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PROJECT PRIORITIZATION CRITERIA

The Foundation of a Great Portfolio

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CONTENT

3 reasons to align projects with strategy

Project prioritization is not just about budgeting. It's about project success rates. It's about saving money.It's about business impact.

Prioritizing and selecting projects that are aligned with strategy is, however, trickier than it seems. In fact, the decision-science-based method used by TransparentChoice is one of only two methods that have been academically shown to be valid.

So, how do you prioritize your projects? Is your portfolio really aligned with strategy?

57%

Projects that are aligned to strategy are **57% more likely to achieve their stated business goals.** Investing in picking the right projects, therefore, is a really quick way to add more business value.

50%

Projects that are aligned with strategy **are 50% more likely to finish on time.** This is not just about the PMO's score-card looking good. Delaying the business benefit represents a real cost to the business.

45%

Projects that are aligned to strategy are **45% more likely to be completed within budget.** Picking the right projects is, therefore, an exercise in direct cost reduction...let's go tell the CFO!

Source - The impact of PMOs on strategy implementation, PMI Pulse of Profession

Overview

When thinking about project prioritization, many people start with the question, **"What criteria should I use?"** This book will help you answer that question.

First, we will look at why criteria matter. We will then look at how to identify the criteria that matter for your business. We will also look at how to use those criteria to prioritize projects.

Finally, we have included a list of 80+ criteria to give you some inspiration.

The core of this book is based on decision-science. In fact, this book was co-written by award-winning decision-making researcher, Roberto Camanho. Roberto has helped over 100 different organizations around the world prioritize their projects and, through this book, we hope he will help you too!

Watchout for this graphic ▶

it means that we have a free resource for you to download

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Why is prioritization important?

To answer this question, let's look at what happens when prioritization is not clear:

- Every project becomes "top priority" which makes for difficult resource allocation decisions.
- Projects don't support the strategic drivers of your organization. That's waste!
- Projects get priority if they are championed by an influential person within the organisation. These are not necessarily the most important projects.
- If projects aren't aligned to strategic direction, executive sponsorship quickly falls off. This contributes to higher project failure rates.

Poor project prioritization and selection ultimately leads to poor execution of projects and reduces the strategic performance of the business.

Some statistics to consider

20% of projects are "the wrong ones"

50% of projects are not resourced properly

61% of executives struggle to translate strategy to execution

90% executives fail to meet their goals

80% of performance difference explained by strategic alignment

Source -
The impact of strategic alignment on the performance of public organisations, Brunel University London
Closing the Gap: Designing and Delivering a Strategy that Work, Brightline Initiative
The impact of PMOs on strategy implementation, PMI Pulse of Profession

QUICK Case Study

ENERGINET.DK

If just one small decision can have such an impact, imagine what a hundred would do. Or even a thousand.

Who

- National power-grid operator in Denmark
- $1.6 bn in revenues
- 5 million end customers

The Problem

- Project portfolio not aligned to corporate strategy
- 30% of projects are obsolete
- 80% of projects tagged as “top priority”, making resource allocation difficult

Solution & results

- TransparentChoice helps executives explicitly define corporate priorities
- Priorities used to drive project selection
- Obsolete projects reduced from 30% to 0%
- Every project now aligned with specific strategic goals or operational targets

> Improving this one decision has increased value-delivered to the business by millions of Euros.
> - **Director Strategic IT, Energinet**

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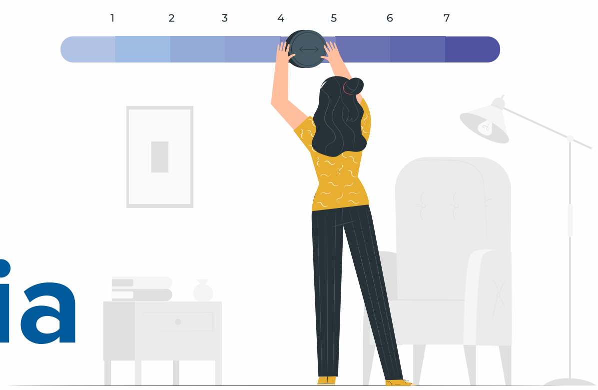

Why do we need criteria

To score projects

Criteria help you evaluate and select the right projects.

To see which projects are more valuable

Working with the right criteria helps you eliminate waste

To get executives aligned

Criteria helps align stakeholders throughout the organisation: it gives people the same language in the same framework.

To make the process transparent and rational and to speed up decision making cycles

Using criteria to prioritize

When picking your project portfolio, you are usually trying to maximize the "value delivered" given your constraints (budget, people, etc.) and the dependencies between projects.

However, it's impossible to maximize value if you don't have a good definition of what value means.
That's where criteria come in.

STEP 1
Use criteria to define value

STEP 2
Collect project demand / requests

STEP 3
Evaluate & score against criteria

STEP 4
Use advanced analytical outputs to prioritize

STEP 5
Optimize the project portfolio and resources

Criteria: The Missing Link

Criteria are the mechanism that lets the executive team discuss and agree a definition of value, but decision scientists have some bad news.

They are concerned with how organizations make decisions. They want to know how to make decisions better, and they have discovered something alarming;

> Managers fail to identify around 50% of the important criteria when making decisions.

Elegant experiments using real decision makers found that, on their own, decision makers usually identified around half of the criteria that they later said were important. Only when the same people are shown a longer list of potential criteria, are they able to quickly identify the missing 50% of criteria.

Just as startling, on their own, decision makers only identify around 60% of the 10 most important criteria. In other words, they missed 4 out of 10.

> That's why we have created a long list of potential criteria, to fuel your creativity, to stimulate your brainstorming.

Before you think about criteria

You might think that all those projects you manage are one portfolio. Well, this may, or may not, be true. You may, in fact, have multiple sub-portfolios.

For the purposes of "prioritization," a "sub-portfolio" is defined as a group of projects that share the same intent - they are projects for which you can use the same criteria.

For example, you might have an engineering team that delivers two groups of projects - one group are small "maintenance" projects and the other group are "large capital" projects.

You can't use the same criteria to evaluate maintenance and capital projects because the "goals" of those two portfolios is different.

Another way people will often segregate their portfolio is;

Run the business - projects that help you run your current business more efficiently.
Grow the business - projects that help you grow your current business.
Transform the business - projects that are real game-changers (and which may carry more risk).

You can still use one team to deliver these different sub-portfolios, but the criteria you use to select them will be different.

Now that you know what portfolio you are working towards, next question to answer is who should define criteria.

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Who should define criteria?

Ideally it should be the executives, the visionaries who define the strategies for the organisation.

But!!!

Are your executives well aligned?

Do they agree on what the strategy and criteria should be?

The answer is probably NO

Different executives have different ideas about what the criteria should be. Even if they have same criteria, interpretation of those criteria may be different.

For example: If strategic alignment is a criterion, to me it may mean growing sales and to you it could be reducing costs.

We are talking about the same criterion, but it means different things to both of us.

So even before deciding which criteria are important, take the time to define what each criterion means and why its important (see page 12).

 # Top Tip

Use Criteria as a language to align the conversation throughout the organisation, not just at the top level.

Use criteria to score projects

1

Define the criteria
- What are our needs?
- What are our objectives?
- What are our opportunities?

2

Weight the criteria
Once you have defined the criteria, you have to weight them based on their importance. Not all criteria can have the same weight.

Weighting the criteria is an important step as this is where you get your stakeholders onto the same page.

3

Score projects
Once you have weighted the criteria you use them to score your projects.

Weighting criteria should be done using AHP (Analytic Hierarchy Process) Click here to learn more

What does a good criterion look like?

We use criteria to measure the attractiveness of each project. The criteria need to reflect what's valuable. These 4 rules will help you create useful criteria.

1. **Does it help you discriminate between projects that add value and the projects that don't add value?**
2. **It has a short and clear description (3 lines)**
3. **It includes a statement of why it matters**
4. **It has a clear scale that allows you to measure the contribution of the project against criteria**

Example of a bad criterion:

When choosing a car, "Number of wheels" is not a good criterion. All cars have 4 wheels (excluding the Bond Bug and a few other oddities) so "Number of wheels" doesn't help you discriminate between cars.

Download this template to capture your criteria

What is NOT a Criterion?

Many people think of cost as a criterion, but it's not - it's a constraint. A lower cost does not increase the value that a project will deliver - but it does change both value-for-money and the amount of budget used.

For example

Common constraints include:
• Budget
• Time
• Skills
• Resources

Other non-criterion factors mean that you will automatically do (or not do) a particular project. These are not criteria, they are "gating factors".

Common gating factors include:
• Safety impact
• Compliance / legal requirement

For example:

You have a project that is required by law. You **have** to do the project so you don't need to evaluate it against your criteria - you simply select and sequence it in the most efficient way.

Are Criteria Universal

NO

You cannot just copy-paste criteria from the internet and use them to prioritize projects.

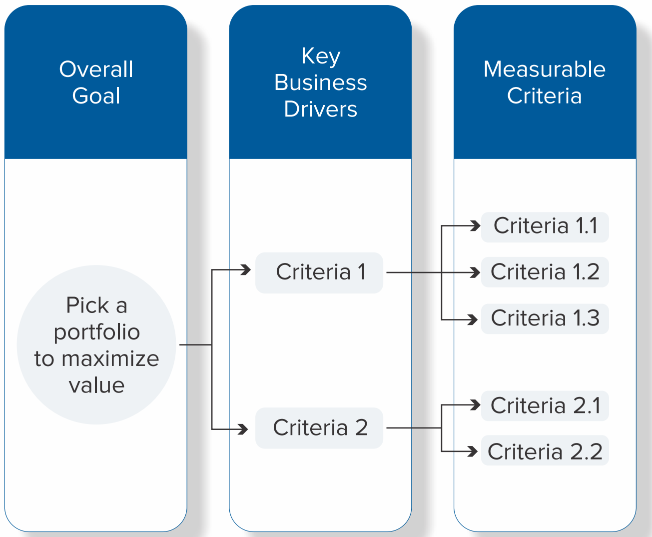
Every organization's goals and drivers are different, and this means that they need different criteria.

So your criteria list should reflect **your** strategy and be aligned with **your goals.**

How many criteria should I use?

The sweetspot for the top-level criteria is 4 or 5. Getting your list down to this number will help you really focus on what's important.

Of course, these top-level criteria are often a little too "high-level" to measure so you can break them down into 2 or 3 sub-criteria. These sub-criteria make it easier to "measure" or "score" your projects against something specific.



Decision scientists say that the absolute maximum criteria you should use for any decision is 9, but 4-5 is better. The discussion to get to 4-5 criteria helps everyone focus on what's really important.

The span of absolute judgment and the span of immediate memory impose severe limitations on the amount of information that we are able to receive, process, and remember. By organizing the stimulus input simultaneously into several dimensions and successively into a sequence of chunks, we manage to break (or at least stretch) this informational bottleneck. **- Harvard University Research**

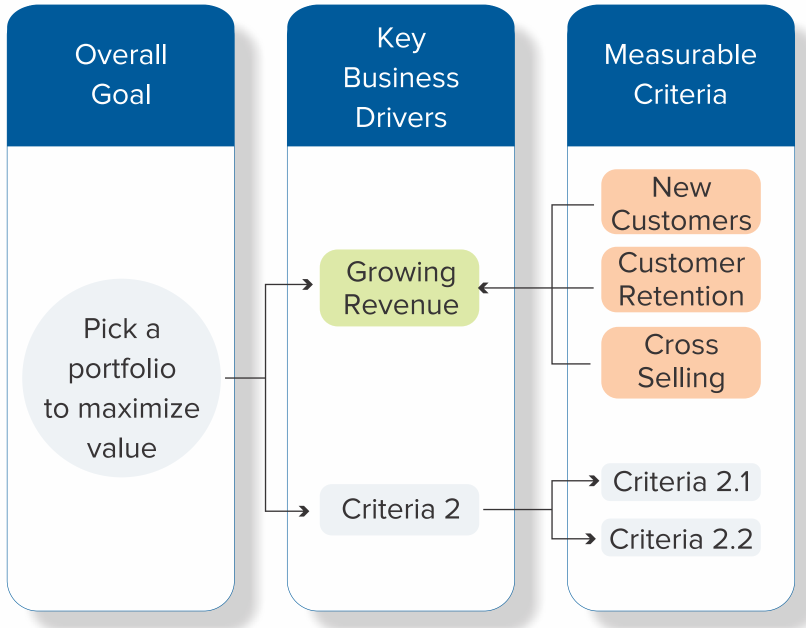
Source-
The Magical Number Seven, Plus or Minus Two
Some Limits on Our Capacity for Processing Information
- George A. Miller, Harvard University

Your criterion hierarchy is not just useful for evaluating projects, it's also a common language that people can use to think and talk about the business every day.Top-level criteria will typically reflect a business goal like "Reduce costs" or "Reduce risk". The sub-criteria add a little more specific detail. This not only helps evaluate projects, but can also help identify the key business-drivers that people can take action on day-to-day.

For example:

“Growing revenue" could be made up of "Win new customers," "Improve customer retention," and "Cross selling". We can use these sub-criteria to score projects.

This "roadmap" can also help teams focus on what's important in their day-to-day activities: "Am I working on things that contribute to one or more of these goals?"



Balanced and independent criteria

You must be cautious that the criteria are **not dependent** on each other and that the **hierarchy is balanced.**

Consider this example - my goal is to **increase online customer acquisition**

I might write down sub-criteria of;
- Increase website traffic
- Increase the number of sign-ups

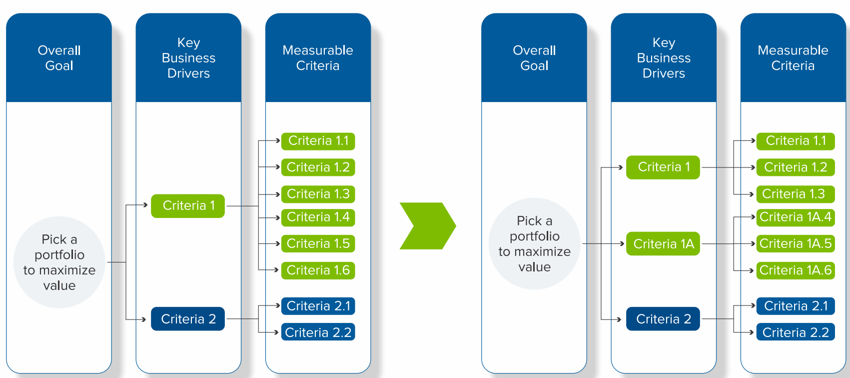
But more traffic leads to more sign ups, so these are not independent criteria.

Having broken it down a little further, **independent** criteria might be;
- Increase website traffic
- Improve conversion rate

As you structure your criteria you want to make sure that the hierarchy is balanced.

For example

There are good "decision science" reasons why we want to balance the hierarchy. It would probably take us another short e-book to explain these reasons, but the rule-of-thumb is simple enough - keep your hierarchy as balanced as possible. Of course, you may not be able to balance it perfectly, but try to avoid big differences in the number of bottom-level criteria.



The green criteria has 6 sub criteria and the blue criteria has 2. This means they are not symmetrical and hence not balanced. So best practice is to split the top level criterion into two. Each top level criterion now has two or three sub-criteria.
Balance is restored!.

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How do you come up with your unique list of criteria?

Here are a few techniques you can use to identify your unique list of criteria;

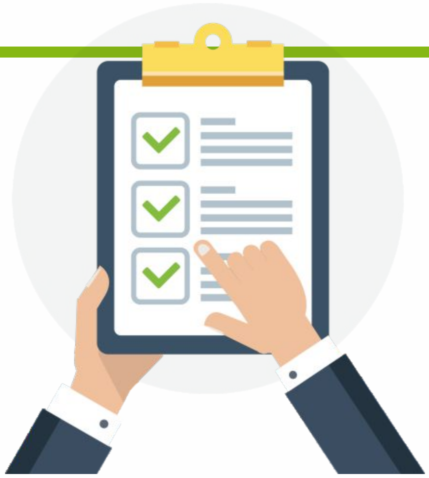
• Use balance score card as a reference to create criteria
A balance score card is a good starting point when looking for criteria. This should tell you which business drivers matter to the organization. Your task is to find the handful that matter most.

• Project review
Another excellent way to find criteria is to pick a handful of your current projects and ask;

- What are the "pros" of this project – the good points /benefits of doing the project?
- What are the "cons" of this project – the down-side of doing the project?
- What are the stated business goals for this project?

If you look across a number of projects, you are likley to find a number of answers to these questions popping up a few times – chances are that these would make good criteria. For example, if one project has as a "pro" that it would reduce the number of integration points between your business applications and another project has a "con" that it would increase the number of integrations points... well, integration points could well be a criterion.

Getting stakeholder input is important!



Research shows that stakeholders do a much better job of identifying the important criteria if they see a list of "possible criteria". You can use this idea to improve the quality of your list and to win buy-in from stakeholders.
Here's how:

1) Ask your stakeholders some nice open questions to get their ideas

2) Next, show them the list that you prepared based on KPIs and project reviews and see if it sparks any other thoughts.

3) Capture their feedback and then structure your criteria into a nice heirarchy ready for weighting!

Criteria Weighting

Well, you've come up with a really great list of criteria - congratulations!

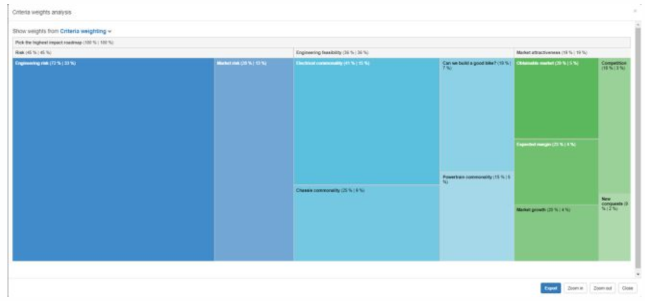
But that's just the start because your criteria are not all equally important. In fact, your stakeholders are quite likely to weight different criteria in different ways. Your VP of Sales, for example, has very different goals and perspective to the VP of Manufacturing.

It's a mess and the most common ways out of this mess simply don't work.

The way most people tackle criteria weighting is to call a meeting, write the criteria on a whiteboard and ask "What weight shall I put on Criterion 1?" The most senior person in the room will then lean back, appear to think for a few seconds and then declare, "The weight on that criterion should be 23.7%!"

There are two problems with this. First, psychologists have shown how that number, 23.7%, is pretty much meaningless. It was plucked out of the air - more accurately, it was plucked out of some biased subconscious process.

Second, everyone else in the room is no longer thinking about what the criteria weight should be. No, they are trying to decide whether or not they want to take on their boss...



You can see AHP in practice by clicking here

The result of this is that everyone - with the possible exception of that senior person - leaves the room "knowing" that the criteria weighting model is absolutely wrong. Any charts you now present based on that model will be ignored.

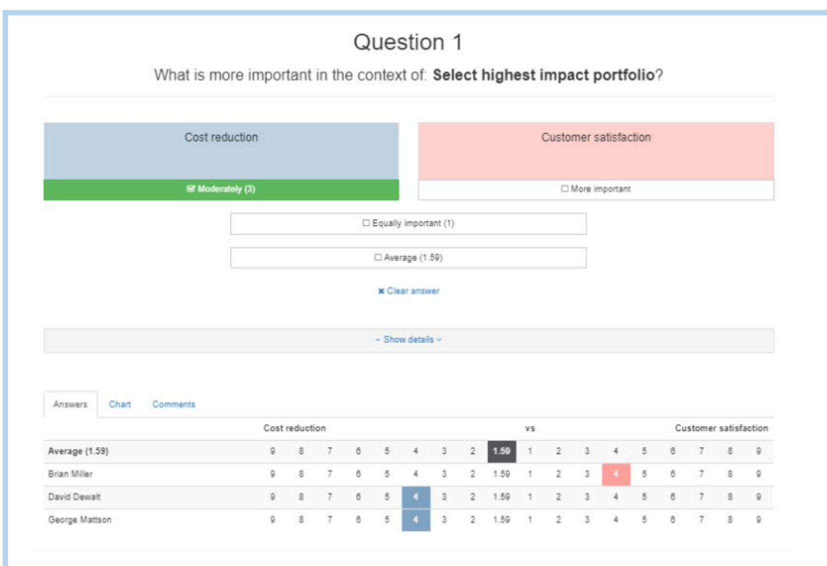
There's really no point going on with this prioritization process.

Except, no, wait!

This is the point that Decision Science steps in. Researchers have looked at over 100 different methods of prioritizing projects and have discovered that only 2 methods are suitable. The most common of those is called AHP (the analytic hierarchy process - sounds scary but isn't).

AHP solves this "weighting problem" by structuring the discussion in a way that reduces bias and increases buy-in.

The rule is simple;
always use AHP to weight your criteria



Learn about AHP

Why pairwise comparison?

AHP uses pairwise caparison to structure the discussion. This means that your stakeholders are asked to look at a pair of criteria and to say which one is more important (and by how much).
This is done as a team, so you can see differences in opinion. The discussion around these differences usually helps your stakeholders to develop real alignment around your criteria and to agree on which ones are more important.

- Reduces bias
- Collaboration gets the executive team on the same page
- Strong buy-in to the model = Commitment to action

Click here to learn why is AHP different

Within the project portfolio, your new weighted criteria can even be used to run ideation challenges:

"Hey everyone, increasing customer satisfaction is our number 1 priority – please come to this webpage and suggest projects that would increase customer sat!"

Using criteria is not just about the project prioritization decision making.

These criteria represent your organisations strategic goals and this can be really useful context for anyone making decisions lower in the organization.

AHP is “The One” for aligning projects to strategy

In 2017, researchers evaluated over 100 project prioritization methods.

100+ methodologies reviewed

Only 2 are “suitable” – AHP is easier to use

TransparentChoice uses AHP

SO - best practice = AHP, end of debate

280 *Int. J. Management and Decision Making, Vol. 16, No. 3, 2017*

A systematic comparison of multi-criteria decision making methods for the improvement of project portfolio management in complex organisations

Darius Danesh*, Michael J. Ryan and Alireza Abbasi
School of Engineering and Information Technology,
University of New South Wales (UNSW),

How to measure?

Once you've defined and weighted your criteria, you need a way of measuring how projects contribute to that criteria, or what impact they have on it, and that's where the scales come in.

The following three rules-of-thumb will help you score projects in a way that is both consistent and that helps you better differentiate between projects.

Most people will initially come up with a "1-4" scale or something, but your scales should always start with a "0".

The reason for this is that you're asking the question, "What contribution does Project X make to Criterion Y?" and often the answer will be "No contribution at all!" - that's why a "0" matters.

Download this criterion / scale template

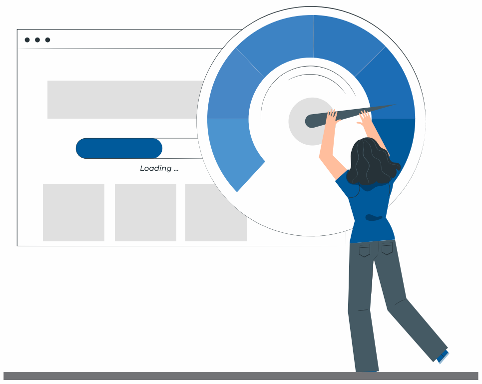
The next important part of designing a scale is to ensure it has 5-7 "levels". Most people think in terms of T-shirt sizes (small, medium and large). This is both familiar and natural but it simply doesn't let you differentiate between projects… so make sure you have at least 5-7 levels on your scale.

Finally, make sure your scale is specific. For example, if you have a level on your scale called "Major impact", describe what "Major impact" means and be as specific as possible. You might say, "Major impact means a reduction of waste of between 20% and 30%".

Example of rating scale

Scale Level	Value	Definition
Does not Contribute	0%	The project does not contribute to the criterion
Little	25%	The project has little contribution to the criterion
Moderate	50%	The project has a moderate contribution to the criterion
Good	75%	The project has a good contribution to the criterion
Great	100%	The project has an excellent contribution to the criterion

Optimize and balance the portfolio



Now that you have scored your projects, the next step is to optimize and balance the portfolio.

The task is simple - figure out how to deliver the maximum value within the budget and other constraints we have. To do this, we can combine our lovely new score for each project and divide it by the "cost".

This will give you "value-for-money" and you can use value for money to make a first-cut at your "ideal portfolio." Simply rank projects by value-for-money and start selecting projects from the top until you run out of resources / money.

Drag a column header and drop it here to group by that column

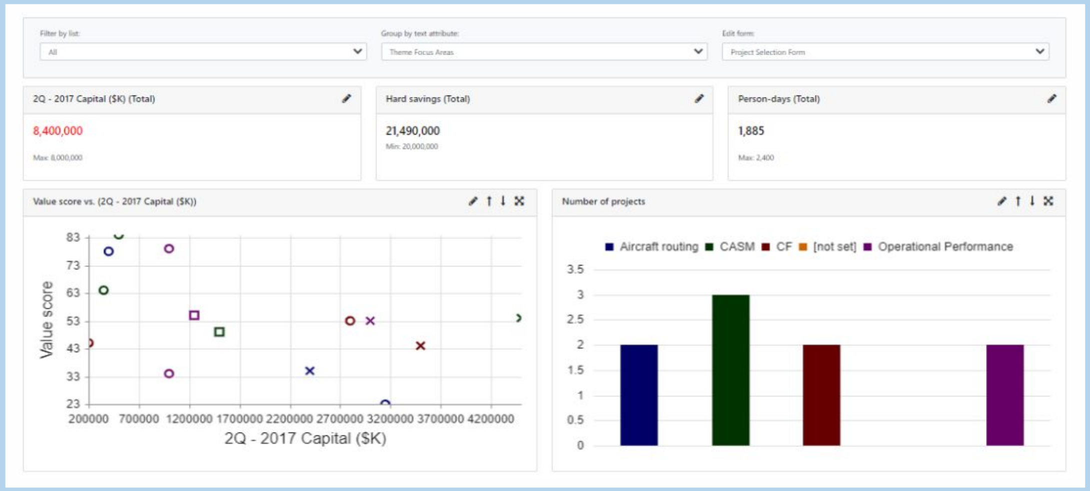
	Name	Status	2Q - 2017 Capit...	Value for money
Edit	Pre-flight check-list autom...	Approved	200,000	24.765
Edit	Stress crack testing upgrade	Approved	350,000	19.167
Edit	Air traffic control integration	Approved	400,000	18.821
Edit	Simulator relocation	Approved	500,000	16.547
Edit	Catering refit	Approved	1,000,000	7.771
Edit	Hold baggage robots	New requests	930,000	5.886
Edit	Underground refuel	Backlog	1,250,000	4.822

Demo Webinar
Why strategic alignment matters?

At the same time, it's a good idea to track budget, KPI's and resource constraints allowing you to find a balance between them.

This process turns the conversation into one that's data-driven rather than emotion- or power-based.

Of course, life is never simple and picking your final portfolio is rarely as simple as "start with the highest value for money and work down..." You might need to balance the portfolio, looking at how projects are spread across different teams, different organization or different skill-pools, etc.

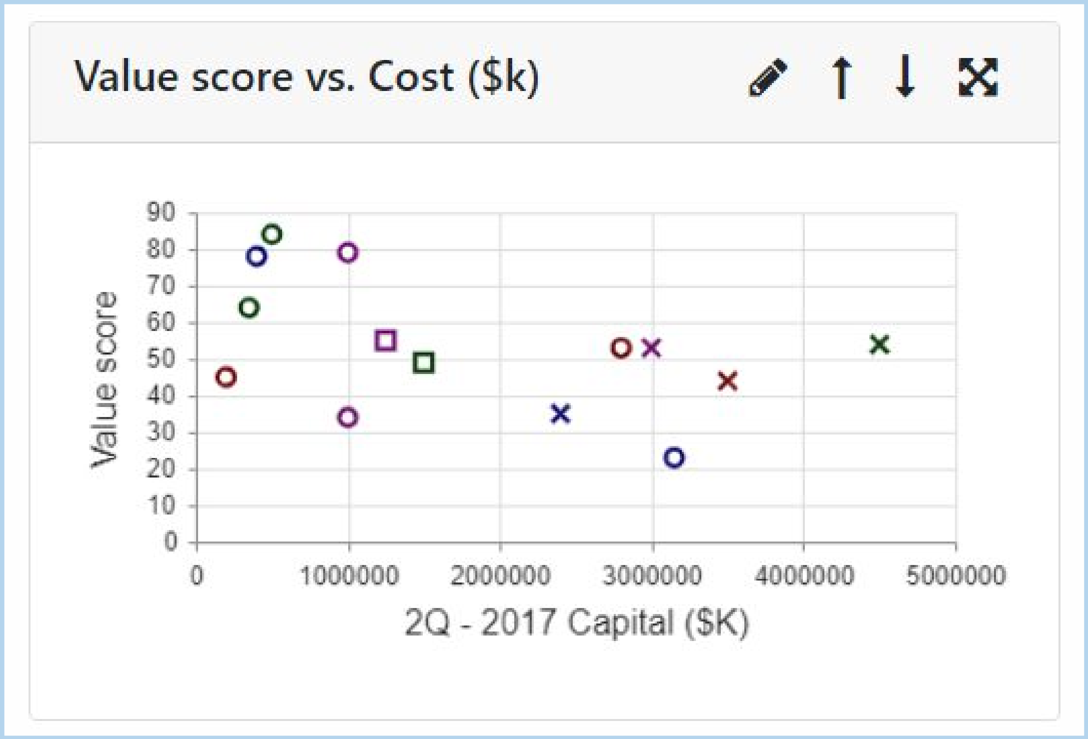


Here's a good question to ask when balancing your portfolio:

"Are we overloading any one particular team with too much change?"

While you go through the "balancing" discussion, and it is usually a discussion involving senior leaders, it's always good to keep a chart similar to this one handy. That way, when discussing a particular project, you have a visual representation of where this particular project sits in terms of value and cost.

This will help you avoid the "pet project" or "momentum project" traps.



Ultimately this leads to :

- Delivering high impact projects
- Good value for money
- Eliminating pet projects and making them visible
- Ensuring you have sufficient resources

Having this data in the project selection meeting can really help drive decision-making and commitment to action.

Software, like the project prioritization software from TransparentChoice, can really speed up project evaluation, scoring and selection, ensuring you have the information you need when you need it.

TransparentChoice makes this process easier

TransparentChoice online software helps you manage the whole process of selecting projects for your portfolio more effectively, saving time and money and increasing the value delivered to the organization from your portfolio.

Based on decades of academic research in both cognitive neuro- and decision-science, TransparentChoice delivers a rigorous decision process that improves both the quality of you decision and the level of buy-in.

- Collect Project Requests
- Define Value
- Evaluate Projects
- Prioritize Projects
- Balance & Optimize Portfolio

Click here to watch a demo

Golden Rules

Based on what we've done so far, we have six "**Golden Rules**".

1. Make sure you have a well-defined portfolio
2. Involve the right people and make sure that they are heard
3. Aim for 4 or 5 top-level criteria; never exceed 9.
4. Use AHP to weight criteria
5. Score your projects using a well-defined scale with at least 5 levels.
6. Balance your resources, maximize value.

This e-book is based on a webinar by award-winning decision-scientist, Roberto Camanho
Click here to watch the original webinar.

Click here to watch project prioritization criteria

Webinar by - Roberto Camanho

Checklist

Before you dive into our list of criteria, here are some reminders of what we've talked about and a few last tips to help you get started.

10 Questions to Improve Your Criteria List

1. **Pros and cons:** What are the pros and cons of each option?
2. **Ideal option:** What would be an ideal option? E.g. ideal project, ideal candidate, vendor, technology...
3. **Future:** What might be the consequences of good and/or bad selection?
4. **Stakeholders:** What would stakeholders (executives, customers, competitors...) be concerned about?
5. **Strategic alignment:** What are your organization's objectives?
6. **Constraints:** What are your constraints?
7. **Ask why:** For each criterion on your list, ask “why this is important?”
8. **Be specific:** For each criterion on the list specify exactly what it means.
9. **Google and social media:** It can be useful to do a quick online search, but remember, don't just copy-paste. Your business is unique!
10. Let us help: Schedule a call

80+ Criteria for Project Prioritization

This list might help you to think about what's important in **your** business.

Geographic Expansion

- Product readiness
- Organizational readiness
- Supports target customer segments
- Product fit
- Distribution and service fit

Transforms competitive positioning

- Defensible IP position
- Differentiation in product

Social sustainability

- Reduces environmental impact
- Contributes to equal opportunities
- Reduces carbon footprint
- Reduces landfill
- Improves employee perception
- Improves external stakeholder perception

Projects that are aligned to strategy are 57% more likely to achieve business goals.

Disclaimer:
This list is intended to help and is only the beginning...not a silver bullet!
Use this list only as guide to frame your list of essential criteria for your project portfolio.

Source - The impact of PMOs on strategy implementation, PMI Pulse of Profession

80+ Criteria for Project Prioritization

Supports restructuring	• Operational readiness • Human factors • Disaster recovery • Improves communication • Delivers early win
Supports human capital development	• Recruit the best people • Develop the best people • Retain the best people • Improve productivity
Supports brand position	• Enhances brand value/image • Enhances brand reach • Creates unique brand value
Supports major (government) policy goals (endless list of possibilities)	• Reduces unemployment • Makes it easier to do business • Reduces homelessness • Increases social mobility • Improves law and order

Does prioritization matter? Research has shown that 40% of the causes of project failure happen before the project kick-off meeting!

Source - The impact of PMOs on strategy implementation, PMI Pulse of Profession

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80+ Criteria for Project Prioritization

Risk

- Complexity
- Level of technology-readiness
- Accuracy of cost estimates
- Level of project maturity
- Management capacity
- Risk of NOT doing this project

Business Resilience

- Supports disaster recovery
- Spreads customer / market risk
- Spreads financing risk
- Supports succession planning
- Reduces probability of major event

Increase Sales

- Increase customer acquisition
- Reduce customer churn
- Increase value of each customer
- Increases brand awareness
- Helps us build distribution capacity
- Supports higher pricing for our product/service
- Improves customer satisfaction
- Opens up new markets

Reduces costs

- Reduces waste
- Reduces cycle time
- Reduces down-time
- Reduces taxes
- Reduces transport costs
- Reduces warehousing costs
- Reduces energy consumption
- Reduces headcount
- Reduces working capital

80+ Criteria for Project Prioritization

Improve Quality

- Improve product "feel"
- Reduce warranty claims
- Reduce rework
- Increase mean-time to failure
- Improves employee participation
- Supports brand development

Customer satisfaction

- Improves consistency
- Improves customer journey
- Improves quality of touch points
- Reduces number of complaints
- Improves (INSERT YOUR MOST COMMON CUSTOMER GRIPE)
- Reduces customer wait-time
- Enables self-service
- Reduces call-handling time

Improves employee productivity

- Gives people access to information they need
- Empowers people to take ownership
- Supports skills development
- Improves staff motivation
- Reduces sick-days

Financial

- Net Present Value (NPV)
- Return on Investment (RoI)
- Internal Rate of Return (IRR)

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Useful resources

Congratulations!
You have made it to the end. Now its your turn to go and actually do something about it. These resources might help:

- Project prioritization criteria webinar
- Project prioritization ultimate guide
- Infographic - why prioritize prioritization
- Strategic alignment ultimate guide
- Prioritization in action
- Schedule a demo

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