immensely valuable, allowing you to align your teams and stakeholders and to increase your ability to project costs, required skills, and delivery dates.

In reality, things change!

Your strategic intentions are subject to volatility, especially those planned within a further timeline. The more costs you incur in planning, the more you leave yourself exposed to inefficiency and waste if those plans change.

Short-term	Near-Term	Future

Strategy Change
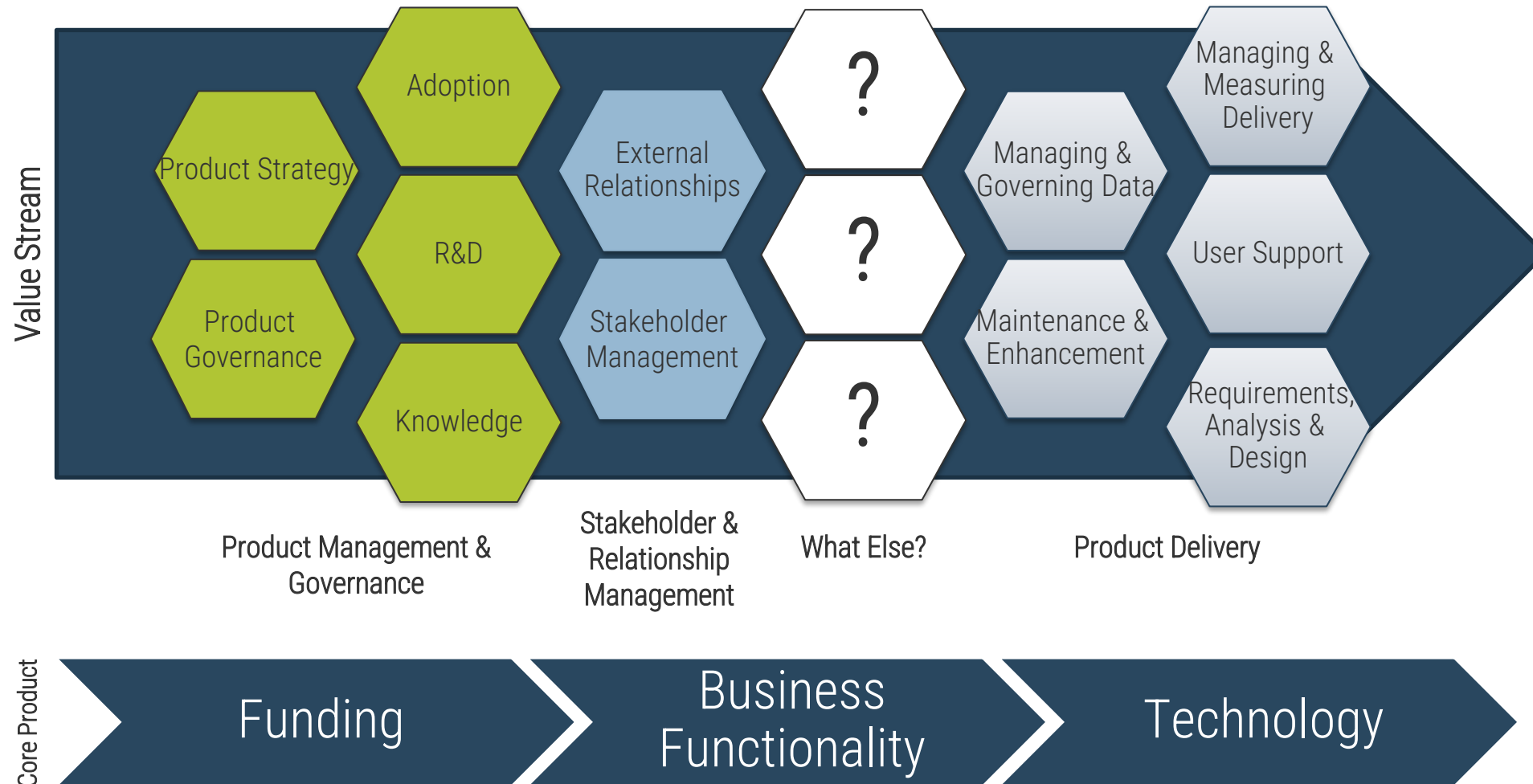
Market Volatility

Info-Tech Insight

A good roadmap is intended to manage and communicate the inevitable changes that are a result of market volatility and changes in strategy.

These variables will range from app to app or product to product. You will need to do some analysis to know which approach will garner the most value. **You will need to decide how flexible you need to be.**
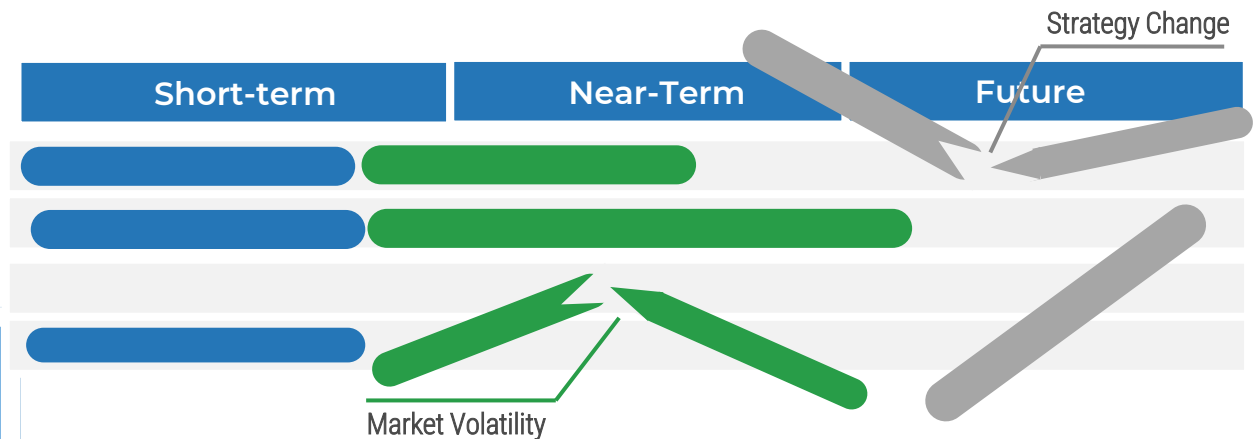
A product has multiple facets; your roadmap, or roadmaps, will need to address all of them

In *Transition to Product Delivery,* we identified the facets of a product. As a product owner, you are responsible for managing these facets through your capabilities and activities.

Multiple roadmap views can communicate differently, yet tell the same truth

Product managers and product owners have many responsibilities, and a roadmap can be a useful tool to complete those objectives through communication or the organization of tasks.

However, not all roadmaps address the correct audience and achieve those objectives. Care must be taken to align the view to the given audience.

	Portfolio	Product	Technology
Audience	**Business/ IT Leaders**	**Users/Customers**	**Delivery Teams**
Roadmap View	**Portfolio**	**Product**	**Technology**
Objectives	To provide a snapshot of the portfolio and priority apps	To visualize and validate product strategy	To coordinate and manage teams and show dev. progress
Artifacts	Line items or sections of the roadmap are made up of individual apps, and an artifact represents a disposition at its highest level.	Artifacts are generally grouped by various product teams and consist of strategic goals and the features that realize those goals.	Artifacts are grouped by the teams who deliver that work and consist of features and technical enablers that support those features.

Pie chart segments: Manage product backlog, Get consensus on product direction, Communicate milestones and releases, Plan and prioritize, Communicate a strategy

Your ideal roadmap approach is a spectrum, not a choice

You can pinpoint where your focus should lean while still providing the appropriate and necessary information your different audiences require.

TACTICAL

A roadmap that is *technical, committed, and detailed*

An internal, non-critical app is being retired.

An ERP expects some feature additions over the next few years.

A group of apps linked by one LoB needs the latest technological advancements.

A web-based, customer-facing product has a constantly evolving customer journey.

STRATEGIC

A roadmap that is *strategic, goal-based, high-level, and*

Stories and Tasks   Features   Epics and Capabilities

"Product Managers do not have to choose between being tactical or strategic ."

— Aha!, 2015

Phase 4

Release and Deliver Value

Phase 1

1.1 Understand your product capabilities

1.2 Articulate your vision by building your product canvas

Phase 2

2.1 Define your backlog structure

2.2 Define your "intake" backlog process

2.3 Define your "analysis" backlog process

2.4 Define your "refinement" backlog process

Phase 3

3.1 Define your roadmap structure

3.2 Populate your roadmap

Phase 4

4.1 Turn your milestones into releases

4.2 Understand what you need to define your next release via the release canvas

Phase 5

5.1 Learn how to introduce your digital product strategy

5.2 Communicate changes on updates to your strategy

5.3 Determine your next steps

This phase will walk you through the following activities:

- Based on your roadmap, break down your existing milestones into potential releases.

- Lay out your plans for your next release using the release canvas.

This phase involves the following participants:

- Product owners and product managers

- Application leaders

- Stakeholders

- Scrum masters or project managers

Deliver on Your Digital Product Vision

Remember: Product delivery is about smaller steps vs. one big one

Product development is inherently uncertain, given the amount of time and decision making that is needed during the analysis, planning, and delivery of one of your requests. This uncertainty often conflicts with the needs and desires of your stakeholders, becomes irrelevant with end users, does not accommodate the system changes from deployed systems, and is at risk of losing confidence beyond the initial delivery of changes.
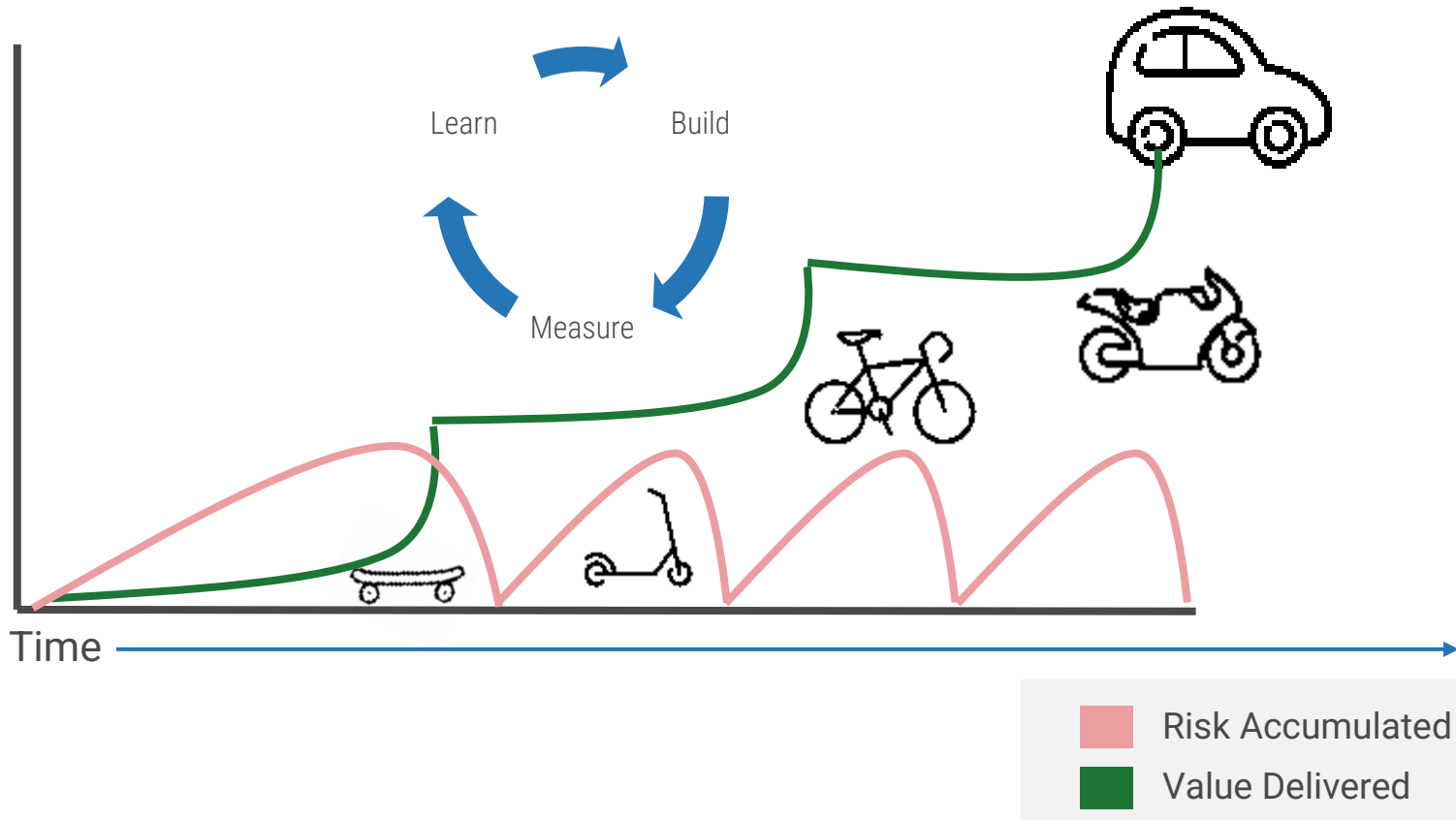
Apply cadence and synchronization to your iterations with periodic cross-domain release and sprint planning. *Cadence* is a rhythmic pattern of events that provides the steady heartbeat of the development process. It makes routine everything that can be routine, so developers can focus on managing the variable part of the solution department. *Synchronization* allows multiple solution perspectives to be understood, resolved, and integrated at the same time (Scaled Agile, Inc., 2019).

Consult your team and other relevant IT stakeholders (e.g. deployment teams, infrastructure) to discuss how your iterations will fit within your existing release calendar and deployment windows. Once your iterations are set, work together to increase the number of release windows so that completed product features can be deployed to production. See Info-Tech's *Take a Holistic View to Optimize Release Management* blueprint for more information.

Including minimum-viable products (MVPs) in your roadmap is the key to product success

By delivering the product in smaller iterations, teams recognize value sooner and reduce accumulated risk. Both are realized as the iteration enters validation testing and release.

An MVP is a piece of value that is delivered using the minimum possible effort, but provides the maximum amount of learning.

The **build-measure-learn** loop suggests development should perpetually take an idea and develop, test, and validate it, and then expand on the product using the lessons learned and evolving ideas. In this sense the MVP is just the first product in the loop.

Having your MVP represented by a milestone helps teams, the business, and customers rally around the key decision-making events in the product release cycle.

Learn   Build

Measure

Time

Risk Accumulated

Value Delivered

Adapted From: "Managing the Development of Large Software Systems"

Measure beyond the iteration

For certain groups, looking at a roadmap does not give a detailed enough view of where you are relative to the current goal.

Targeting Release 2.0 MVP
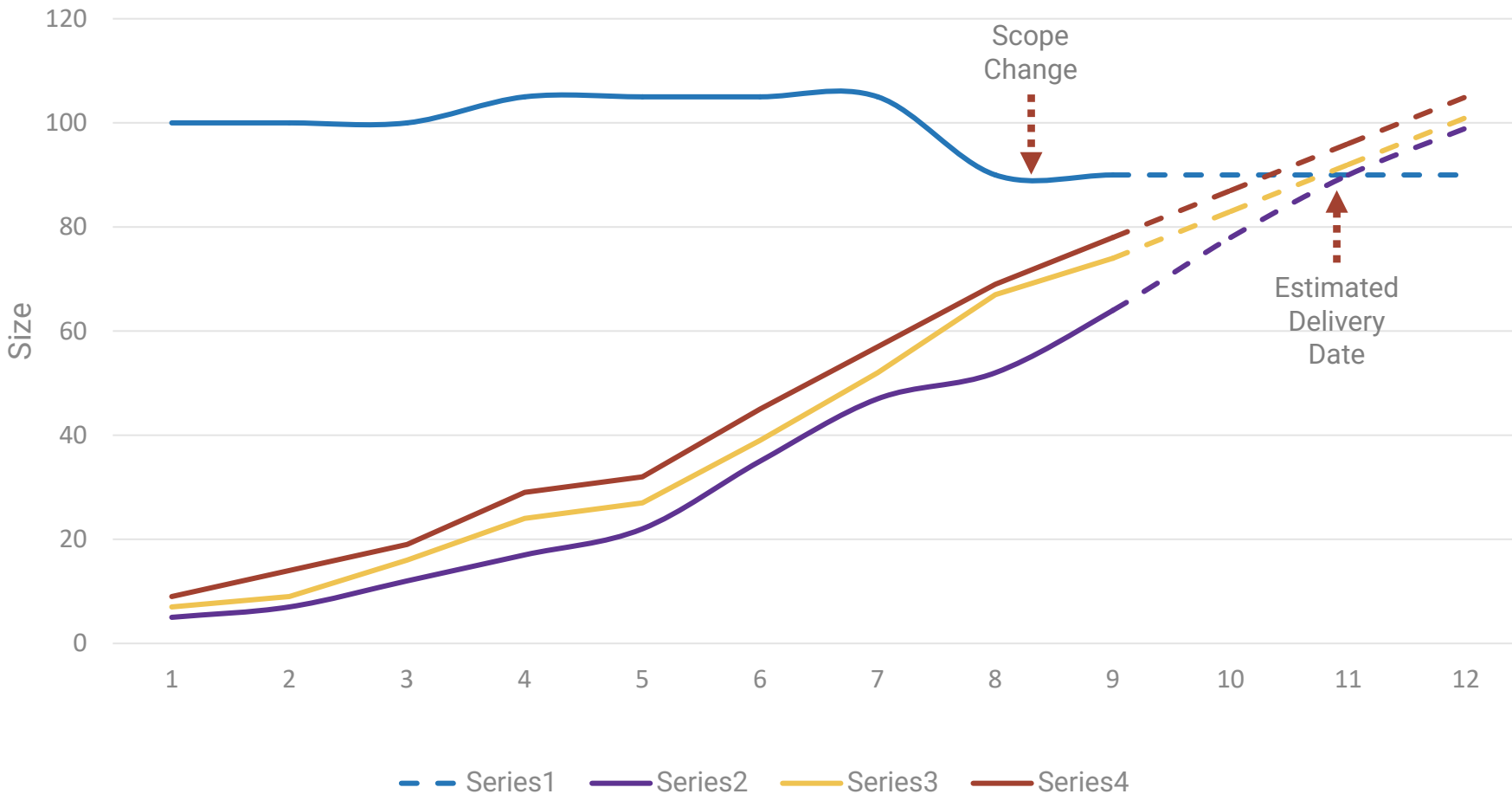
A burn-up chart (sometimes called a cumulative flow diagram) provides a simple way to represent to stakeholders how a release is trending vs. the given scope.

In addition, you can quickly articulate the impact of any scope changes that will (always) occur throughout the development lifecycle.
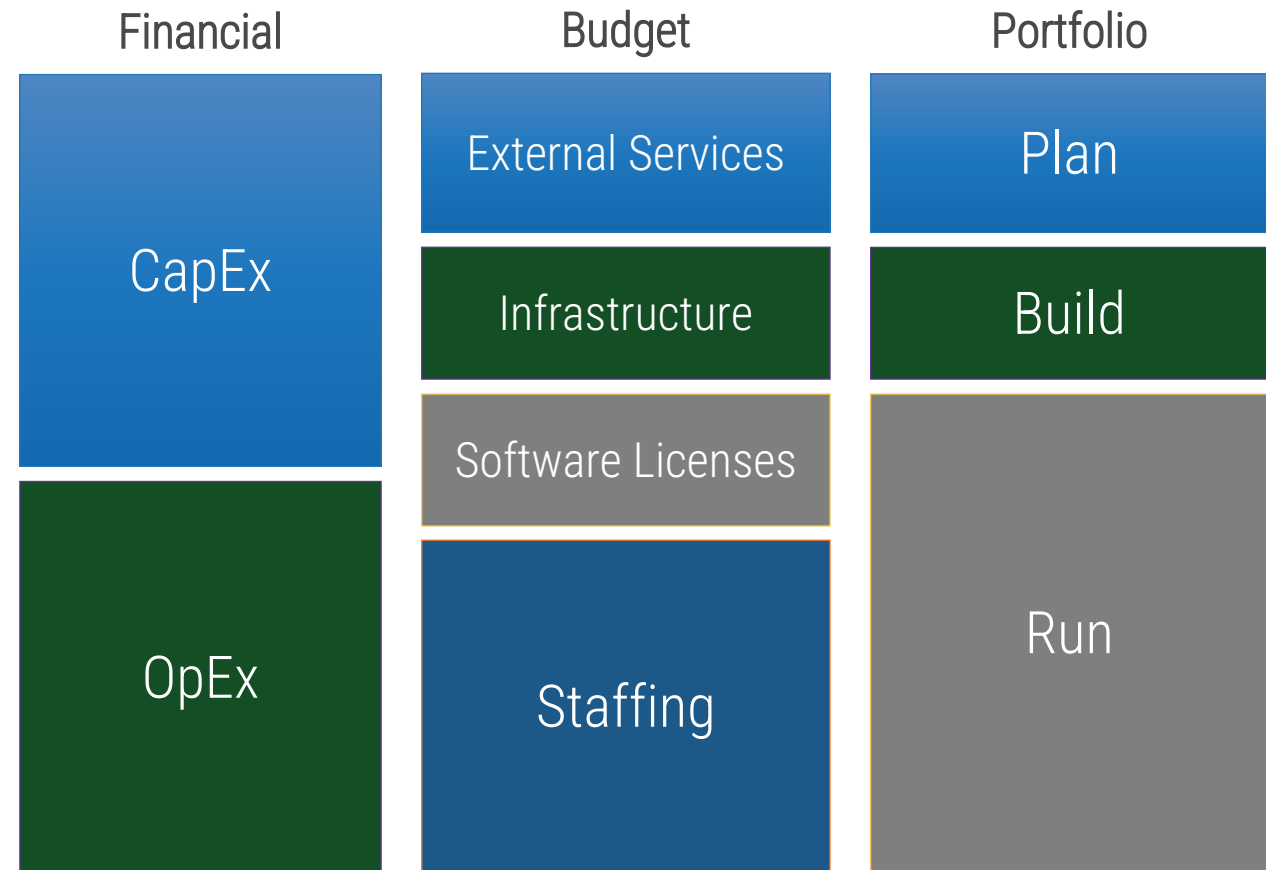
Most IT funding depends on one-time expenditures or capital-funding mechanisms that are based on building construction-funding models predicated on a life expectancy of 20 years or more.

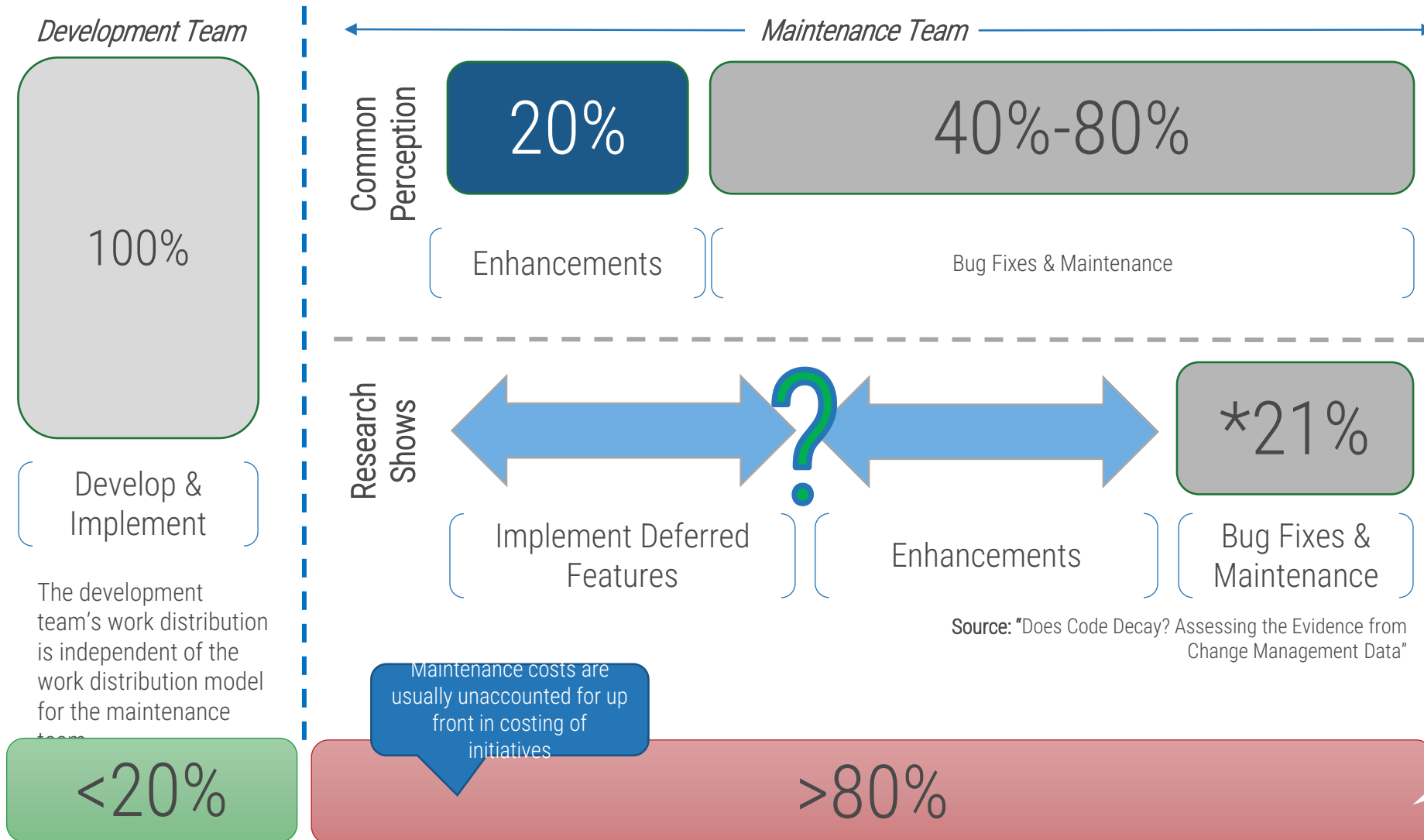*Such models don't provide the stability or flexibility needed for modern IT investments.*

– "Aligning IT Funding Models to the Pace of Technology Change"

Why is calculating costs so problematic?

Traditional budgetary models fragment the cost of a product and divorce it from benefits realization.

Financial	Budget	Portfolio
CapEx	External Services	Plan
	Infrastructure	Build
	Software Licenses	
OpEx	Staffing	Run

These models require increasing accuracy throughout the project lifecycle to manage actuals vs. estimates.

Your strategy must include the cost to build and operate

Most investment happens after go-live, not in the initial build.

Development Team

Maintenance Team

Common Perception

100%	20%	40%-80%

Enhancements   Bug Fixes & Maintenance

Research Shows

? *21%

Develop & Implement

Implement Deferred Features   Enhancements   Bug Fixes & Maintenance

The development team's work distribution is independent of the work distribution model for the maintenance team

Source: "Does Code Decay? Assessing the Evidence from Change Management Data"

Maintenance costs are usually unaccouted for up front in costing of initiatives

<20%   >80%

Adapted from: "Software Maintenance: Understanding and Estimating Costs"

Info-Tech Insight

While the exact balance point between development or implementation costs varies from application to application, over 80% of the cost is accrued after go-live.

Phase 5

Communicate the Strategy – Make It Happen!

Phase 1

1.1 Understand your product capabilities

1.2 Articulate your vision by building your product canvas

Phase 2

2.1 Define your backlog structure

2.2 Define your "intake" backlog process

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4.2 Understand what you need to define your next release via the release canvas

Phase 5

5.1 Learn how to introduce your digital product strategy

5.2 Communicate changes on updates to your strategy

5.3 Determine your next steps

This phase will walk you through the following activities:

- Understand the importance of effective communication. Build an "executive summary" of your product vision to present to stakeholders

- Determine what you need to do to communicate updates for your roadmaps

- Lay out your next steps for delivering on your digital product vision

This phase involves the following participants:

- Product owners and product managers

- Application leaders

- Stakeholders

Deliver on Your Digital Product Vision

Example: Summarize your product strategy

VISION
We believe in an organization where people from any walk of life can have access to quick, efficient advice and assistance with no financial burden on them.

GOALS
- Improve resolution time by 50%
- Double our service offerings to cover more customer use cases
- Increase the usage rate of self-service by 75%
- Improve CSAT scores by 25%

BUSINESS VALUE
- Expansion of service to a wider audience
- Long-term reduction of costs due to increased self-service usage
- Increase in revenue due to improved CSAT, outcomes, and resulting retention

WHO IS IMPACTED
- Customer success leadership and managers
- Architecture, Development leadership
- Infrastructure management

OUR ASK FOR HELP
Be a partner with us to ensure we are serving our customers well, not missing any use cases, and being that sobering voice whether we are achieving our goals or not.

How we engage with the message is just as important as the message itself

Why are we here?

Speak to what matters to them

Sell the improvement

Show real value

Discuss potential fears

Ask for their support

Be gracious

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Kieran is an IT professional with 24 years of experience focused on business, technology, and systems analysis. He has split his career between external and internal customer-facing roles, resulting in a true understanding of what is required to be a Professional Services Consultant. His problem-solving skills and ability to mentor others have resulted in successful software implementations.

Kieran's specialties include deep-system troubleshooting and analysis, facilitating communications to bring together participants effectively, mentoring, leadership, and organizational skills.

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Rupert is an experienced senior leader with a passion for defining and delivering products that deliver real customer and commercial benefits. Together with a team of highly experienced and motivated product managers, he has successfully led highly complex, multi-stakeholder payments initiatives, from proposition development and solution design through to market delivery. His team's domain of experience is in building online payment products in high-risk and emerging markets, remittance, prepaid cards, and mobile applications.

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Hans Eckman is a keynote speaker on the topic of product-based delivery. He served as Group Vice President at SunTrust Bank, where he helped develop programs and products that drove innovation, process improvement, and quality teammate engagement across the enterprise and helped establish three different Centers of Excellence. Hans helped Blueprint Software Solutions productize their professional services offerings and created operational playbooks for clients.

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Mike Starkey is a Director of Engineering at W.W. Grainger, currently focusing on operating model development, digital architecture, and building enterprise software. Prior to joining W.W. Grainger, Mike held a variety of technology consulting roles throughout the system delivery lifecycle spanning multiple industries such as healthcare, retail, manufacturing, and utilities with Fortune 500 companies.

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With over ten years of experience in both the private and public sectors, Vincent possesses an impressive track record of improving, informing, and transforming business strategy and operations through process improvement, design and re-engineering, the application of quality to business analysis, project management, and process improvement standards.

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Saeed has been working in high-tech for 30 years in both Canada and the US and has held a number of leadership roles in Product Management during that time. He speaks regularly at conferences, and has been writing publicly about technology product management since 2005.

Through Transformation Labs, Saeed helps companies accelerate product success by working with product teams to improve their skills, practices, and processes. He is a co-founder of ProductCamp Toronto and currently runs a Meetup group and global Slack community called Product Leaders; the only global community of senior level product executives.

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Jeff Meister is a technology advisor and product leader. He has more than 20 years of experience building and operating software products and the teams that build them. He has built products across a wide range of industries, and has built and led large engineering, design, and product organizations.

Jeff most recently served as Senior Director of Product Management at Avanade, where he built and led the product management practice. This involved hiring and leading product managers, defining product management processes, solution shaping and engagement execution, and evangelizing the discipline through pitches, presentations, and speaking engagements.

Jeff holds a Bachelors of Applied Science (Electrical Engineering) and a Bachelors of Arts from the University of Waterloo, an MBA from INSEAD (Strategy), and certifications in product management, project management, and design thinking.

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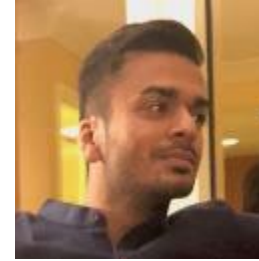
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Abhishek is a product management leader, an artificial intelligence practitioner, and an educator. He has led product management and engineering teams at Clarifai, IBM, and Kasisto, to build a variety of artificial intelligence applications within the space of computer vision, natural language processing, and recommendation systems. Abhishek enjoys having deep conversations about the future of technology, and helping aspiring product managers enter and accelerate their careers.

Related Info-Tech Research

Product and Agile Delivery

Deliver Digital Products at Scale
- Deliver value at the scale of your organization through defining enterprise product families.

Transition From Project to Product Delivery
- Maximize product value by breaking project silos.

Build a Better Product Owner
- Strengthen the product owner role in your organization by focusing on core capabilities and proper alignment.

Apply Design Thinking to Build Empathy With the Business
- Use design thinking and journey mapping to make IT the business' go-to problem solver.

Build Your Agile Acceleration Roadmap
- Quickly assess the state of your Agile readiness and plan your path forward to higher value realization.

Implement Agile Practices That Work
- Improve collaboration and transparency with the business to minimize project failure.

Implement DevOps Practices That Work
- Streamline business value delivery through the strategic adoption of DevOps practices.

Extend Agile Practices Beyond IT
- Further the benefits of Agile by extending a scaled Agile framework to the business.

Build Your BizDevOps Playbook
- Embrace a team sport culture built around continuous business-IT collaboration to deliver great products.

Spread Best Practices With an Agile Center of Excellence
- Facilitate ongoing alignment between Agile teams and the business with a set of targeted service offerings.

Enable Organization-Wide Collaboration by Scaling Agile
- Execute a disciplined approach to rolling out Agile methods in the organization.

Related Info-Tech Research

Value, Delivery Metrics, Estimation

Build a Value Measurement Framework
- Focus product delivery on business value-driven outcomes.

Select and Use SDLC Metrics Effectively
- Be careful what you ask for, because you will probably get it.

Application Portfolio Assessment: End User Feedback
- Develop data-driven insights to help you decide which applications to retire, upgrade, re-train on, or maintain to meet the demands of the business.

Create a Holistic IT Dashboard
- Mature your IT department by measuring what matters.

Refine Your Estimation Practices With Top-Down Allocations
- Don't let bad estimates ruin good work.

Estimate Software Delivery With Confidence
- Commit to achievable software releases by grounding realistic expectations.

Reduce Time to Consensus With an Accelerated Business Case
- Expand on the financial model to give your initiative momentum.

Optimize Project Intake, Approval, and Prioritization
- Deliver more projects by giving yourself the voice to say "no" or "not yet" to new projects.

Enhance PPM Dashboards and Reports
- Facilitate ongoing alignment between Agile teams and the business with a set of targeted service offerings.

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