AAPG Annual Meeting
March 10-13, 2002
Houston, Texas

Implementing Portfolio Management: Integrating Process, People and Tools

Howell, John III, Portfolio Decisions, Inc., Houston, TX: Warren, Lillian H., Portfolio Decisions, Inc., Houston, TX; and Howell, Anita L., Portfolio Decisions, Inc., Houston, TX

Many companies that prosper in today's complex business environment use portfolio management tools to describe and manage the interactions of factors that impact business opportunities, such as international contract terms, oil and gas price, political situations and market forces. Company initiatives frequently start by addressing portfolio management tools without addressing the equally important issues of portfolio processes and the role people play in leveraging a portfolio management system. Successful companies address their portfolio management efforts on three fronts; tools, process and people.

This presentation will explore a typical portfolio management implementation and illustrate the critical interdependence of tools, process and people. We will address the benefits each component offers individually and illustrate the synergy realized by addressing all three components in a systematic manner.   Additionally we will characterize some of the business issues that arise when companies fail to adequately address the tools, people and process components of a portfolio management system.

* * * * * * * * * * * *

Portfolio Management is a process - a way of thinking about your business. Portfolio Management is a specific approach to evaluating business investments, including major projects, acquisitions and divestitures. Opportunities are not selected for investment simply because they are 'good' projects. Opportunities are evaluated in terms of their interrelated dependencies, and contribution to the business goals, business performance, and aggregate risk. A company's strategy is the starting point and projects are selected such that interactions reduce risk while satisfying the driving strategies. Under this philosophy, the business plan is not based on a roll-up of available opportunities, but is built via a goal seeking process. That is, given a set of strategy goals, what kinds and quantities and timing of opportunities are needed to meet those goals. When you invest with a portfolio perspective, you know explicitly what the project contributes to your strategic goals.

Process

Many companies see the Portfolio Management process as the steps depicted in figure 1. The input for the process is data describing available projects. The results are often a ranked list of projects. The process is linear. Some companies select opportunities based on "gut feel" and experience. Others use a variety of valuation techniques to arrive at a numerical prioritization of opportunities. However, often there is no transparency to this process, no way of knowing whether the quality of thinking behind the valuations was consistent. The perception to those not directly involved in the decision can be that decisions are driven by the advocacy skills of the executive involved, or made behind closed doors.

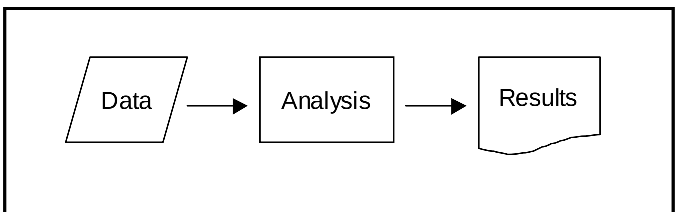

Figure 1

A better Portfolio Management process is depicted in figure 2. The input for the process explicitly includes the company strategy in the form of multi-year, multi-metric performance goals. Data input includes descriptions for available projects and potential or "coveted" projects. The results are not a ranked list of projects, but investment options composed of suites of projects and their projected business performance characteristics. The process explicitly incorporates several feedback loops including:

A. The results generate questions, which beget more analysis.
B. The results may bring in to question some of the opportunity data and require investigation and/or refinement of that data.
C. The results of the analysis may provide food for thought that causes the strategy to be refined.
D. Feedback from the external world and resulting business performance will impact the strategy, and thus the performance goals that drive the portfolio analysis.

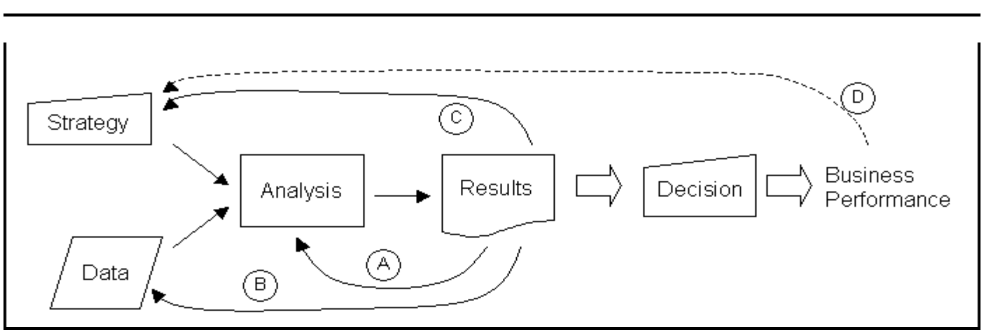

Figure 2

The analysis step in this process is technically complex and can require significant amounts of data and sophisticated computer based tools. However, the larger process is clearly expanded beyond data and analysis tools to include many different roles across the organization, and many iterative feedback loops.

People

For the Portfolio Management process to be effective, a company must clearly define the responsibilities that people will have in the process and must gain a commitment from the decision makers to be engaged throughout the process. At a high level, this is defined in Table 1 and Figure 3 below:

Who	Responsibilities	Actions
Decision Makers	Own strategy	Define strategy & make decisions
Portfolio Team	Own process	Analyze, communicate
Technical Teams	Own data	Create & adjust project descriptions

TABLE 1

Portfolio Management Roles & Interactions

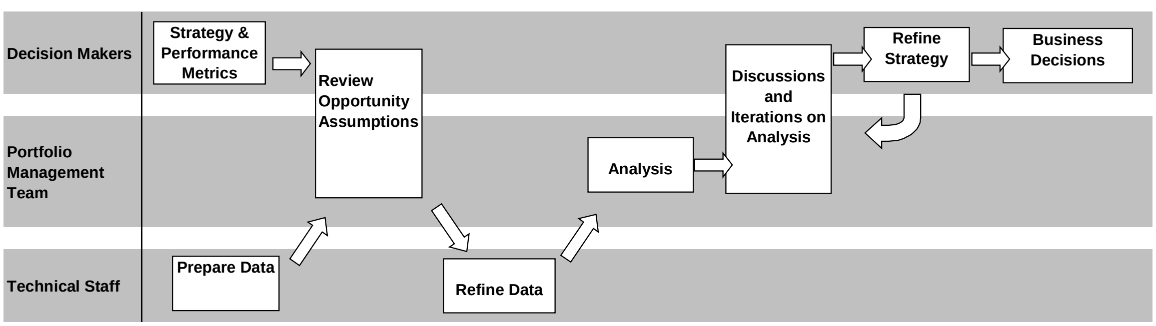

Figure 3

One of the key factors in a successful Portfolio Management process is continued and repeated involvement from the decision makers, as illustrated in figure 3. They set the performance goals that drive the portfolio. They should review and become comfortable with the underlying assumptions that are the basis for the opportunity description. The analysis phase involves a lively ongoing discussion with the portfolio team that may iterate several times. Decision-making is not a one-time event, not a final meeting, but requires continued involvement throughout many steps in the process.

The portfolio team has a key responsibility of communicating to the decision makers and the technical staff. Their job is not just to "crunch the numbers". To effectively shepherd the process they must focus on consistency, quality and credibility of input, an understanding of the inherent trade-offs among various corporate goals, and an open dialog with decision makers and technical staff.

Tools

A good decision-making process needs the underlying support of a rigorous technical approach. The main issues are

1) Can the tool facilitate a fruitful discussion among the decision makers, portfolio team and technical teams? Is it graphic, fast, real time, and portable?
2) Is the tool flexible? Can it address strategy problems and specific investment problems?
3) Is the tool technically robust? It should address risk, opportunity interactions, and be based on a goal seeking approach.

A tool that addresses the appropriate business issues and is easy to use will minimize effort and maximize the benefits. It is important to note that a portfolio analysis tool should **not** be used to replace corporate finance or accounting systems, and should **not** replace reserves management software.

What does it look like when it works?

A successful Portfolio Management process is one that is credible to all, including top management, project teams, and regional management – many times located at considerable distances from each other. Specifically, all interested parties believe that the process accurately characterizes their opportunities, fairly compares risks and potential across opportunities, and contributes significantly to the understanding of the business. Specific characteristics of such a process are:

- Multiple cycles of feedback loops (A, B & C in figure 2).
- Very robust discussions around the investment implications.
- Decisions that are understood by all interested parties.
- The time period required usually takes the same cycle as the previous decision process but there is a major shift in the way time is spent:

Many decision processes	**Portfolio Management**
10% thinking about the business	80% thinking about the business
90% working with the data	20% working with the data

What does it look like when it doesn't work?

An infinite number of deviations are possible, but PDI has found that the most common issues include:

Process

1. The process is ill defined or too complex and the company never fully completes the cycle to achieve the benefits of the synergistic discussions.
2. The process is not effectively integrated with the larger decision making process or it conflicts with the organizational structure resulting in a great deal of political resistance.

People

1. Decision makers lack understanding and buy-in. If portfolio analysis simply serves as a technical solution, it can be seen as a challenge to the authority of the decision makers, or is simply ignored. In other cases decision makers may be totally overloaded with new information that has no context. In either case the analysis has little resulting business value because it is not acted upon.
2. The revised focus does not get communicated. An organization may be conditioned to judge all opportunities on one metric; so all opportunities are described to look best on that dimension – skewing the profile and greatly reducing the flexibility and value that otherwise would be inherent in the analysis.

Tools

1. Results are not transparent (black box syndrome).
2. The tool is too slow and does not support quick turnaround of 'what if' questions and business discussions.

Conclusion

A successful implementation of Portfolio Management generally takes from six months to two years. It requires a significant commitment of time and resources. Broadening the focus of a portfolio management initiative from tool selection and analytical training to include people and process may appear to "add" effort to the implementation but it will greatly increase the probability of a successful implementation and the ensuing business benefit. With proficiency in portfolio thinking and analysis, the quality of decision making throughout the company will improve dramatically.