

THE LADDER OF INFERENCE



Take Action – Do something!

Form Beliefs – Reinforce or form new.

Come to Conclusions – It “must” be “this” way.

Make Assumptions – Think we know what others’ motivation is.

Affixed Meaning – Is this a threat or benefit to me?

Select Data & Experience – What’s left after we filter?

Real Data & Experience – What really happened?

Description

Have you ever been accused of "putting 2 and 2 together and making 5", meaning that the other person thinks you have jumped to the wrong conclusion?

In today's fast-moving world, we are always under pressure to act now, rather than spend time reasoning things through and thinking about the true facts. Not only can this lead us to a wrong conclusion, but it can also cause conflict with other people, who may have drawn quite different conclusions on the same matter.

Especially in a fast business environment, you need to make sure your actions and decisions are founded on reality. Similarly, when you accept or challenge other people's conclusions, you need be confident that their reasoning, and yours, is firmly based on the true facts. The "Ladder of Inference" helps you achieve this.

Sometimes known as the "Process of Abstraction", this tool helps you understand the thinking steps that can lead you to jump to wrong conclusions, and so helps you get back to hard reality and facts.

The Theory

The Ladder of Inference describes the thinking process that we go through, usually without realizing it, to get from a fact to a decision or action. The thinking stages can be seen as rungs on a ladder and are shown in the image.

Starting at the bottom of the ladder, we have reality and facts. From there, we:

- Experience these selectively based on our beliefs and prior experience.
- Interpret what they mean.
- Apply our existing assumptions, sometimes without considering them.
- Draw conclusions based on the interpreted facts and our assumptions.
- Develop beliefs based on these conclusions.
- Take actions that seem "right" because they are based on what we believe.

This can create a vicious circle. Our beliefs have a big effect on how we select from reality, and can lead us to ignore the true facts altogether. Soon we are literally jumping to conclusions – by missing facts and skipping steps in the reasoning process.

By using the Ladder of Inference, you can learn to get back to the facts and use your beliefs and experiences to positive effect, rather than allowing them to narrow your field of judgment. Following this step-by-step reasoning can lead you to better results, based on reality, so avoiding unnecessary mistakes and conflict.

How to use the theory

The Ladder of Inference helps you draw better conclusions, or challenge other people's conclusions based on true facts and reality. It can be used to help you analyze hard data, such as a set of sales figures, or to test assertions, such as "the project will go live in April". You can also use it to help validate or challenge other people's conclusions.

The step-by-step reasoning process helps you remain objective and, when working or challenging others, reach a shared conclusion without conflict.

Use the following steps to challenge thinking using the Ladder of Inference:

1. Stop! It's time to consider your reasoning.
2. Identify where on the ladder you are. Are you:
 - Selecting your data or reality?
 - Interpreting what it means?
 - Making or testing assumptions?
 - Forming or testing conclusions?
 - Deciding what to do and why?
3. From your current "rung", analyze your reasoning by working back down the ladder. This will help you trace the facts and reality that you are actually working with.
 - At each stage, ask yourself WHAT you are thinking and WHY. As you analyze each step, you may need to adjust your reasoning. For example you may need to change some assumption or extend the field of data you have selected.
 - The following questions help you work backwards (coming down the ladder, starting at the top):
 1. Why have I chosen this course of action? Are there other actions I should have considered?
 2. What belief lead to that action? Was it well-founded?
 3. Why did I draw that conclusion? is the conclusion sound?
 4. What am I assuming, and why? Are my assumptions valid?
 5. What data have I chosen to use and why? Have I selected data rigorously?
 6. What are the real facts that I should be using? Are there other facts I should consider?
4. With a new sense of reasoning (and perhaps a wider field of data and more considered assumptions), you can now work forwards again – step-by-step – up the rungs of the ladder.

Tips

Use the Ladder of Inference at any of stage of your thinking process. If you're asking any of the following questions, the model may prove a useful aid:

- Is this the "right" conclusion?
- Why am I making these assumptions?
- Why do I think this is the "right" thing to do?
- Is this really based on all the facts?
- Why does he believe that?

When you are working through your reasoning, look out for rungs that you tend to jump. Do you tend to make assumptions too easily? Do you tend to select only part of the data? Note your tendencies so that you can learn to do that stage of reasoning with extra care in the future.

Try explaining your reasoning to a colleague or friend. This will help you check that your argument is sound.

If you are challenging someone else's conclusions, it is especially important to be able to explain your reasoning so that you can explain it to that person in a way that helps you reach a shared conclusion and avoid conflict.

References

Information extracted from http://www.mindtools.com/pages/article/newTMC_91.htm

The Ladder of Inference was first put forward by organizational psychologist Chris Argyris and used by Peter Senge in *The Fifth Discipline: The Art and Practice of the Learning Organization*.