

Class 13: Portfolio Management - Doing It

Here we look at implementation, how to make it work.

Challenges & Unresolved Issues

General Conclusions

- Portfolio management is vital
- No magic solution
- Some approaches are better than others
- No "Flavor of the Month" solutions

There is no one way that the best performing companies use. But they do not rely solely on financial. No flavor of the month solution means decide on an approach and stick to it! Can't keep changing your approach. There is a penalty in terms of time, effort, and money.

Challenges & Unresolved Issues

Goals of Portfolio Management

- Maximizing the value of portfolio against objectives
- Seek portfolio balance
- Link portfolio to business strategy
- Integration between tollgates and portfolio decisions
- Consider all types of projects
- Beware of information overload

Goals of portfolio management. Trying to maximize your value and not just your financial value! Other kinds of goals, strategic, balance, marketplace.

Link: can't have a portfolio model that does not match what your strategy is.

Align your portfolio management process with your tollgates.

Do not try and do too much, each process requires many measurements and a lot of effort. Do not overkill. Pick the most important for your project and go with it.

Challenges & Unresolved Issues

- To many projects – not enough resources
- How firm are resources committed
- Too many projects on hold
- Why prioritize at all?
- **Imaginary precision**
- How to gather project information
- Failure to discriminate between projects
- Too many small projects
- Failed portfolio review meetings
- When to initiate portfolio management
- Models for information or decisions
- Problems presented by financial analysis

Where can we have imaginary precision? NPV has risk especially early in the project. May not know as much as you should about upcoming costs. Though the risk is reduced a little in “enhancement” projects. How would it score in other areas? Strategy, balance.

To be successful in the portfolio process you have to have reliable information.

Getting Reliable Information

Marketing / Revenue / Pricing

- Gathering information
- Estimating market penetration
- Setting the price
 - Perceived value to customer
 - Value-in-Use pricing
 - Lifetime cost / value
 - Outside-in vs. Inside-out pricing

Outside-In: what do you think the customer is willing to pay? Can we meet that cost hurdle? Ex. willing to pay \$100 and we want \$30 for margin can we make it for \$70?

Inside – out: make it for \$80, want \$30 fir margin, will have to sell it for \$110.

Must do these kinds of things in order to get financial data into your scoring model.

These are the kinds of issues we have to get to in order to set the price, we can see the frailty of the financial model in the portfolio process.

Getting Reliable Information

Manufacturing / Operating Costs

- Activity Based Costing
- Target Costing
- Estimating capital or equipment costs

These [points illustrate the need for data if you are going to use the financial model.

Getting Reliable Information

Estimating probability of success

- Modified Delphi method
- Matrix approach
- Scoring method

Now we are asking “where do we get these probabilities”?

[EXAM]

Modified Delphi Method: poll people but they do not see each other’s answers. Condense the collective answers and give it back to the poll takers. Ask them review and comment again. This can go through several iterations. This is an expert opinion method.

	Low	Medium	High
Technical	0.2	0.5	0.7
Commercial	0.3	0.7	0.9

In this case (**Matrix Method**) we develop operational definitions of “low, medium, and high” so we can use these definitions to rank the probability of our projects. Then we assign accordingly. It’s a course method, very simple. For a firm that is not doing any kind of risk assessment this can be a big step in the right direction.

Scoring method is comparable.

Getting Reliable Information

Estimating resource requirements

Dealing with uncertainty

- Sensitivity Analysis
- Monte Carlo Simulation

Sensitivity analysis is kind of a **best case / worst case** approach.

In **Monte Carlo** we are plugging in different resources.

Strategic Allocation of Resources

Strategic Bucket Model

- Breakdown the status quo
- Top-Down or Strategic Allocation
- First-cut Allocation
- Bottom-up Approach
- Review against business areas
- Display tentative portfolio
- Start next iteration

First cut of money to buckets but you can't stop there, this requires iterations, it is not a perfect system. Go back and forth with the rankings.

Bottom up may ask, is it close to done?
Can I get some bang for a little more buck?

Use the bubble diagram for risk vs reward but there are other views. Whole portfolio should feel right, and this doesn't mean "finally I got my favorite project above the cut line". The whole portfolio should feel right, should be driving and supporting your strategy.

[Continued below]

Implementation involves “breaking down the status quo”. This means we have to look at our projects in place and start scoring them, how do they really rank up. Then use a top-down first cut, do a bottom up, repeat these a few times until you come up with a good solution the company can use.

Two goals: do the right projects and get them done (on time). Part of “on time” involves good planning, mitigating risk, not overtaxing resources. All the things we learned about in project management. Do these things right and your project will get done when you expect it to get done.

Start with a vision, a strategy. Where do we want to be? What markets? How do we want our portfolio arranged? Where do we want to go with our initiatives?

Now how do you want to measure your projects? But do not concentrate on financial only it is least accurate and a short term approach. No people factor, does not speak to the marketplace. Does not speak to risk.

Top level management must be behind the framework and everyone must use the same framework.

Cannot have too many criteria, too difficult to get all that data. Each of the criteria is a proportion to the total answer. This is what we mean by finding some framework to decide on how to measure the project.

Making Portfolio Mgmt. Work

Key Components to Portfolio Management

- Strategy
- Gating
- Portfolio Reviews

Approaches to Portfolio Management

- Gate Dominate
- Portfolio Review Dominate

Designing & Implementation

Define Requirements

- Assemble task force
- Concurrence on mandate
- Kick-off session
- Literature review
- Benchmark other firms
- Internal audit of current practices
- Define / Develop goals
- Determine key metrics
- Develop work plan
- Secure concurrence from sponsor(s)

Say you find yourself in a situation where you need to implement a portfolio management process. This is the cookbook template.

Need knowledgeable people. Need agreement on what the group is trying to do. Mandate, example; create a portfolio review process which aligns project selection with strategy. Kickoff; all the right people are in the room talking about implementing the strategy and making some cuts. Literature review; what are the companies best

practices, what are the approaches that the most successful companies use? Benchmark, goals, key metrics. Work plan is how to do it. Also, buy a good book.

Designing & Implementation

Design the Process

- Map out the system design
- Gate dominate vs. Process dominate
- Process for resource allocation
- Develop, Overhaul, Refine for new product process
- Design portfolio reviews
- Define key metrics
- Build in interactions
- Engage top management
- Define data collection

Map out a design. How are we going to look at these projects? At what point do we examine them, at tollgates or at process points (below). Process dominate is looking at the whole portfolio in one snapshot. Gate is each time it comes along.

Built in interactions; in your process make sure different groups are communicating, build interactions between constituencies. Making sure that the portfolio people are talking to the operations people who are talking to the manufacturing people.

Designing & Implementing

Trial Installation and Adjustments

- Portfolio software
- Collect initial data
- Review projects
- Trial run of portfolio reviews
- Test allocation
- Final review and revisions
- Implementation plan
- Present to executive sponsor

The process is built, now it must be tested. There are software packages which help with this. But it can all be done in excel.

Designing & Implementing

Implementation and Improvement

- Portfolio process manager
- Senior management approval
- User-friendly documentation
- Internal marketing
- Training
- Integration of existing projects
- Start gates immediately
- Start portfolio reviews
- Review and revise the process

This can be something like involving all the project managers in a room and helping them understand that this process is not meant to kill their project but to look at all the projects and help them be more successful with what the company ultimately plans to do.

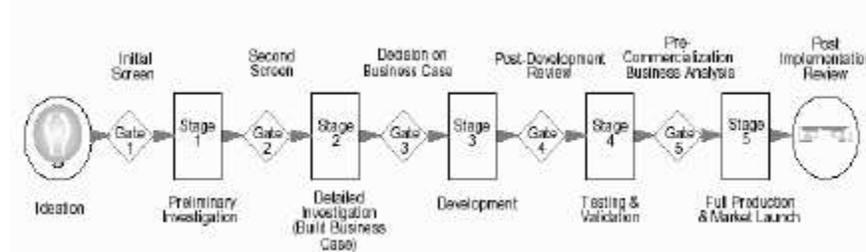
So the implementation plan is the stakeholder analysis, influencing diagrams, communication plan, and other things we've talked about to plan the project.

Then you may make a presentation to the president of the business and say, OK, here is the plan and we are all set to go.

Now need someone to oversee the portfolio. PMO office.

\$tar – Gate Solution [wp9]

Figure 4: The typical **Stage-Gate** new product process has five stages, each stage preceded by a gate. Stages define best practice activities and deliverables, while gates rely on visible criteria for Go/Kill decisions. An estimated 60% of product developers in the U.S. now employ a Stage-Gate process to guide their development efforts. Source [15].



Trademarked process. Saying; from the initial idea of the project all the way through after it's been released, there are places where you stop and evaluate the project. This vendor calls them "Stargates", other literature and packages will have their own names.

It's just a place where you stop and examine the project, you can make a kill decision at any of the gates. Consider that you want a good process. You do not want to find that you are killing 80% of your projects at the last gate. By that time you've invested a lot of money and resources. But kills up front can be very constructive, recognizing early that the project is not going to fit in.

The idea is that you, the company, are willing to kill something **after** it has started! Must form a place where you make that evaluation.

Resource Capacity vs Demand Analysis

- **Determine Demand**

- Review current list of active projects
- Prioritize from best to worst
- Evaluate project plan / timeline (MS Project)
- Record work-day requirements by resource / dept.

- **Evaluate Capacity**

- Total time available for resources
- Adjust for inefficiencies (90%?)
- Allocate against demand until you run-out

Portfolio management should/tries to **forecast resources**. Look for places where one person can affect the whole project.

Adjust for inefficiencies. A person can be sick. One person can cause a task which is not critical path to become critical path. Why? Because that resource was not available. What about Walt? Is Walt needed on all the projects?

Determine demand and then do you have capacity?

Product Innovation Strategy

- **What % of growth from new products vs. core**

These are some other things we could think about in terms of which strategy we want.

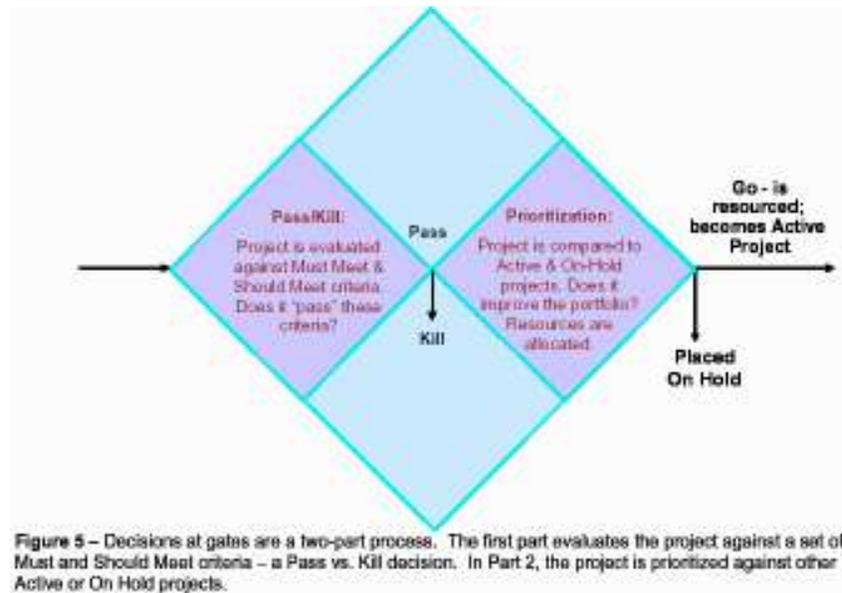
- **What are arenas for focus** (markets / technologies)

- **Deployment of resources** (platform, new, extension, fixes, up-dates)

Sometime you don't care that you do not have the resource, you consider the project and then go get the resources you need.

- **Attack plan** (innovator vs. fast follower / superior performance vs. best cost)

Portfolio Management Approach 1



Look at the project against the scoring criteria. If it “lives” it is compared against other projects and again pass or fail? Is it better or worst than the other projects? If worst it is put on hold.

Figure 5 – Decisions at gates are a two-part process. The first part evaluates the project against a set of Must and Should Meet criteria – a Pass vs. Kill decision. In Part 2, the project is prioritized against other Active or On Hold projects.

Approach 2

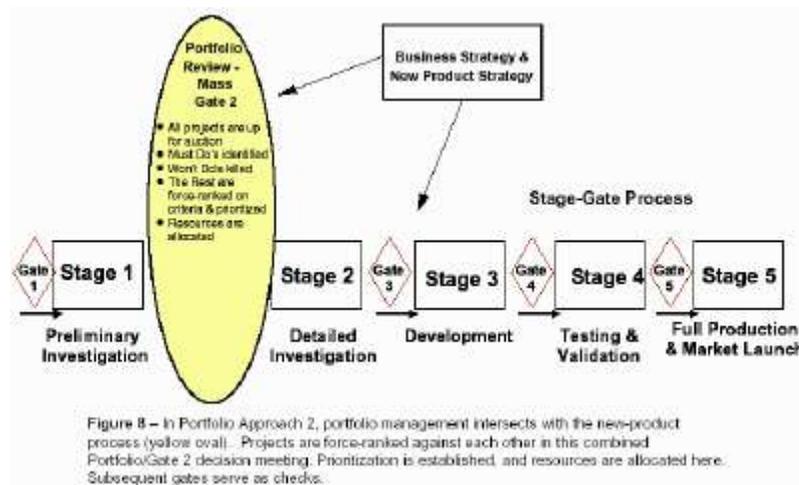


Figure 8 – In Portfolio Approach 2, portfolio management intersects with the new-product process (yellow oval). Projects are force-ranked against each other in this combined Portfolio/Gate 2 decision meeting. Prioritization is established, and resources are allocated here. Subsequent gates serve as checks.

Looks at entire portfolio and when new ideas come to it look at the entire portfolio at that snapshot in time and decide to keep or kill. This is a recurring process. Can be monthly, every quarter, etc.

