

Decisions Making – Top-down or Bottom-up?

A case for company-wide training.....

Organizations cannot escape the reality of the Information Technology (IT) revolution driving the world around them. But what is IT? The main function of IT is *gathering, organizing, and disseminating information*. Today's professional faces an information overload, which overwhelms the decision-maker and renders previous decision-making methods obsolete and ineffective. This has created a hidden crisis of "*analysis paralysis*".

Organizations have spent a fortune on IT infrastructure; but "oops" we forgot to train the user, on how to use this information to make better decisions in a timely manner. Training employees to search for information on the web, manage emails, and dabble in Microsoft Office products such as Excel & Word is not sufficient. They need to know how to use this information to make better decisions.

The general belief is that *Leadership Training is for Leaders*. True, decisions made by "managers" have the greatest impact. But.....

- Is it not true that managers rely on their teams to provide the information to make such decisions?
- Is it not true that managers often sign off on decisions made by their subordinates?
- Is it not true that most companies encourage "delegation" to subordinates?

If you plan on delegating, and you place your faith on the decisions of your subordinates, it is imperative that the folk who are doing the work are also trained, because they too make many assumptions (decisions). There is ample proof that many decisions made by "junior" staff can, and will have serious consequences, and also real some successes (See the real-world examples in the box).

Bottom-up Decisions – Some Real World Fiascos

Downing of a Libyan Commercial Plane – Israel

On February 21, 1973, Libyan Airlines Flight 114 left Tripoli at 10:30 on its regular trip to Cairo, with a French captain and a Libyan co-pilot. Because of the information/decisions made by the pilots of the fighter aircrafts, General Hod (Israeli Defense Forces) ordered the plane be brought down. A UN Commission concluded that there were a series of poor decisions, by the pilots, that led to the death of 113 civilians and crew.

Bloody Sunday – Ireland

One mid-level British officer ordered his troops to fire on a crowd at a soccer match, killing 14 civilians. This led to historic Irish war which spanned many decades.

Gas Plant Design – Abu Dhabi

When the A.D. National Oil Company initiated the design of a Gas Processing plant, the request for a gas sample went down the management chain, to a foreman. He in turn instructed a low-level operator to grab a gas sample. The operator, who was not fully cognizant of the final use of the sample – did not pay much attention to the procedure. The plant was designed and built with data from a "contaminated" gas sample. Cost of retro-fitting the plant to fix the errors was nearly 2 million dollars (1974), not to mention the loss of revenue.

Bottom-up Decisions – Some Real World Successes

Hospital Bed Sheets

One day, a nurse dealing having to change bed-sheets decided to cut the bed-sheet lengthwise so as not to have to lift the patient.

Wiltel – Fiber-Optic Lines

A junior engineer suggested that Wiltel laid fiber-optic cable adjacent to pipelines owned by its parent company Williams. This propelled Wiltel to be a major long-distance telephone carrier.

Verdict! It is likely that more decisions flow bottom-up, than top-down; though the success/failure of such decisions are not attributed to the lower-level staff.

To draw on a medical analogy, in the business world the process of reengineering is more akin to a physician resorting to surgery instead of preventative care. Without denying the enormous benefits of simplifying workflows and collapsing management layers, re-engineering seldom transforms the industry structure at the deeper level. The primary question remains:

The medical analogy:

Q: What led to this patient getting sick in the first place?

If the ultimate goal is to prevent disease rather than just treat its symptoms, we must understand the basic causes. Differences in lifestyle, diet, occupation, etc. are key reasons for patients falling sick.

Recent research has also shown that certain groups of people are more prone to a particular disease due to genetics; some maladies such as sickle cell anemia, Down's syndrome, and male pattern baldness are determined almost exclusively by genetics.

In the business world:

Q: What thought process led an employee to make a sub-optimal decision?

In the managerial context, a manager's perception of their role and industry predisposes them to behave a certain way under particular circumstances. The concern here is that managers without prior training are genetically encoded in the area of decision-making – so they are likely to make poor decisions.

Re-training employees to improve their decision-making skills is in essence equivalent re-working the genetic code to optimize it.

Training, the Holistic Way

In the conventional sense we determine the quality of a decision – by the *outcome!* If the outcome meets our expectations, we characterize our decision as “good”. This *after-the-fact* approach is unacceptable. We need a reliable methodology.

This is similar to driving a car. There is no guarantee that you would get from point A to B, without an accident. Yet, if we were to drive at prudent speeds, with attention to road conditions and safety, the likelihood of getting point B, safely, is greatly increased. What matters is the “process”.

The starting point of any decision-making exercise should be an unambiguous objective.

The Holistic Approach to Decision Making

1. Define an unambiguous objective.
2. Identify all relevant criteria.
3. Extract obligatory criteria.
4. Creatively identify options.
5. Gather information on candidates
6. Assign weights to obligatory criteria
7. Rank candidates.

Surrogate Objective

It is known that narrowing of arteries due to plaque build-up leads to cardiac problems. Hence the objective should be to reduce plaque. However, there is no way to measure plaque build-up. Therefore, we settle for a *surrogate objective* – a different end-point that we can measure – to measure the cholesterol level, before and after treatment.

The objective is like a map. If you start with a bad map, no amount of effort and diligence will get you to the desired destination. If the objective cannot be measured, one needs a surrogate objective (see box).

Often organizations resort to collaborative decision-making, as a panacea. The reasons may be the search for viewpoints and consensus, or anonymity and safety in numbers, or even uncertainty and doubt. Beware; there are many famous fiascos attributed to *groupthink*, a dangerous phenomenon associated with team-decisions, where the members *go along just to get along!*

Problem Solving → Creative Thinking → Decision Making

The need for a decision arises due to a real or perceived problem – present or future. However, problem solving is not decision-making. Problem solving is unique to the domain expert, while decision-making is unique to the decision-maker (see box).

Decision-making is the process of selecting one option, from a list of plausible solutions. Problem solving is the process of generating these options. Thus, before we engage in decision-making we need to focus on the problem-solving phase, to identify viable options.

Irrespective of how good a technique you use to make a decision, the *best decision is only as good as your best option*. Therefore, we need to dig deeper, and think *creatively* (as opposed to thinking *critically*), to identify the *not-so-obvious* options.

Many schools teach *critical thinking*, to hone analytical skills. However, this rigorous training in *critically thinking* can be a hindrance to *creative thinking*.

We are born to innovate; but trained to conform. Whether at home or at school.... we have all heard.... “Jimmy why can’t you be like the other kids! Even at work.... We are told.. “Jimmy... I don’t know much about your background... but here we have procedures, policies, mission statements, best practices, and the like.... you need to conform.” We have to undo these notions, and encourage even seemingly outrageous ideas.

The Gear Train Problem

Your car making a funny noise and you take it to Jimmy – your trustworthy local mechanic who tells you that there is a gear-train problem. He gives you several options. Repair it; install a refurbished unit or a brand new unit; or consider selling the car. Jimmy is the “domain” expert. He did a great job as far as solving your problem – he provided you with options.

Now Jimmy has no earthly idea of your personal circumstances including your financial worth; debt-level; job-security; your financial obligations or if you have a relative who could use this vehicle. So who do you think should make the decision? Certainly not Jimmy – the domain expert; he did a great job giving you the options but not answers! Now it is your job to make the decision.

Conclusion

With the massive information overload, financial constraints, political and legal implications, and extensive scrutiny – companies must make optimal decisions that are defensible.

We cannot just live by data alone! Ever wondered why a \$12.00 stock is a good buy for one person, while it is a sell opportunity for another?

Because..... before a decision is made – all *quantitative data* are transformed to *qualitative interpretations*. Remember – decision-making is unique to the person! So, absent a consistent methodology, different people will arrive at the different decisions, given the same problem and information.

Sadly, we tend to think “*Leadership Training*” is for managers only! While it is true that managers are leaders – *all leaders are not managers. Decision-making has no boundaries*. Every employee is a decision-maker; though the impact of the decision varies with the individual’s position in the organization.

Use a holistic methodology to get a grip on decision making, to break down complex issues into manageable components, to determine the optimum solution. *This need not be a tombstone technology.*

Tombstone technologies:

The term “tombstone technologies” is used in cases where the technology was available to prevent a disaster, but was not incorporated due to cost considerations. However, after a disaster, such technologies are incorporated.

About the Author:

Dr. Wirasinghe is the author of the book: “The Art of Making Decisions—Expanding Common Sense & Experience.” For additional information on this topic visit www.XpertUS.com.

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