

Management: Decision Making

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Management

	<u>Self or Individual</u>	<u>Intimate or team</u>	<u>Group</u>
<u>Informational</u>	<ul style="list-style-type: none"> <input type="checkbox"/> Documentation <input type="checkbox"/> Filing 	<ul style="list-style-type: none"> <input type="checkbox"/> Distribution of information <input type="checkbox"/> Work Orders 	<ul style="list-style-type: none"> <input type="checkbox"/> Office systems <input type="checkbox"/> Libraries <input type="checkbox"/> ISO Procedures
<u>Affecting results</u>	<ul style="list-style-type: none"> <input type="checkbox"/> Project planning <input type="checkbox"/> Time management <input type="checkbox"/> Prioritization 	<ul style="list-style-type: none"> <input type="checkbox"/> Work Contracts <input type="checkbox"/> Strong contracts <input type="checkbox"/> Decision-making ability <input type="checkbox"/> Delegation 	<ul style="list-style-type: none"> <input type="checkbox"/> Project reviews <input type="checkbox"/> Design reviews <input type="checkbox"/> Audits <input type="checkbox"/> Measurables <input type="checkbox"/> Risk Analysis <input type="checkbox"/> MAAA <input type="checkbox"/> Fatal Flaw Analyses

Big Picture of Decision Making:

Decision-making Paradox: “All decisions are emotional. You use your intellect to rationalize the decision”

Rules: “All Opportunities are relative”

“All Opportunities have to feel right to you”

Any "good" opportunity has to:

- Be right for you
- Appear better than other opportunities
- Feel comfortable

It is extremely difficult to keep your emotions from clouding your judgment

It is difficult to make an assessment of an opportunity without others to compare it to.

The solution to this problem is called “Benchmarking”. Learn how to do it.

1. The rewards need to be clarified
2. The risks must be evaluated
3. The emotional component should be removed (reduced)
4. The decision is communicated to the team and stakeholders
5. Buy-in by the stakeholders is confirmed

The Japanese ate America’s lunch in industry after industry, simply by benchmarking.

Decision Types:

People (and organizations) make decisions differently:

- Lots of information required vs. little information
- Tend to see multiple outcomes vs. a single outcome

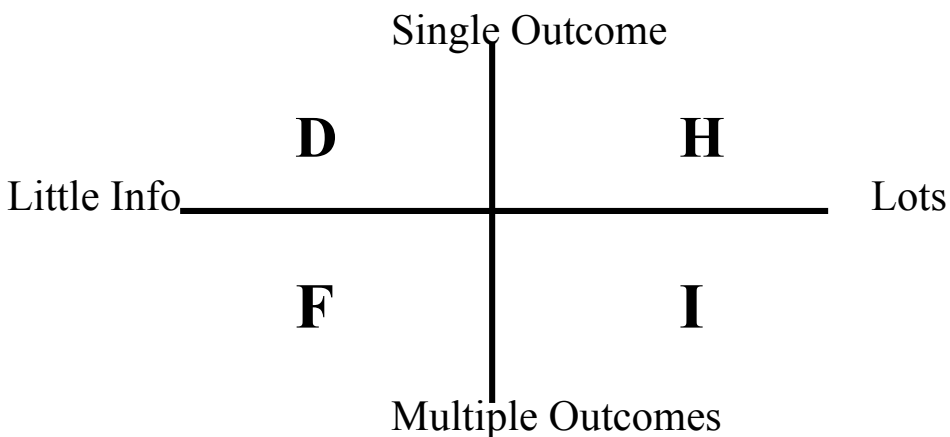
Decision Types:

1. **Decisive**: little information, single conclusion
2. **Flexible**: little information, multiple conclusions
3. **Integrative**: Maximum information, multiple conclusions
4. **Hierarchic**: Maximum information, single conclusion

How do you get consensus and buy-in, when people have such diverse decision-making styles?

- Which is your organization?
- Which are you?
- Which is appropriate for your venture

In many organizations, people who rise up to management ranks share the same decision style.



How to make and communicate a decision:

1. Determine the attributes of an opportunity that make it attractive to you (and your team)
2. Get consensus on the "weightings" of the attributes
3. Document input from the team
 - **Tool:** Maximum Attribute Assessment Analysis
4. Determine the risks of the opportunity
 - Compare to standard risks
 - Evaluate against previous opportunities
 - **Tool:** Standard Risk Assessment
5. Document results of the analyses
6. Communicate the results. Ask
 - What can change to reduce risk
 - What can change to make the opportunity more attractive to the team
 - What partners could be approached to reduce risk or increase attractiveness

Rule: "Most successful ventures find Partners to cover risks".

Maximum Attribute Assessment Analysis: (MAAA)

MAAA is a tool for comparing the reward of different opportunities.

Steps:

1. List the Attributes that are important to analyze
2. Select the “Most important to you” (e.g. 10 or so)
3. Give each attribute a relative weighting (1-10), based on relative importance to you
4. Rate each opportunity for each attribute (1-10)
5. Multiply the weighting times the rating
6. Sum the products

Repeat for several opportunities.

Assess that the rating scheme “feels” right for you. If not, work on attributes and weightings until it does feel right. (or agrees with other data, like actual success)

Keep the process consistent, as new opportunities arise

Keep records of earlier assessments for comparison to new opportunities.

As your “investment goals” change, document these in the attributes and the weightings.

Example Assessment Analysis

Investment Evaluation:

(Courtesy of Brook Venture Fund, LP)

Scores for each opportunity: 1=poor, 5=great

Criteria	<u>Weight</u>	<u>Opportunity A</u>	<u>Opportunity B</u>	<u>Opportunity C</u>
1. Current Sales	1.0			
2. Profitability	1.25			
3. Gross Margin	1.0			
4. Industry Risk	1.0			
5. Competitive Advantage	1.0			
6. Competition Intensity	0.5			
7. Projected Growth Rate	1.0			
8. Investment Opportunity	1.0			
9. Barriers to entry	0.5			
10. Product or Service Differentiation	1.25			
11. Management	2.0			
12. Working Business Model	2.0			
13. Fatal Flaws	(1.0)			
<u>Total Score</u>				

Application of MAAA

Examples of decisions where Maaa is useful:

- How do these various investment opportunities compare?
- Which job opportunity do I take?
- Which school should I go to?
- What is important to me in a “partner”. How do I select. (assuming you have a choice)
- _____

Why do it:

- Communication to your team on a decision process
- A way to get input from your team, in a non-emotional manner
- Record of your reasons, so you learn from your action
- Determine what has to change to make an opportunity attractive
- _____

Risk Assessment:

Most people do not have a technique for evaluating risks. Hence, only the rewards are evaluated.

You can never eliminate all risk. You can

- ❑ monitor the risk
- ❑ act to minimize it
- ❑ respond to changes in risk
- ❑ learn from it

Every situation has a set of "standard risks". These come up over and over again. E.g.

- ❑ Business Risks
- ❑ Project Risks
- ❑ Customer Risks

Use the tool "Fatal Flaw Analysis" to develop the standard risks in your world.

Use these standard risk analyses to

- ❑ Separate the risk into components
- ❑ Identify high risk areas
- ❑ Develop a plan to mitigate
- ❑ Keep a record of previous projects
- ❑ Monitor the risk as it changes during a project.

This is the most powerful tool I know. I have attached a "standard project risk" analysis for my previous world. (Manufacturing high volume parts for Automotive OEM customers)

Opportunities for Benchmarking:

Use MAAA for benchmarking these employment opportunities.

(Note: other examples may be used during class)

1. Consulting Engineer

Moderate sized consulting company has an opening for an entry-level engineer. Company was just awarded a large government contract for the development of ground source energy extraction for residential properties. Location is Chicago suburbs. Work will be entirely in the lab, doing computer modeling. No long term guarantees; when contract is over, who knows. Salary Competitive. Competitive benefits. Travel is not required. No hands-on dirty work. Others will do testing and prototyping. Nice office.

2. Customer Service Engineer

Diesel Engine manufacturer has an opening for a Customer service engineer. Extensive travel, largely to the Far East. (On the road half time). Home base, Peoria, IL. Job consists of helping customers determine their needs, supervising installation, and having general responsibility for customer satisfaction. May have to contract out for local services (like installation). A lot of flexibility. Highly visible job. Historically, a necessary tour for a management position. Salary Competitive plus travel and overseas living expense.

3. Manufacturing Engineer

Auto Parts manufacturer has an opening for a manufacturing engineer. Located at the plant, just outside of *Your Home Town*. Lots of responsibility for the development of manufacturing systems. Work with team of 5 other engineers. Really neat engineering work, with lots of complicated mechanical and electrical components. Occasional travel to Detroit (once per month, typical). Some customer contacts, as part of a sales team. Should be able to make credible presentation to engineering customers. Salary Competitive. Competitive benefits.

Opportunities for Benchmarking (cont.):

4. Software Engineer

The premier Software Company has an opening for an engineer to help with the programming of the next generation operating system. Location, Redmond, WA. Job is to be on the team to program all the printer drivers for the future, and to keep current as new printers are developed. No travel. Great location, fancy office. Expected to work >80 hours per week, like everyone else in the company. Salary Competitive++. Great benefits. However, if you don't cut it, you are out. Low tolerance for poor performers. Smart co-workers.

5. Assistant to the President

Top Boston-based management consulting firm has finally recognized that they don't know diddly about engineering, and need an internal expert if they are going to be credible in their consulting. Need an engineer, with good people skills, who can consult with our project teams on the engineering implications of their work. High visibility, reports directly to the CEO. Moderate travel. Should be comfortable flying in corporate jet, instead of commercial aircraft. Must accompany the CEO on his trips to large customers, and assist with the presentations. Top \$\$ for the right person (\$very lucrative with great benefits). Not a lot of overtime, the CEO values his family time, and expects his direct reports to do likewise.

Assignment:

1. List the attributes YOU would use for a job assessment
2. Give them a weighting
3. Rate these opportunities
4. See who wins
5. Check with "your gut" that the relative results are correct
6. What has to happen to EACH opportunity to make it attractive to you.
7. Write it up.

Rules: Decision Making

- All opportunities are relative
- All decisions are emotional, you use your intellect to rationalize them
- When you are emotionally involved, you are blind
- An opportunity has to be right for you
- Develop good benchmarking skills
- Decision styles are different
- There are standard risks for any venture. Know them
- Most successful new ventures find Partners to cover risks