Appreciation

Extracting Maximum Information from Facts

Appreciation is a very simple but powerful technique for extracting the maximum amount of information from a simple fact.

How to Use the Tool:

Starting with a fact, ask the question 'So what?' i.e. what are the implications of that fact? Keep on asking that question until you have drawn all possible inferences.

Example:

Appreciation is a technique used by military planners, so we will take a military example:

Fact: It rained heavily last night

So What?

– The ground will be wet

So What?

– It will turn into mud quickly

So What?

– If many troops and vehicles pass over the same ground, movement will be progressively slower and more difficult as the ground gets muddier and more difficult.

So What?

– Where possible, stick to paved roads. Otherwise expect movement to be much slower than normal.

While it would be possible to reach this conclusion without the use of a formal technique, Appreciation provides a framework within which you can extract information quickly, effectively and reliably.

Key points:

Asking 'so what?' repeatedly helps you to extract all important information implied by a fact.

Stakeholder Analysis

Winning Support for your Projects

"Stakeholder management is critical to the success of every project in every organization I have ever worked with. By engaging the right people in the right way in your project, you can make a big difference to its success... and to your career."

– Rachel Thompson, Experienced Project Manager

As you become more successful in your career, the actions you take and the projects you run will affect more and more people. The more people you affect, the more likely it is that your actions will impact people who have power and influence over your projects. These people could be strong supporters of your work – or they could block it.

Stakeholder Management is an important discipline that successful people use to win support from others. It helps them ensure that their projects succeed where others fail.

There are two major elements to Stakeholder Management: Stakeholder Analysis and Stakeholder Planning. Stakeholder Analysis is the technique used to identify the key people who have to be won over. You then use Stakeholder Planning to build the support that helps you succeed.

The benefits of using a stakeholder-based approach are that:

- You can use the opinions of the most powerful stakeholders to shape your projects at an early stage. Not only does this make it more likely that they will support you, their input can also improve the quality of your project.
- Gaining support from powerful stakeholders can help you to win more resources – this makes it more likely that your projects will be successful.
- By communicating with stakeholders early and often, you can ensure that they know what you are doing and fully understand the benefits of your project – this means they can support you actively when necessary.
- You can anticipate what people's reaction to your project may be, and build into your plan the actions that will win people's support.

How to Use the Tool:

The first step in Stakeholder Analysis is to identify who your stakeholders are. The next step is to work out their power, influence and interest, so you know who you should focus on. The final step is to develop a good understanding of the most important stakeholders so that you can work out how to win their support. You record this analysis on a stakeholder map.

After you have used this tool and created a stakeholder map, you can use the stakeholder planning tool to plan how you will communicate with each stakeholder.

The steps of Stakeholder Analysis are explained below:

1. Identifying Your Stakeholders:

The first step in your stakeholder analysis is to brainstorm who your stakeholders are. As part of this, think of all the people who are affected by your work, who have influence or power over it, or have an interest in its successful or unsuccessful conclusion.

The table below shows some of the people who might be stakeholders in your job or in your projects:

Your boss	Shareholders	Government
Senior executives	Alliance partners	Trades associations
Your coworkers	Suppliers	The press
Your team	Lenders	Interest groups
Customers	Analysts	The public
Prospective customers	Future recruits	The community
Your family		

Remember that although stakeholders may be both organizations and people, ultimately you can only communicate with individual people. Make sure that you identify the correct individual stakeholders within a stakeholder organization.

2. Prioritize Your Stakeholders:

You may now have a long list of people and organizations that are affected by your work. Some of these may have the power either to block or advance it. Some may be interested in what you are doing, others may not care.

Map out your stakeholders on a Power/Interest Grid on our free template as shown in figure 1, and classify them by their power over your work and by their interest in your work.
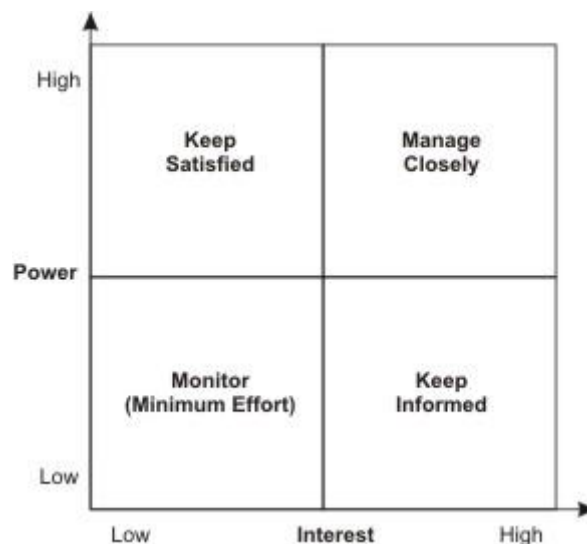

Figure 1: Power/Interest Grid for Stakeholder Prioritization

For example, your boss is likely to have high power and influence over your projects and high interest. Your family may have high interest, but are unlikely to have power over it.

Someone's position on the grid shows you the actions you have to take with them:

- **High power, interested people:** these are the people you must fully engage with, and make the greatest efforts to satisfy.
- **High power, less interested people:** put enough work in with these people to keep them satisfied, but not so much that they become bored with your message.
- **Low power, interested people:** keep these people adequately informed, and talk to them to ensure that no major issues are arising. These people can often be very helpful with the detail of your project.
- **Low power, less interested people:** again, monitor these people, but do not bore them with excessive communication.

3. Understanding your key stakeholders:

You now need to know more about your key stakeholders. You need to know how they are likely to feel about and react to your project. You also need to know how best to engage them in your project and how best to communicate with them.

Key questions that can help you understand your stakeholders are:

- What financial or emotional interest do they have in the outcome of your work? Is it positive or negative?
- What motivates them most of all?
- What information do they want from you?
- How do they want to receive information from you? What is the best way of communicating your message to them?
- What is their current opinion of your work? Is it based on good information?
- Who influences their opinions generally, and who influences their opinion of you? Do some of these influencers therefore become important stakeholders in their own right?
- If they are not likely to be positive, what will win them around to support your project?
- If you don't think you will be able to win them around, how will you manage their opposition?
- Who else might be influenced by their opinions? Do these people become stakeholders in their own right?

A very good way of answering these questions is to talk to your stakeholders directly – people are often quite open about their views, and asking people's opinions is often the first step in building a successful relationship with them.

You can summarize the understanding you have gained on the stakeholder map, so that you can easily see which stakeholders are expected to be blockers or critics, and which stakeholders are likely to be advocates and supporters or your project. A good way of doing this is by color coding: showing advocates and supporters in green, blockers and critics in red, and others who are neutral in orange.
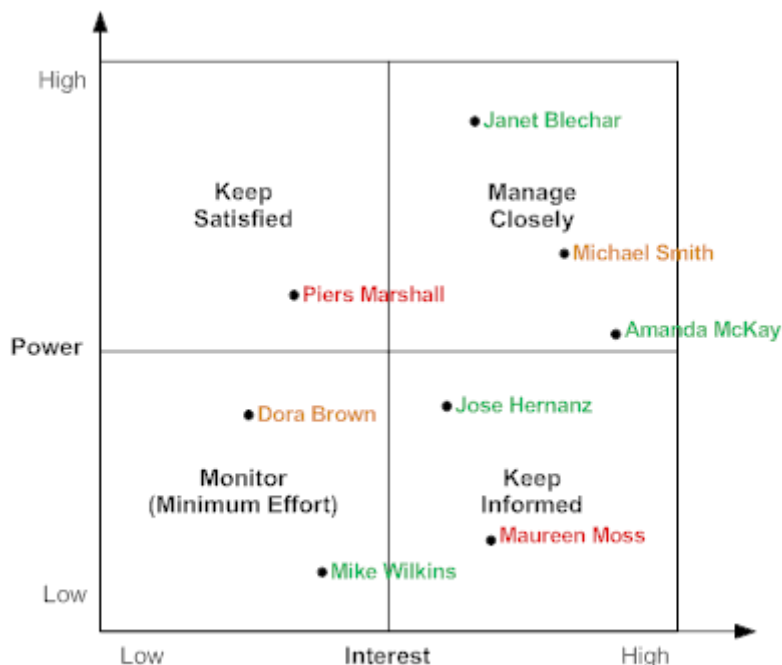

Figure 2: Example Power/Interest Grid with Stakeholders Marked

Figure 2 shows an example of this - in this example, you can see that a lot of effort needs to be put into persuading Piers and Michael of the benefits of the project – Janet and Amanda also need to managed well as powerful supporters.

You can create your own example of stakeholder analysis at work - whether for your current role, a job you want to do or a new project.

Conduct a full stakeholder analysis. Ask yourself whether you are communicating as effectively as you should be with your stakeholders. What actions can you take to get more from your supporters or win over your critics?

Key points:

As the work you do and the projects you run become more important, you will affect more and more people. Some of these people have the power to undermine your projects and your position. Others may be strong supporters of your work.

Stakeholder Management is the process by which you identify your key stakeholders and win their support. Stakeholder Analysis is the first stage of this, where you identify and start to understand your most important stakeholders.

The first stage of this is brainstorm who your stakeholders are. The next step is to prioritize them by power and interest, and to plot this on a Power/Interest Grid. The final stage is to get an understanding of what motivates your stakeholders and how you need to win them around.

Influence Maps

Uncovering Where the Power Lies in Your Projects

Also known as: Social Network Analysis

Many people can have influence over your projects. Some influencers are obvious and easy to spot. Others are less obvious, but are no less significant. If you fail to recognize and "manage" these influencers, you'll most-likely experience unexpected resistance to your projects, and sometimes bewildering failure. This is increasingly the case as you run large projects, and as the number of people affected by your projects increases.

People within your organization, at least, are supposed to work together openly and willingly. However, even here, your boss, your teammates, your customers, your boss's boss - even the CEO's nephew in the mailroom - can all impact you, given certain sets of circumstances.

However people outside your organization have all sorts of interests and motivations that you can't control. Here, knowing who influences who can be critical if you want to get anything done at all.

Influence Mapping

So do you understand who has influence over your projects? Do you know the nature, direction, and strength of these influences? After all, using the normal "chain of command" may not always be the best way to advance your objectives: Knowing who the real influencers are can help you determine where you should put your effort if you really want to succeed.

This is what influence mapping is all about - discovering your project's true stakeholders (not just the obvious ones) and the influence relationships between them. This helps you target the key influencers so that you can win the resources and support you need to reach your goal.

> Influence maps are a natural extension of [Stakeholder Analysis](). Your project's success can depend on identifying its key stakeholders and then managing the various relationships between them. Stakeholders have the power to help or hurt your initiatives, so stakeholder management is an important aspect of project management. For more on this, see our[Winning Support for Your Project]() Bite-Sized Training.

The Elements of an Influence Map

An influence map is a visual model showing the people who influence and make decisions about your project. The map helps you understand how stakeholders relate to one-another, so that you can quickly see the way in which influence flows.

Remember that even the most powerful people rarely act alone. Top executives and other people in authority rely on advisers. Find out who the advisers are, and understand how they operate. This can be vital to your project's success.

There are three main considerations when you construct an influence map:

1. The **importance** or weight of a stakeholder's overall influence (represented by the size of the circle representing that stakeholder).
2. The **relationships** between stakeholders (represented by the presence of lines or arrows between them).
3. The **amount of influence** stakeholders have over others (represented by the heaviness of the lines drawn between them).

Your completed influence map shows the stakeholders with the most influence as individuals with the largest circles. Lines (arrows) drawn to other stakeholders indicate the presence and strength of influence.

We'll use an example to illustrate.

You've proposed a new organizational structure that will encourage people to work in business units with cross-functional teams. You know this is a huge change, and you want to make sure it's well supported within the company before you try to implement it.

The most obvious stakeholders are:

|	
CEO	Elizabeth Brown
CFO	Dennis Gordon
Director of Marketing	Pamela Enns
Director of Product Development	Jon Evans
Director of Human Resources	Wallace Houston

But are there other stakeholders as well? And who holds influence over whom?

Upon further investigation, here's what you discover:

- The entire HR team will be important to the reorganization - but not just the director of HR. Francis Beaton, the newly hired change agent, will be especially important.

- Elizabeth Brown has worked with Jon Evans for over 15 years, and she values Jon's input on strategic initiatives.

- The board of directors is chaired by a longtime associate of Jon Evans. Like Elizabeth Brown, the board chair values Jon's opinions and has never objected to any initiative Jon has ever backed.

- Wallace Houston and Dennis Gordon have a history of conflict. This is because Dennis was very late to realize HR's strategic value. Dennis still has difficulty spending money on HR projects, which he considers to be "soft" expenses. Getting Dennis's buy-in is critical if you want the financial resources needed for the change.

So when you look more closely, you can identify additional people who will have an impact on your reorganization plan. And not everyone has the same influence.

The resulting influence map looks something like this:
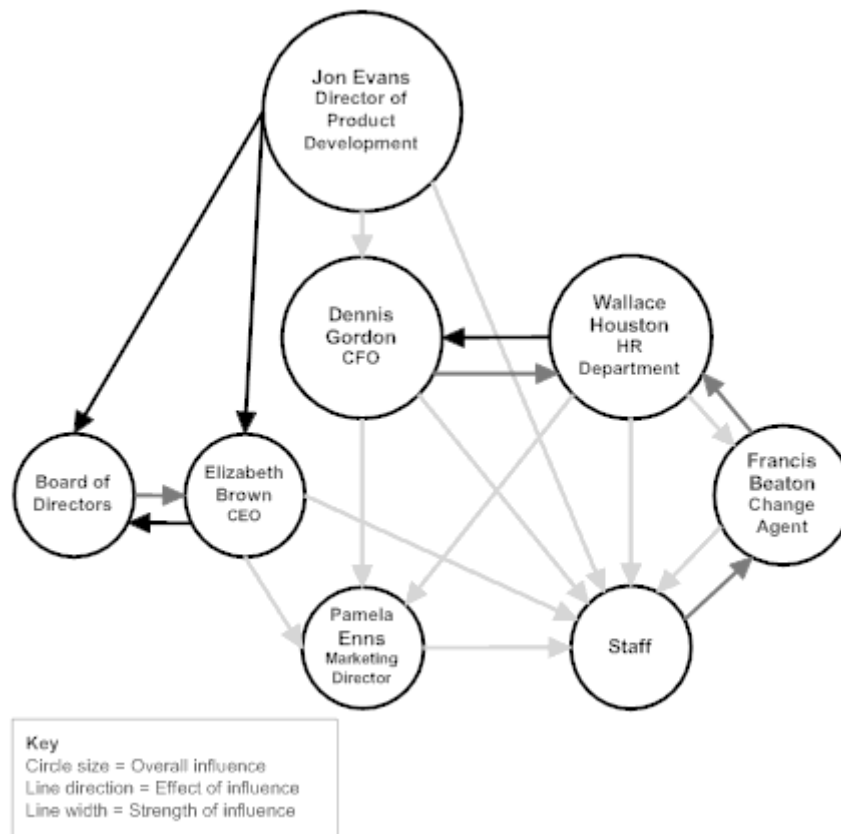
This influence map clearly shows how important Jon Evans is to the success of your restructuring plan. It also indicates that you should spend energy on gaining support from Wallace Houston and Dennis Gordon before moving on to other executives.

Before you thought about stakeholder influences, you might have assumed that the CEO and CFO had the most influence on organization-wide change. But the influence map shows you that this is probably not for the case in this situation.

> Influence is not static. It changes over time, just like the circumstances surrounding each project or decision. If you create influence maps at regular intervals, you'll chart these differences and gain a much greater appreciation for the way decisions are made. This will help you to smooth the decision making process and be more effective.

Creating an Influence Map

Follow these steps to construct an influence map.

Step One: Prepare a stakeholder analysis. This helps you identify, prioritize, and understand your key stakeholders.

Step Two: For each stakeholder, find out the following:

- Whom does he or she influence, and who influences him or her?
- How strong is that influence?
- What is the history of each relationship? How does this impact overall influence?
- What role does hierarchy play in the amount of influence?

Step Three: Map the importance of influence using the size and position of the circles. The largest circles belong to stakeholders with the most influence. Where possible, place the most influential stakeholders at the top of the page, and put less influential people lower down.

Step Four: Map the direction of influence by drawing arrows to link the stakeholders. (These may be one-way or two-way, depending on whether influence flows to the same extent in both directions).

Step Five: Map the strength of influence by using thicker lines to indicate stronger influence.

> In some situations, the person who signs off projects or purchases may not actually be the most influential person in the network. For example, a Head of Purchasing might always accept the recommendations of the IT Department.
>
> In this case, it's worth marking who has sign-off authority on your map, however, it's worth checking quite carefully that they really are as influenced by others as the others claim!

Step Six: Study the map, and identify stakeholders with the most overall influence. Form a stakeholder management plan that will allow you to communicate with, and hopefully influence, these important influencers.

Step Seven: Map these influence relationships on a regular basis. This way, you'll better understand the dynamics of decision making relating to your project.

Key Points

Influence maps are important visual models of the key people and relationships that impact a project or decision. (Don't make the mistake of thinking that hierarchy or traditional lines of authority are always the routes by which decisions are made.)

Take the time to uncover the underlying relationships and influence that key stakeholders have. With this insight, you can tap into the real sources of power and persuasion.

While this is something that people do intuitively in small projects, it's something that you'll need to do actively for larger projects. This is particularly the case in projects that involve people outside your organization.

Grid Analysis

Making a Decision By Weighing Up Different Factors
Also known as Decision Matrix Analysis, Pugh Matrix Analysis, and Multi-Attribute Utility Theory (MAUT)

Imagine that your boss has put you in charge of taking on a new outsourced IT supplier. You've already identified several different suppliers, and you now need to decide which one to use.

You could decide to go with the low-cost option. But you don't want to make your decision on cost alone - factors such as contract length, underlying technology, and service levels need to be taken into consideration. So how can you make sure you make the best decision, while taking all of these different factors into account?

Grid Analysis is a useful technique to use for making a decision. It's particularly powerful where you have a number of good alternatives to choose from, and many different factors to take into account. This makes it a great technique to use in almost any important decision where there isn't a clear and obvious preferred option.

Being able to use Grid Analysis means that you can take decisions confidently and rationally, at a time when other people might be struggling to make a decision.

How to Use the Tool

Grid Analysis works by getting you to list your options as rows on a table, and the factors you need consider as columns. You then score each option/factor combination, weight this score by the relative importance of the factor, and add these scores up to give an overall score for each option.

While this sounds complex, this technique is actually quite easy to use. Here's a step-by-step guide with an example. Start by downloading our [free worksheet](#). Then work through these steps:

1. List all of your options as the row labels on the table, and list the factors that you need to consider as the column headings. For example, if you were buying a new laptop computer, factors to consider might be cost, dimensions, and hard disk size.

2. Next, work your way down the columns of your table, scoring each option for each of the factors in your decision. Score each option from 0 (poor) to 5 (very good). Note that you do not have to have a different score for each option - if none of them are good for a particular factor in your decision, then all options should score 0.

3. The next step is to work out the relative importance of the factors in your decision. Show these as numbers from, say, 0 to 5, where 0 means that the factor is absolutely unimportant in the final decision, and 5 means that it is very important. (It's perfectly acceptable to have factors with the same importance.)

   > **Tip:**
   > These values may be obvious. If they are not, then use a technique such as [Paired Comparison Analysis](#) to estimate them.

4. Now multiply each of your scores from step 2 by the values for relative importance of the factor that you calculated in step 3. This will give you weighted scores for each option/factor combination.

5. Finally, add up these weighted scores for each of your options. The option that scores the highest wins!

A windsurfing enthusiast is about to replace his car. He needs one that not only carries a board and sails, but also one that will be good for business travel. He has always loved open-topped sports cars, but no car he can find is good for all three things.

His options are:

- An SUV/4x4, hard topped vehicle.
- A comfortable "family car."
- A station wagon/estate car.
- A convertible sports car.

Factors that he wants to consider are:

- Cost.
- Ability to carry a sail board safely.
- Ability to store sails and equipment securely.
- Comfort over long distances.
- Fun!
- Look, and build quality.

Firstly he draws up the table shown in Figure 1, and scores each option by how well it satisfies each factor:

Figure 1: Example Grid Analysis Showing <u>Unweighted</u> Assessment of How Each Type of Car Satisfies Each Factor

Factors:	Cost	Board	Storage	Comfort	Fun	Look	Total
Weights:							
Sports Car	1	0	0	1	3	3	
SUV/4x4	0	3	2	2	1	1	
Family Car	2	2	1	3	0	0	
Station Wagon	2	3	3	3	0	1	

Next he decides the relative weights for each of the factors. He multiplies these by the scores already entered, and totals them. This is shown in Figure 2:

Figure 2: Example Grid Analysis Showing <u>Weighted</u> Assessment of How Each Type of Car Satisfies Each Factor

Factors:	Cost	Board	Storage	Comfort	Fun	Look	Total
Weights:	**4**	**5**	**1**	**2**	**3**	**4**	
Sports Car	4	0	0	2	9	12	**27**
SUV/4x4	0	15	2	4	3	4	**28**
Family Car	8	10	1	6	0	0	**25**
Station Wagon	8	15	3	6	0	4	**36**

This gives an interesting result: Despite its lack of fun, a station wagon is the best choice. Windsurfing really matters to him!

Key Points

Grid Analysis helps you to decide between several options, where you need to take many different factors into account.

To use the tool, lay out your options as rows on a table. Set up the columns to show the factors you need to consider. Score each choice for each factor using numbers from 0 (poor) to 5 (very good), and then allocate weights to show the importance of each of these factors. Multiply each score by the weight of the factor, to show its contribution to the overall selection. Finally add up the total scores for each option. The highest scoring option will be the best option.

> **Note:**
> Grid Analysis is the simplest form of Multiple Criteria Decision Analysis (MCDA), also known as Multiple Criteria Decision Aid or Multiple Criteria Decision Management (MCDM). Sophisticated MCDA can involve highly complex modelling of different potential scenarios, using advanced mathematics.
>
> A lot of business decision making, however, is based on approximate or subjective data. Where this is the case, Grid Analysis may be all that's needed.

Plus, Minus, Interesting (PMI)

Weighing the Pros and Cons of a Decision

PMI stands for 'Plus/Minus/Interesting'. It is a valuable improvement to the 'weighing pros and cons' technique used for centuries.

PMI is an important Decision Making tool: the mind tools used so far in this section have focused on selecting a course of action from a range of options. Before you move straight to action on this course of action, it is important to check that it is going to improve the situation (it may actually be best to do nothing!) PMI is a useful tool for doing this.

How to Use the Tool:

In the column underneath 'Plus', write down all the positive results of taking the action. Underneath 'Minus' write down all the negative effects. In the 'Interesting' column write down the implications and possible outcomes of taking the action, whether positive, negative, or uncertain.

By this stage it may already be obvious whether or not you should implement the decision. If it is not, consider each of the points you have written down and assign a positive or negative score to it appropriately. The scores you assign may be quite subjective.

Once you have done this, add up the score. A strongly positive score shows that an action should be taken, a strongly negative score that it should be avoided.

Example:

A young professional is deciding where to live. Her question is 'Should she move to the big city?'

She draws up the PMI table below:

Plus	Minus	Interesting
More going on (+5)	Have to sell house (-6)	Easier to find new job? (+1)
Easier to see friends (+5)	More pollution (-3)	Meet more people? (+2)
Easier to get places (+3)	Less space (-3)	More difficult to get own work done? (-4)
	No countryside (-2)	
	More difficult to get to work? (-4)	
+13	-18	-1

She scores the table as 13 (Plus) - 18 (Minus) - 1 (Interesting) = - 6

For her, the comforts of a settled rural existence outweigh the call of the 'bright lights' - it would be much better for her to live outside the city, but close enough to travel in if necessary.

PMI was codified by Edward de Bono in his book Serious Creativity.

Key points:

PMI is a good way of weighing the pros, cons and implications of a decision. When you have selected a course of action, PMI is a good technique to use to check that it is worth taking.

To use the technique, draw up a table with three columns headed Plus, Minus and Interesting. Within the table write down all the positive points of following the course of action, all the negatives, and all the interesting implications and possible outcomes.

If the decision is still not obvious, you can then score the table to show the importance of individual items. The total score should show whether it is worth implementing the decision.

Force Field Analysis

Understanding the Pressures For and
Against Change

Force Field Analysis is a useful technique for looking at all the forces for and against a decision. In effect, it is a specialized method of weighing pros and cons.

By carrying out the analysis you can plan to strengthen the forces supporting a decision, and reduce the impact of opposition to it.

How to Use the Tool:

To carry out a force field analysis, first download our free worksheet and then use it to follow these steps:

- Describe your plan or proposal for change in the middle.
- List all forces for change in one column, and all forces against change in another column.
- Assign a score to each force, from 1 (weak) to 5 (strong).

For example, imagine that you are a manager deciding whether to install new manufacturing equipment in your factory. You might draw up a force field analysis like the one in Figure 1:

Figure 1:
Force Field Analysis
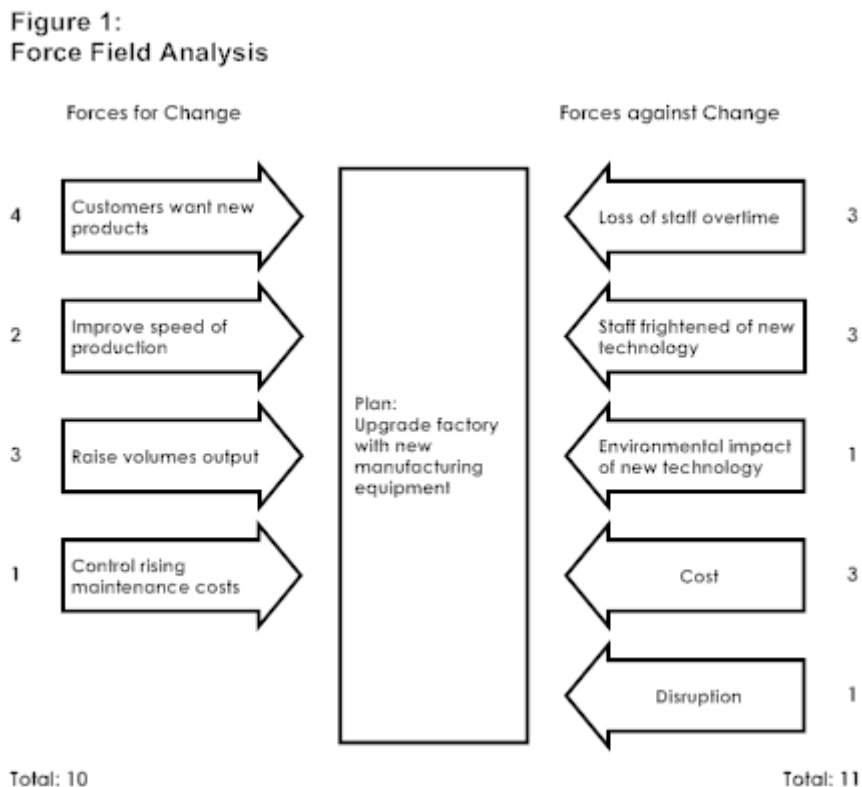
Drawn using SmartDraw. Click for free download.

Once you have carried out an analysis, you can decide whether your project is viable. In the example above, you might initially question whether it is worth going ahead with the plan.

Where you have already decided to carry out a project, Force Field Analysis can help you to work out how to improve its probability of success. Here you have two choices:

- To reduce the strength of the forces opposing a project.
- To increase the forces pushing a project.

Often the most elegant solution is the first: just trying to force change through may cause its own problems. People can be uncooperative if change is forced on them.

If you had to implement the project in the example above, the analysis might suggest a number of changes to the initial plan:

- By training staff (increase cost by 1) you could eliminate fear of technology (reduce fear by 2)
- It would be useful to show staff that change is necessary for business survival (new force in favor, +2)
- Staff could be shown that new machines would introduce variety and interest to their jobs (new force, +1)
- You could raise wages to reflect new productivity (cost +1, loss of overtime -2)
- Slightly different machines with filters to eliminate pollution could be installed (environmental impact -1)

These changes would swing the balance from 11:10 (against the plan), to 8:13 (in favor of the plan).

Key points:

Force Field Analysis is a useful technique for looking at all the forces for and against a plan. It helps you to weigh the importance of these factors and decide whether a plan is worth implementing.

Where you have decided to carry out a plan, Force Field Analysis helps you identify changes that you could make to improve it.

Decision Trees
Choosing by projecting "expected outcomes"

Decision Trees are excellent tools for helping you to choose between several courses of action. They provide a highly effective structure within which you can lay out options and investigate the possible outcomes of choosing those options. They also help you to form a balanced picture of the risks and rewards associated with each possible course of action.

Drawing a Decision Tree

You start a Decision Tree with a decision that you need to make. Draw a small square to represent this towards the left of a large piece of paper.

From this box draw out lines towards the right for each possible solution, and write that solution along the line. Keep the lines apart as far as possible so that you can expand your thoughts.

At the end of each line, consider the results. If the result of taking that decision is uncertain, draw a small circle. If the result is another decision that you need to make, draw another square. Squares represent decisions, and circles represent uncertain outcomes. Write the decision or factor above the square or circle. If you have completed the solution at the end of the line, just leave it blank.

Starting from the new decision squares on your diagram, draw out lines representing the options that you could select. From the circles draw lines representing possible outcomes. Again make a brief note on the line saying what it means. Keep on doing this until you have drawn out as many of the possible outcomes and decisions as you can see leading on from the original decisions.

An example of the sort of thing you will end up with is shown in Figure 1:

Figure 1:
Example Decision Tree:
Should we develop a new product or consolidate?
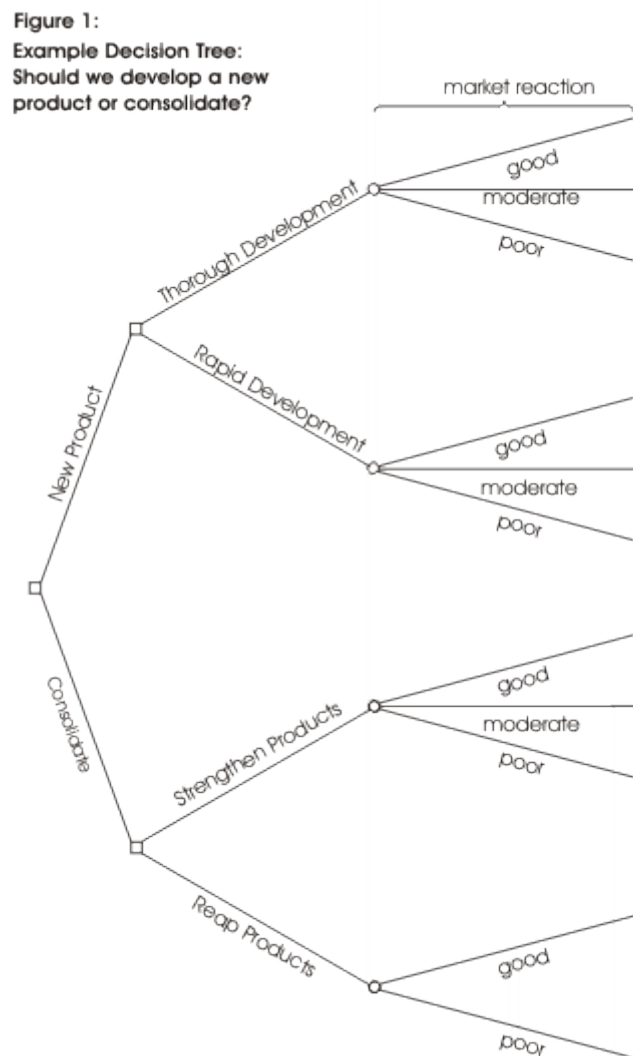
Once you have done this, review your tree diagram. Challenge each square and circle to see if there are any solutions or outcomes you have not considered. If there are, draw them in. If necessary, redraft your tree if parts of it are too congested or untidy. You should now have a good understanding of the range of possible outcomes of your decisions.
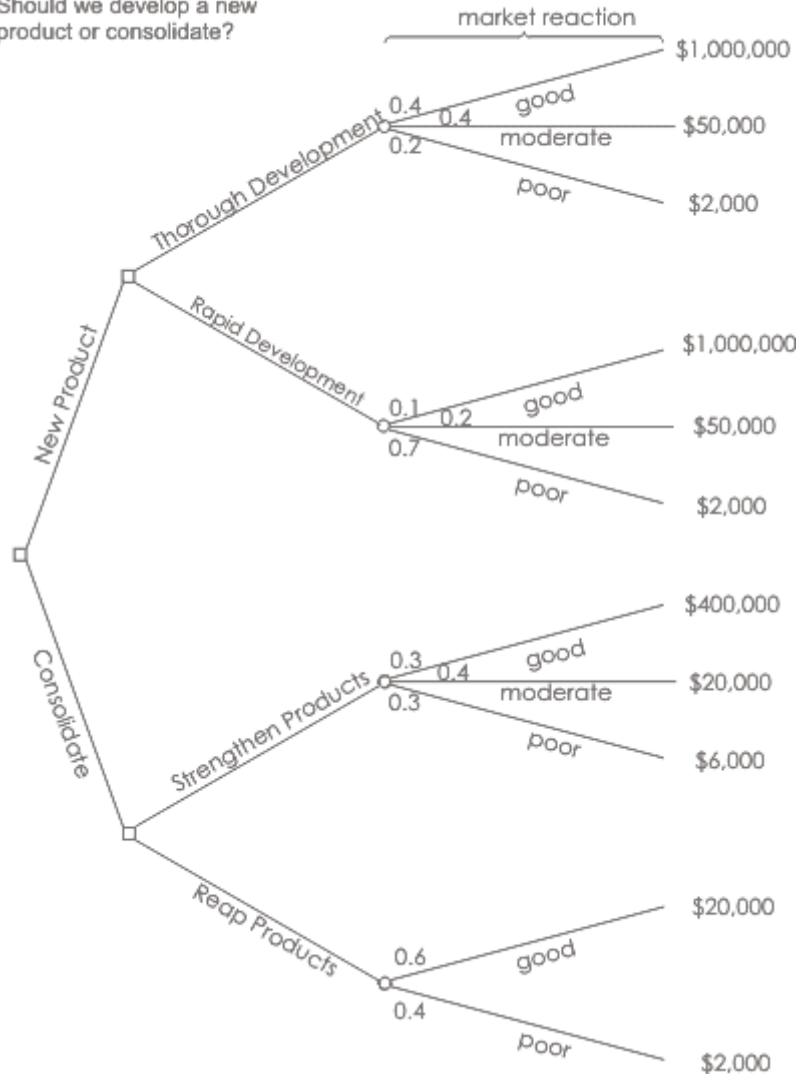
Evaluating Your Decision Tree

Now you are ready to evaluate the decision tree. This is where you can work out which option has the greatest worth to you. Start by assigning a cash value or score to each possible outcome. Estimate how much you think it would be worth to you if that outcome came about.

Next look at each circle (representing an uncertainty point) and estimate the probability of each outcome. If you use percentages, the total must come to 100% at each circle. If you use fractions, these must add up to 1. If you have data on past events you may be able to make rigorous estimates of the probabilities. Otherwise write down your best guess.

This will give you a tree like the one shown in Figure 2:

Figure 2

Example Decision Tree:
Should we develop a new
product or consolidate?

Calculating Tree Values

Once you have worked out the value of the outcomes, and have assessed the probability of the outcomes of uncertainty, it is time to start calculating the values that will help you make your decision.

Start on the right hand side of the decision tree, and work back towards the left. As you complete a set of calculations on a node (decision square or uncertainty circle), all you need to do is to record the result. You can ignore all the calculations that lead to that result from then on.

Calculating The Value of Uncertain Outcome Nodes

Where you are calculating the value of uncertain outcomes (circles on the diagram), do this by multiplying the value of the outcomes by their probability. The total for that node of the tree is the total of these values.

In the example in Figure 2, the value for 'new product, thorough development' is:

0.4 (probability good outcome) x $1,000,000 (value) =		$400,000
0.4 (probability moderate outcome) x $50,000 (value) =		$20,000
0.2 (probability poor outcome) x $2,000 (value) =		$400
	+	**$420,400**

Figure 3 shows the calculation of uncertain outcome nodes:

Figure 3

Example Decision Tree:
Should we develop a new
product or consolidate?

market reaction

Thorough Development

420,400

0.4
0.4 good → $1,000,000
0.4 moderate → $50,000
0.2 poor → $2,000

0.4 x 1,000,000 = 400,000
0.4 x   50,000 = 20,000
0.2 x   2,000 =   400
                  420,400

Rapid Development

111,400

0.1
0.1 good → $1,000,000
0.2 moderate → $50,000
0.7 poor → $2,000

0.1 x 1,000,000 = 100,000
0.2 x   50,000 = 10,000
0.7 x   2,000 =   1,400
                  111,400

New Product

Consolidate

Strengthen Products

129,800

0.3
0.3 good → $400,000
0.4 moderate → $20,000
0.3 poor → $6,000

0.3 x 400,000 = 120,000
0.4 x 20,000 =   8,000
0.3 x   6,000 =   1,800
                 129,800

Reap Products

12,800

0.6
0.6 good → $20,000
0.4 poor → $2,000

0.6 x 20,000 = 12,000
0.4 x 2,000 =   800
                  12,800

Note that the values calculated for each node are shown in the boxes.

Calculating the Value of Decision Nodes

When you are evaluating a decision node, write down the cost of each option along each decision line. Then subtract the cost from the outcome value that you have already calculated. This will give you a value that represents the benefit of that decision.

Note that amounts already spent do not count for this analysis – these are 'sunk costs' and (despite emotional counter-arguments) should not be factored into the decision.

When you have calculated these decision benefits, choose the option that has the largest benefit, and take that as the decision made. This is the value of that decision node.

Figure 4 shows this calculation of decision nodes in our example:

Figure 4:
Example Decision Tree:
Should we develop a new product or consolidate?
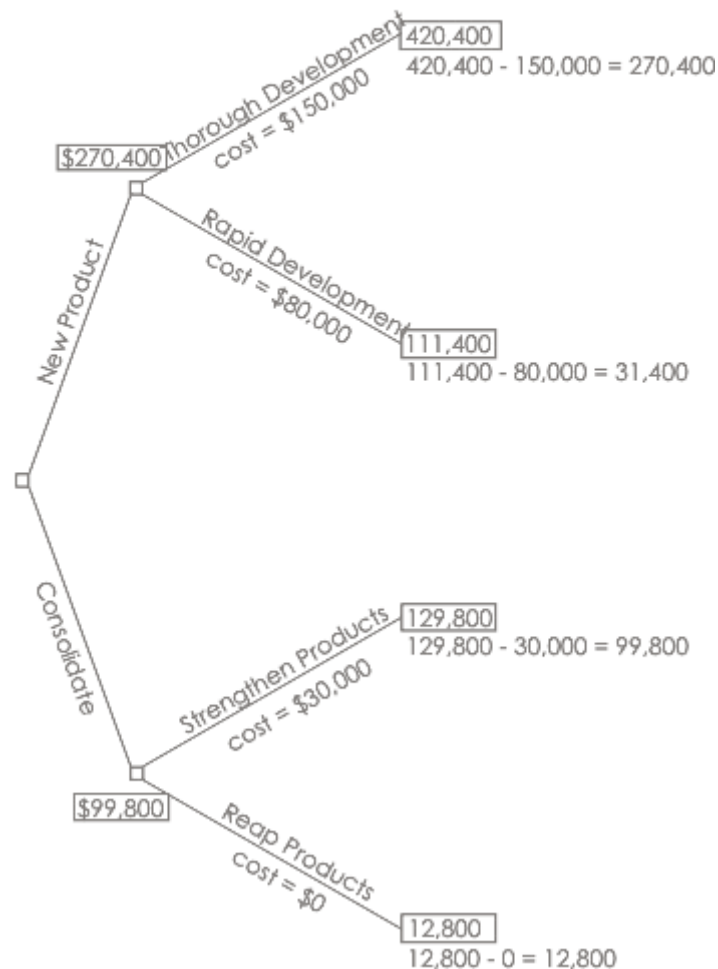
In this example, the benefit we previously calculated for 'new product, thorough development' was $420,400. We estimate the future cost of this approach as $150,000. This gives a net benefit of $270,400.

The net benefit of 'new product, rapid development' was $31,400. On this branch we therefore choose the most valuable option, 'new product, thorough development', and allocate this value to the decision node.

Result

By applying this technique we can see that the best option is to develop a new product. It is worth much more to us to take our time and get the product right, than to rush the product to market. It is better just to improve our existing products than to botch a new product, even though it costs us less.

Key Points:

Decision trees provide an effective method of Decision Making because they:

- Clearly lay out the problem so that all options can be challenged.

- Allow us to analyze fully the possible consequences of a decision.

- Provide a framework to quantify the values of outcomes and the probabilities of achieving them.

- Help us to make the best decisions on the basis of existing information and best guesses.

As with all Decision Making methods, decision tree analysis should be used in conjunction with common sense – decision trees are just one important part of your Decision Making tool kit.

Risk Analysis & Risk Management

Evaluating and Managing the Risks You Face

Almost everything we do in today's business world involves a risk of some kind: customer habits change, new competitors appear, factors outside your control could delay your project. But formal risk analysis and risk management can help you to assess these risks and decide what actions to take to minimize disruptions to your plans. They will also help you to decide whether the strategies you could use to control risk are cost-effective.

How to use the tool:

Here we define risk as 'the perceived extent of possible loss'. Different people will have different views of the impact of a particular risk – what may be a small risk for one person may destroy the livelihood of someone else.

One way of putting figures to risk is to calculate a value for it as:

risk = probability of event x cost of event

Doing this allows you to compare risks objectively. We use this approach formally in decision making with Decision Trees.

To carry out a risk analysis, follow these steps:

1. Identify Threats:

The first stage of a risk analysis is to identify threats facing you. Threats may be:

- **Human** - from individuals or organizations, illness, death, etc.
- **Operational** - from disruption to supplies and operations, loss of access to essential assets, failures in distribution, etc.
- **Reputational** - from loss of business partner or employee confidence, or damage to reputation in the market.
- **Procedural** - from failures of accountability, internal systems and controls, organization, fraud, etc.
- **Project** - risks of cost over-runs, jobs taking too long, of insufficient product or service quality, etc.
- **Financial** - from business failure, stock market, interest rates, unemployment, etc.
- **Technical** - from advances in technology, technical failure, etc.
- **Natural** - threats from weather, natural disaster, accident, disease, etc.
- **Political** - from changes in tax regimes, public opinion, government policy, foreign influence, etc.
- **Others** - Porter's Five Forces analysis may help you identify other risks.

This analysis of threat is important because it is so easy to overlook important threats. One way of trying to capture them all is to use a number of different approaches:

- Firstly, run through a list such as the one above, to see if any apply
- Secondly, think through the systems, organizations or structures you operate, and analyze risks to any part of those
- See if you can see any vulnerabilities within these systems or structures
- Ask other people, who might have different perspectives.

2. Estimate Risk:

Once you have identified the threats you face, the next step is to work out the likelihood of the threat being realized and to assess its impact.

One approach to this is to make your best estimate of the probability of the event occurring, and to multiply this by the amount it will cost you to set things right if it happens. This gives you a value for the risk.

3. Managing Risk:

Once you have worked out the value of risks you face, you can start to look at ways of managing them. When you are doing this, it is important to choose cost effective approaches - in most cases, there is no point in spending more to eliminating a risk than the cost of the event if it occurs. Often, it may be better to accept the risk than to use excessive resources to eliminate it.

Risk may be managed in a number of ways:

- *By using existing assets:*
  Here existing resources can be used to counter risk. This may involve improvements to existing methods and systems, changes in responsibilities, improvements to accountability and internal controls, etc.
- *By contingency planning:*
  You may decide to accept a risk, but choose to develop a plan to minimize its effects if it happens. A good contingency plan will allow you to take action immediately, with the minimum of project control if you find yourself in a crisis management situation. Contingency plans also form a key part of Business Continuity Planning (BCP) or Business Continuity management (BCM).
- *By investing in new resources:*
  Your risk analysis should give you the basis for deciding whether to bring in additional resources to counter the risk. This can also include insuring the risk: Here you pay someone else to carry part of the risk - this is particularly important where the risk is so great as to threaten your or your organization's solvency.

4. Reviews:

Once you have carried out a risk analysis and management exercise, it may be worth carrying out regular reviews. These might involve formal reviews of the risk analysis, or may involve testing systems and plans appropriately.

Key points:

Risk analysis allows you to examine the risks that you or your organization face. It is based on a structured approach to thinking through threats, followed by an evaluation of the probability and cost of events occurring.

As such, it forms the basis for risk management and crisis prevention. Here the emphasis is on cost effectiveness. Risk management involves adapting the use of existing resources, contingency planning and good use of new resources.

Porter's Five Forces

Assessing the Balance of Power in a Business Situation

The Porter's 5 Forces tool is a simple but powerful tool for understanding where power lies in a business situation. This is useful, because it helps you understand both the strength of your current competitive position, and the strength of a position you're considering moving into.

With a clear understanding of where power lies, you can take fair advantage of a situation of strength, improve a situation of weakness, and avoid taking wrong steps. This makes it an important part of your planning toolkit.

Conventionally, the tool is used to identify whether new products, services or businesses have the potential to be profitable. However it can be very illuminating when used to understand the balance of power in other situations too.
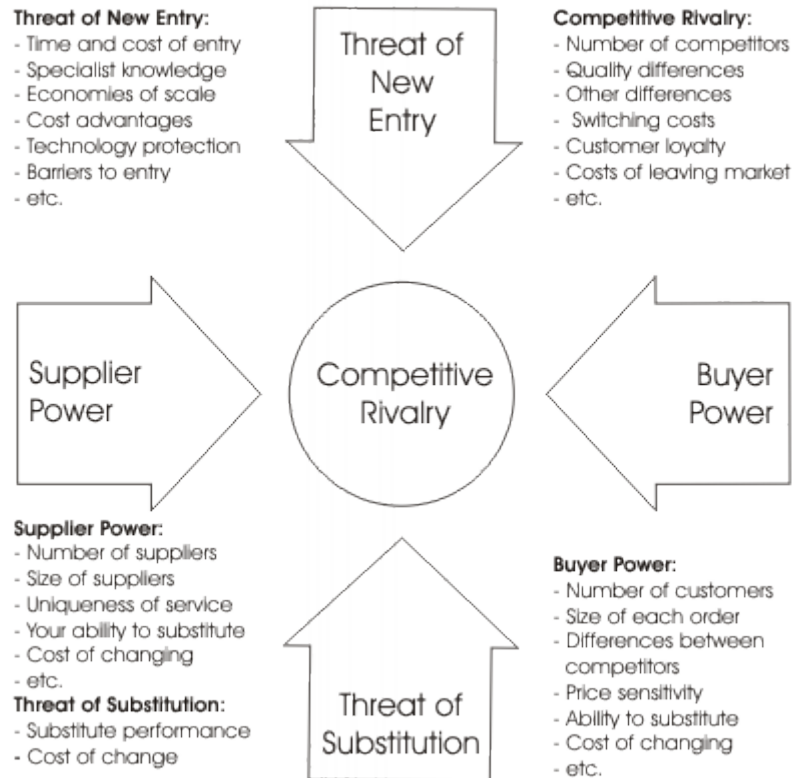
Understanding the Tool:

Five Forces Analysis assumes that there are five important forces that determine competitive power in a business situation. These are:

1. **Supplier Power:** Here you assess how easy it is for suppliers to drive up prices. This is driven by the number of suppliers of each key input, the uniqueness of their product or service, their strength and control over you, the cost of switching from one to another, and so on. The fewer the supplier choices you have, and the more you need suppliers' help, the more powerful your suppliers are.
2. **Buyer Power:** Here you ask yourself how easy it is for buyers to drive prices down. Again, this is driven by the number of buyers, the importance of each individual buyer to your business, the cost to them of switching from your products and services to those of someone else, and so on. If you deal with few, powerful buyers, then they are often able to dictate terms to you.
3. **Competitive Rivalry:** What is important here is the number and capability of your competitors. If you have many competitors, and they offer equally attractive products and services, then you'll most likely have little power in the situation, because suppliers and buyers will go elsewhere if they don't get a good deal from you. On the other hand, if no-one else can do what you do, then you can often have tremendous strength.
4. **Threat of Substitution:** This is affected by the ability of your customers to find a different way of doing what you do – for example, if you supply a unique software product that automates an important process, people may substitute by doing the process manually or by outsourcing it. If substitution is easy and substitution is viable, then this weakens your power.
5. **Threat of New Entry:** Power is also affected by the ability of people to enter your market. If it costs little in time or money to enter your market and compete effectively, if there are few economies of scale in place, or if you have little protection for your key technologies, then new competitors can quickly enter your market and weaken your position. If you have strong and durable barriers to entry, then you can preserve a favorable position and take fair advantage of it.

These forces can be neatly brought together in a diagram like the one below:

Porter's Five Forces

Threat of New Entry:
- Time and cost of entry
- Specialist knowledge
- Economies of scale
- Cost advantages
- Technology protection
- Barriers to entry
- etc.

Competitive Rivalry:
- Number of competitors
- Quality differences
- Other differences
- Switching costs
- Customer loyalty
- Costs of leaving market
- etc.

Supplier Power:
- Number of suppliers
- Size of suppliers
- Uniqueness of service
- Your ability to substitute
- Cost of changing
- etc.

Threat of Substitution:
- Substitute performance
- Cost of change

Buyer Power:
- Number of customers
- Size of each order
- Differences between competitors
- Price sensitivity
- Ability to substitute
- Cost of changing
- etc.

Using the Tool:

To use the tool to understand your situation, look at each of these forces one-by-one and write your observations on our free worksheet which you can download here.

Brainstorm the relevant factors for your market or situation, and then check against the factors listed for the force in the diagram above.

Then, mark the key factors on the diagram, and summarize the size and scale of the force on the diagram. An easy way of doing this is to use, for example, a single "+" sign for a force moderately in your favor, or "--" for a force strongly against you (you can see this in the example below).
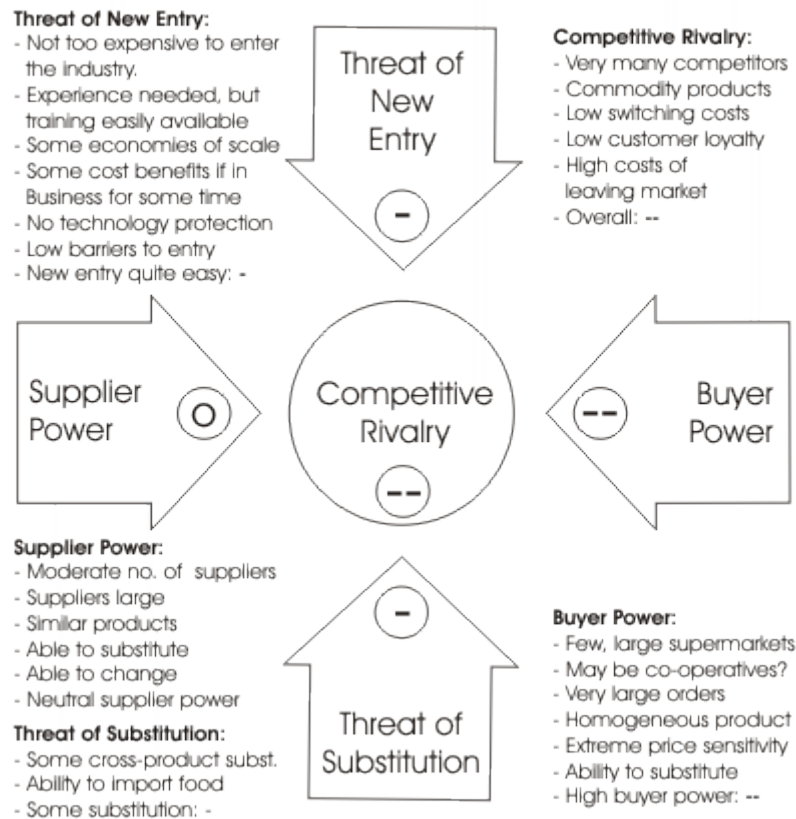
Then look at the situation you find using this analysis and think through how it affects you. Bear in mind that few situations are perfect; however looking at things in this way helps you think through what you could change to increase your power with respect to each force. What's more, if you find yourself in a structurally weak position, this tool helps you think about what you can do to move into a stronger one.

This tool was created by Harvard Business School professor, Michael Porter, to analyze the attractiveness and likely-profitability of an industry. Since publication, it has become one of the most important business strategy tools. The classic article which introduces it is "How Competitive Forces Shape Strategy" in Harvard Business Review 57, March - April 1979, pages 86-93.

Example:

Martin Johnson is deciding whether to switch career and become a farmer - he's always loved the countryside, and wants to switch to a career where he's his own boss. He creates the following Five Forces Analysis as he thinks the situation through:

Porter's Five Forces - Buying a Farm

Threat of New Entry:
- Not too expensive to enter the industry.
- Experience needed, but training easily available
- Some economies of scale
- Some cost benefits if in Business for some time
- No technology protection
- Low barriers to entry
- New entry quite easy: -

Competitive Rivalry:
- Very many competitors
- Commodity products
- Low switching costs
- Low customer loyalty
- High costs of leaving market
- Overall: --

Supplier Power:
- Moderate no. of suppliers
- Suppliers large
- Similar products
- Able to substitute
- Able to change
- Neutral supplier power

Threat of Substitution:
- Some cross-product subst.
- Ability to import food
- Some substitution: -

Buyer Power:
- Few, large supermarkets
- May be co-operatives?
- Very large orders
- Homogeneous product
- Extreme price sensitivity
- Ability to substitute
- High buyer power: --

This worries him:

- The **threat of new entry** is quite high: if anyone looks as if they're making a sustained profit, new competitors can come into the industry easily, reducing profits.
- **Competitive rivalry** is extremely high: if someone raises prices, they'll be quickly undercut. Intense competition puts strong downward pressure on prices.
- **Buyer Power** is strong, again implying strong downward pressure on prices.
- There is some **threat of substitution**.

Unless he is able to find some way of changing this situation, this looks like a very tough industry to survive in. Maybe he'll need to specialize in a sector of the market that's protected from some of these forces, or find a related business that's in a stronger position.

Key points:

Porter's Five Forces Analysis is an important tool for assessing the potential for profitability in an industry. With a little adaptation, it is also useful as a way of assessing the balance of power in more general situations.

It works by looking at the strength of five important forces that affect competition:

- **Supplier Power:** The power of suppliers to drive up the prices of your inputs.

- **Buyer Power:** The power of your customers to drive down your prices.
- **Competitive Rivalry:** The strength of competition in the industry.
- **The Threat of Substitution:** The extent to which different products and services can be used in place of your own.
- **The Threat of New Entry:** The ease with which new competitors can enter the market if they see that you are making good profits (and then drive your prices down).

By thinking about how each force affects you, and by identifying the strength and direction of each force, you can quickly assess the strength of your position and your ability to make a sustained profit in the industry.

You can then look at how you can affect each of the forces to move the balance of power more in your favor.

The Ansoff Matrix

Understanding the risks of different options
(Also known as the Product/Market Expansion Grid)

Successful businesspeople spend a lot of time thinking about how they can increase profits. They'll typically have hundreds of ideas about things they could do, including developing new products, opening up new markets and new channels, and launching new marketing campaigns.

In the same way, people within organizations often have many different ideas about how they want to progress their careers. Perhaps they want to develop new skills, move into new roles, and even work in new industries.

That's great! But, if this describes you, which of these ideas should you choose? And why?

This is where you can use a strategic approach, such as the Ansoff Matrix, to start screening your options, so that you can narrow these down and choose the ones that best suit your situation.

Understanding the Tool

The Ansoff Matrix was first published in the Harvard Business Review in 1957, and has given generations of marketers and business leaders a quick and simple way of thinking about growth.

Sometimes called the Product/Market Expansion Grid, the matrix (see Figure 1 below) shows four ways that businesses can grow, and helps people think about the risks associated with each option.

Figure 1: The Ansoff Matrix - Business

Drawn using SmartDraw. Click for free download.

The Matrix essentially shows the risk that a particular strategy will expose you to, the idea being that each time you move into a new quadrant (horizontally or vertically) you increase risk.

The Corporate Ansoff Matrix

Looking at it from a business perspective, the low risk option is to stay with your existing product in your existing market: you know the product works, and the market holds few surprises for you.

However, you expose yourself to a whole new level of risk by either moving into a new market with an existing product, or developing a new product for an existing market. The new market may turn out to have radically different needs and dynamics than you thought, and the new product may just not be commercially successful.

And by moving two quadrants and targeting a new market with a new product, you increase your risk to yet another level!

FREE Worksheet >>

Personal Ansoff

Looking at this idea from a personal perspective, just staying where you are is often a low risk option.

Switching to a new role in the same company or industry, or changing to a similar job in a new industry is a high-risk option. And switching to a new role in a new industry has an even higher level of risk!

FREE Worksheet >>

This is shown in Figure 2, below.

Figure 2: The Ansoff Matrix - Career

Figure 2: The Ansoff Matrix - Career

Tip 1:
Interpret this according to your circumstances. For example, an accountant may find it easy to switch from one industry to another. But a salesman doing this may lose contacts that would take years to rebuild.

Tip 2:
Don't be too scared by risk – if you manage it correctly (for example, by researching carefully, making contingency plans, building appropriate skills, and suchlike), then it can be well worth taking quite large risks.

How to Use the Tool

Use of the tool is straightforward:

1. Start by downloading either our free Corporate Ansoff or Personal Ansoff worksheet. Then plot the approaches you're considering on the matrix. The table below helps you think about how you might classify different approaches.

Market Development	Diversification
Here, you're targeting new markets, or new areas of the market. You're trying to sell more of the same things to different people. Here you might: • Target different geographical markets at home or abroad • Use different sales channels, such as online or direct sales if you are currently selling through the trade • Target different groups of people, perhaps with different age, gender or demographic profiles from your normal customers.	This strategy is risky: There's often little scope for using existing expertise or for achieving economies of scale, because you are trying to sell completely different products or services to different customers The main advantage of diversification is that, should one business suffer from adverse circumstances, the other may not be affected.
Market Penetration With this approach, you're trying to sell more of the same things to the same people. Here you might: • Advertise, to encourage more people within your existing market to choose your product, or to use more of it • Introduce a loyalty scheme • Launch price or other special offer promotions • Increase your sales force activities, or • Buy a competitor company (particularly in mature markets)	**Product Development** Here, you're selling more things to the same people. Here you might: • Extend your product by producing different variants, or packaging existing products it in new ways • Develop related products or services (for example, a domestic plumbing company might add a tiling service – after all, if customers who want a new kitchen plumbed in are quite likely to need tiling as well!) • In a service industry, shorten your time to market, or improve customer service or quality.

2. Manage risk appropriately. For example, if you're switching from one quadrant to another, make sure that:

    • You research the move carefully.
    • You build the capabilities needed to succeed in the new quadrant.

- You've got plenty of resources to cover a possible lean period while you're learning how to sell the new product, and are learning what makes the new market "tick".
- You have firstly thought through what you have to do if things don't work out, and that failure won't "break" you.

Tip:
Some marketers use a nine-box grid for a more sophisticated analysis. This adds "modified" products between existing and new ones (for example, a different flavor of your existing pasta sauce rather than launching a soup), and "expanded" markets between existing and new ones (for example, opening another store in a nearby town, rather than going into online sales).

This is useful as it shows the difference between product extension and true product development, and also between market expansion and venturing into genuinely new markets (see Figure 3). However, be careful of the three "options" in grey, as they involve trying to do two things at once without the one benefit of a true diversification strategy (escaping a downturn in one product market).

Figure 3: The 9-Box Grid

Markets	Existing Products & Services	Modified Products & Services	New Products & Services
New	Market Development	Partial Diversification	Diversification
Expanded	Market Expansion	Limited Diversification	Partial Diversification
Existing	Market Penetration	Product Extension	Product Development