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ON DECISION MAKING

- All You Ever Need To Know About Decision Making (Including Why It Must Be Avoided)

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On decision making

— All you ever need to know about decision making (including why it must be avoided)

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Note to the reader: This article is a chapter of the manuscript with the work title "Achieve aims with minimal resources by avoiding decision making — in Organisations, (Project) Management, Sales and Procurement (Everybody can manage risk, only few can minimise it)". The article refers to other chapters, but can be read on its own. Other chapters available on the website are "On experts and expert organisations", "How to predict future behaviour of individuals and organisations", "The four steps of DICE that will change the world" and "The five principles of TONNNO that will avoid decision making."

A general introduction to the approach of Decision Free Solutions can be found here.

The paradigm shift of identifying a decision as a risk

We live in a world which equates strong leadership with bold decision making, which is full of people aspiring to be (ultimate) decision makers and who are supported by an entire industry eager to assist, facilitate and provide training in decision making. In this world, stating that decisions increase risk and shall be avoided presents a paradigm shift. It is thus essential to be transparent about the meaning of the word "decision", its related concepts, as well as its alternatives.

The meaning and the context of a decision

The Oxford Dictionary definition of decision is: "A conclusion or resolution reached after consideration", and that of consideration: "Careful thought, typically over a period of time".

A decision is thus defined as a conclusion or resolution reached after careful thought.

The following is now put forward:

1. In order to be able to make a decision there must be something to choose between: *a decision is therefore a kind of choice.*
2. There is "a something" that is given thought to, and the decision will affect this something. In other words, there is a purpose or an intent to a decision: *a decision is made in the context of a desired outcome (an aim) that is to be achieved.*
3. When something is totally transparent (like letting go of a helium filled balloon), there is nothing to think about (it will rise). Vice versa, *when something is given "careful thought" by someone, this is indicative of this something not being fully transparent*.
4. If someone comes to a conclusion or resolution in a situation which is not fully transparent, the impact it will have on the desired outcome is uncertain. *If a situation is not transparent, it is not possible to substantiate how and in what way the desired outcome will be affected.*

Decision clarified

From the above follows that a decision is a choice made in a situation whereby it is not entirely transparent (at least not to the decision maker) how that what is being considered within the context of an aim will affect this aim.

If everything would be fully transparent there would be nothing to give thought to. It would be obvious what to do next. Therefore a decision would not be required as there is nothing left to choose between.

When, however, in absence of full transparency a decision is made, the decision maker does not fully oversee how, in what way and through which mechanisms the choice made will contribute to achieving the desired outcome.

The definition of "decision" can thus be *clarified* — not redefined! — as follows:

> A "decision" is a choice not fully substantiated to contribute to achieving a desired outcome.

In practice there are plenty of decisions made which come without *any* substantiation — as decision making is often regarded a prerogative not requiring any substantiation. More often a decision is a choice with a nontransparent, ambiguous and or incomplete substantiation. The effect remains the same: risk is increased. Bearing in mind that a substantiation is always made in relation to (achieving) a desired outcome, and skipping over the many gradations in which a choice may or may not be fully substantiated, a "decision" is — for short — *an unsubstantiated choice*.

Surely not *all* decisions increase risk (we would know by now)

Actually, yes, all decisions increase risk. That this may sound puzzling, or ridiculous, has many reasons. For one, not everything that is called a decision in everyday life strictly follows the dictionary definition of when something is a decision. Many "decisions" are in fact substantiated choices, or choices made in absence of a desired outcome (if you have to pick the color of a pawn in a board game you have to make a choice, not a decision).

More importantly, *increasing* the risk doesn't mean the risk will also occur. In our professional lives we make many educated guesses which technically may be decisions (as we can't fully substantiate them) but which are still based on our experience and which we get right more often than not. Decisions may increase risk we do something that will not contribute to achieving our desired outcome, but in those areas where we are experts-of-sorts this increase may be small and the risk may not occur.

Then, if the risk *does* occur, it may happen so long after the decision made that we no longer make the link between the two. If we do we will find ways to not feel bad about it. We did the best we could do, we can't be blamed.

Finally, as making decisions can be status-affirming, and give us the enjoyable feeling of control in what is — *by definition* — a non-transparent situation, decision making can feel empowering or liberating or both. That may be another part of the reason why we don't know decisions increase risk — we often don't want to know.

But there is simply no time to avoid decisions!

In organisations which operate with hierarchical decision making those who have to make decisions are asked to deal with all sorts of issues which need to be resolved. Managers tend to have to work very hard to be in meetings and to try to take in as much information as they can to be able to make informed decisions. Many decisions must also be taken rapidly. People may be waiting for a final word. Delays may also result in a competitive disadvantage. So, in practice, there is no way around making decisions!

It is certainly true that organisations will be forced into making decisions, for many reasons (see also later in this chapter). Not all decisions can be avoided. Time is often critical. All the more so when you don't know where to find what expertise, and whether it is actually available to you.

The point to be made here is that there is *a lot* that can be done to minimise the number of decisions. Then there is also *a lot* that can be done to minimise the risk-increase for those decisions which can't be avoided.

The methods that follow from DFS, such as e.g. DF Management, create the conditions to optimally utilise the available expertise with the aim to 1) replace as many decisions as possible with substantiated choices, 2) to have experts make the decisions which cannot be avoided (making substantiated assumptions instead), and 3) to identify and treat decisions made as risk and consider them for Risk Management.

What about the decision making industry?

If decision making is to be avoided, then what is an entire industry of researchers, consultancy firms, gurus and book publishers working on "making better and smarter decisions" doing? What is it they are promoting? What is it they are failing to see?

The *raison d'etre* of the decision making industry is precisely this: decision making is perceived as a risky business. But their solutions are based on assumptions which are firmly rooted in the past. In short, they take as a starting point the existence of hierarchical decision making, recognise that human beings are very poor at making objective decisions because of countless decision making biases, and then propose ways to help the decision maker in navigating this treacherous path. But no amount of consulting or support will make an expert out of an appointed decision maker.

More on the decision making industry in the Appendix.

Identifying a decision

Before continuing with alternatives to decision making and the various causes of decision making a quick reminder of how to distinguish between a choice and a decision.

A "decision" is now identified by the following elements:

1. Choice (multiple possible outcomes)
2. A desired outcome (something is given careful thought in the context of an aim that is to be achieved)
3. Lack of (a full) substantiation how the choice will contribute to achieving the desired outcome

When all three elements are present a "decision" has been made, and the risk the aim will not be achieved has subsequently been increased.

When there is nothing to choose between, there is no decision to be made. When there is no aim to be considered, then a choice is simply a choice. When a choice has been substantiated to contribute to achieving an aim, then any formal action attached to it to may be labeled as an "approval", a "go-ahead" or an "authorisation".

One question which will be addressed later in this chapter is the following: when we call an *unsubstantiated* choice a "decision", then what to call a *substantiated* choice?

The alternatives to decision making

Transparency

Decisions are unsubstantiated choices, and they are made by those to whom a situation is not fully transparent. This makes transparency the alternative to decision making.

Transparency is provided by experts (the topic of the next chapter). Experts don't make decisions, they avoid them. But experts, typically, are not the ones the organisation appoints to make, or rather, avoid decisions. This is, however, exactly what organisations who strive to minimise risk work are to accomplish.

Lean organisations use data and the expertise of process-experts to eliminate waste and add value. In doing so they effectively try to avoid decision making. One challenge organisations face in letting experts utilise their expertise and just be productive is governance. How to communicate and keep track of who is governing what? "Holacracy" [19] is an example of a management system that recognises and tries to overcome this challenge. This topic is further discussed in the method of Decision Free Organisations.

Transparency can (and should) play an important role in existing organisational structures also. Many organisations tend to work with periodic meetings in which things "get decided". Such periodic meetings function as a "moment of reflection" or a "stop-go" necessary to commence with the next work package or set of actions as required to achieve a goal. To avoid a decision in such a setting it must be ensured that it is transparent to all involved a) what the goal is that is to be achieved, and b) how a certain work package or set of actions will contribute to achieving that goal. Which leads us to the next subsection.

Approvals

Transparency is the alternative to decision making. So, instead of making decisions, what is it that managers are to do? In the situation where a manager has to "make a decision" on a work package, then it shall be made transparent to this manager that this package will indeed contribute to achieving a specified goal. If this remains unclear to the manager, then the manager can either request for a better explanation (and perhaps discover that expertise is lacking), or he/she can make a decision (and increase risk).

If it *is* transparent, then the manager can give his/her "approval", "go-ahead", or "authorisation". In order to minimise risk a manager is not to be a "decision maker" but an "approver".

In 1964 the Apollo program had exploded in size. Joe Shea had to coordinate the work of many tens of thousands of engineers working on hundreds of contracts and subcontracts on at least a dozen major systems. Any "decision" to be taken on the Command and Service Module or the lunar lander ultimately came to Joe Shea. Later that year, to systematise and limit the changes being made to the spacecraft, he established a Change Board. But when it came to the final decision, the only opinion which really counted was Joe Shea's. Even if a proposed change got by the Change Board, there was still Joe Shea to visit on the seventh floor in Building 2 at the Manned Spacecraft Center in Houston. Then you had to explain to him what it was you wanted, and why it was absolutely essential that the change was made in the spacecraft. Joe Shea would begin to ask questions. Whether he was a specialist in the area or not made no difference. In Joe Shea's words: "If you understand it, you can make me understand it." If something was not clear, it got dismissed immediately. A waste of his time. It was a yes or a no, and there was no second chance. "I want to tell you that an adverse decision is not a decision delayed," Joe Shea told an engineer once after he brought up an item which had been decided against before. Joe Shea readily acknowledged that "I never ran the Change Board as a democratic process." Joe Shea effectively *avoided* decision making by demanding that any change be transparently explained to him. By not giving people a second chance he ensured that everyone came fully prepared with substantiations for the change proposed. Joe Shea did not make decisions, he approved or disapproved. *Source: [2]*

Resolts

An expert doesn't make decisions, an expert makes substantiated choices. In organisations experts can create transparency as to why and how a proposal will contribute to achieving a goal.

In organisations a manager can also make it clear why this proposal is still to be denied. The manager may be aware of conditions or have access to information the experts do not (e.g. a recent change in strategy, insufficient resources, a conflict with another project, etc.). In such a situation the manager too can make a substantiated choice.

As there is no word for "a substantiated choice", the word "resolts" (noun) is here proposed[1].

A 'resolt' is a conclusion or resolution which has been fully substantiated to be in support of, or to contribute to, achieving a desired outcome.

[1] The word 'resolt' is proposed because it is linked to 'result', '(re)*solution*', and the verb 'resolve'. It thus indicates that something has been accomplished, and that a solution has been found. It often also means change can progress: 'something resolved itself into something else'.

James (Jim) Edwin Webb, a government official, served as the second administrator of NASA from February 1961 to October 1968, overseeing all the critical first manned launches from the beginning of the Kennedy administration until just before the first manned Apollo flight. His role at NASA was indispensable. Many of the engineers of Apollo will tell that of all the people who got the United States to the Moon Jim Webb was among the most important. Kenneth Kleinknecht, Director of Flight Operations, said that "Webb was the greatest thing that ever happened to NASA." Webb never tried to make technical decisions, but he would sometimes override them for nontechnical reasons. One such instance occurred in 1963, when Webb cancelled a seventh Mercury flight, which was to be a three-day manned mission orbiting Earth. The engineers weren't very happy about it. But Webb explained that if the flight would be successful, it wouldn't really change anything. However, if, at that point in time of the Apollo program, there would be a failure that could not be recovered, it might stop the manned space program altogether. According to Ken Kleinknecht, one of the unhappy engineers, Webb was a hundred percent right. Nobody argued with Webb's substantiation. A prime example of a resolt. *Source: [2]*

When decisions cannot be avoided

Reasons why decisions cannot always be avoided

There can be several reasons why decisions cannot be avoided:

- There is no desired outcome, or a desired outcome is not defined in a transparent and unambiguous way (so it becomes impossible to substantiate why something should be done)
- There is no expert available to substantiate a choice:
  - The expert/expertise for a particular situation does not exist
  - The expert/expertise for a particular situation is not available
  - There is no time to identify/involve/obtain substantiations from an expert
  - A particular situation is too complex and requiring near instantaneous action (e.g. in an operating room)
- An expert fails to transparently substantiate his/her choice (so somebody still has to make a decision)
- Something can simply not be known (e.g. weather at future date) and assumptions — a type of decision — have to be made

That not all decisions can be avoided is a reality for almost everybody working to achieve an outcome. By identifying decisions, however, the associated risk can be identified and managed.

Who is to make decisions?

Experts, as will be explained in the next chapter, minimise risk through a combination of perceptiveness and experience. In situations where insufficient information is available for an expert to avoid a decision, the expert generally still is the one best situated to either formulate assumptions on which to base a decision, or to simply ask for a personal "hunch"[2].

[2] See also the section "A guide to trusting feelings" in the chapter "Predicting future behaviour".

When a decision cannot be avoided most organisations have an established hierarchy which makes it clear where the responsibility to make the decision lies. Often this person is not the expert, and thus not the person most suited to make the decision. The challenge is to establish the culture in which the one with the most expertise will not only speak out, but will also be listened to, even in absence of clear substantiations.

Atul Gawande, author or the excellent "The Checklist Manifesto; How to get things right" (2010), is a surgeon who sought to minimise risk in a situation of great complexity and pressure: the operating room. The checklist, as he clearly demonstrated, is an exciting and powerful tool which can achieve remarkable and measurable results practically overnight. Including "unlocking" the expertise of all team members, as investigators at the John Hopkins hospital found. When nurses were given a chance to say their names and mention concerns at the beginning of a case, they were more likely to note problems and offer solutions. The investigators labelled it the "activation phenomenon". Giving people a chance to say something at the start seemed to activate their sense of participation and responsibility and their willingness to speak up. After three months the number of team members reporting that they "functioned as a well-coordinated team" went from 68 to 92 percent. As the author discovered in his own operation room, designing a checklist takes expertise. Even simple checks can be ambiguous, and a checklist can quickly become too long and a distraction. When the checklist is not designed well, and or not specifically for the task at hand, the checklist becomes a tool of "control", steering and directing a team along a (winding) path rather than making them alert and utilise their expertise. A checklist is thus at risk of being, or becoming, a collection of decisions increasing risk. *Source: [3]*

The profound consequences of clarifying "decision"

Starting from the dictionary definition of a "decision", followed by applying logic and analysis of (the context of) making a decision, a decision has now been clarified to be "a choice not substantiated to contribute to achieving a desired outcome".

This clarification results in a paradigm shift. One can now see the world through different glasses and start to identify risks where before they could not (but were no less real).

From the clarified definition directly follows that in order to minimise risks:

- *Aims must be clear and transparent, understood by all alike*. Without well understood aims, choices *cannot* be substantiated to achieve them, and every choice automatically becomes a decision. (The definition of the desired outcome is the first step of DICE).
- *Experts must be identified based on the relevance of their expertise in relation to the aim.* Without relevant expertise choices cannot be *substantiated* to help achieving the aim. (The identification of the expert is the second step of DICE).
- *Experts must substantiate choices in a transparent way.* Without transparency others (e.g. managers) are forced to give the substantiation "careful thought", and the resulting conclusion will be a decision. (The clarification of the expert's choice is the third step of DICE).
- *Contracts and protocols etc. are decisions and to be treated as potential risks.* Contracts and protocols etc. are decisions, as they were written up without the current aim in mind (a substantiation they will contribute to the current aim is lacking).

- Any form of directing or instructing (managing) the expert that is without substantiation must be avoided. As this restricts the use of the experts' expertise, and consequently increases risk.

Three types of decision making

Based on the above, three types of decision making have been identified which all, potentially, increase risk:

1. Decision making (unsubstantiated choices)
2. Past decision making (choices made without considering the present aim, e.g. contracts, protocols, checklists)
3. Precursor to decision making (when something is insufficiently substantiated, causing the non-expert to start thinking)

Right and wrong decisions

In the context of Risk Minimisation there are, technically, no right or wrong decisions. Every decision is an unsubstantiated choice which increases risk. This unsubstantiated choice may turn out to be "right" (contributing to achieving a desired outcome) or it may turn out to be "wrong".

This is, to a degree, semantics. But the distinction becomes somewhat more meaningful in the context of "making a lot of right decisions". Is this person an expert, making substantiated choices, or simply very lucky?

The Apollo's spacecraft consisted of three parts, among which the conical Command Module. The Command Module was a cabin that housed a crew of three and equipment needed for re-entry into Earth's atmosphere and subsequent splashdown, landing the module by parachute in the ocean. The typical conical, "semi-ballistic" or "gumdrop-shaped" Command Module with its rounded edges had several advantages over a sharp-edged cone. It had a low center of gravity and a wide-footprint which made tipping unlikely. It allowed for a tail-first re-entry into the atmosphere, so that no complicated "flip" would be required before releasing the parachute. The blunt rounded shape contributes in creating a shock-wave that insulates the craft, helping to keep it sufficiently cool. Having said all that, the rounded corners of the Command Module were not arrived at through sharp analysis. Far from it. The original shape of the Command Module was identical to that of the sharp-edged cones as used with the spacecraft programs of Gemini and Mercury. The diameter of the bottom of the spacecraft was, logically, to be the same as the diameter of the third and last stage of the carrier rocket. Caldwell Johnson, one of the designers responsible for the design of the Apollo Spacecraft, explained that the bottom of the module measured 160 inches. Until they learned that the diameter of the third stage of the carrier rocket had been reduced to154 inches. "We said, 'Jesus Christ, now we can't leave this sonofabitch hanging out over the edge like that, and we can't change the mold lines, because that'll cut in on the interior space.' So we said to each other, 'Let's just round the corners, nobody'll ever know the difference." An example of a decision which turned out to be the right one, but not quite a substantiated choice. *Source: [2]*

Appendix

Why is there a decision making industry if decisions need to be avoided?

If decision making is to be avoided, then what is an entire industry of researchers, consultancy firms, gurus and book publishers working on "making better and smarter decisions" doing? What is it they are promoting? What is it they are failing to see?

A first observation to be made is that this entire industry exists precisely *because* decision making increases risk. "Making decisions is the most important job of any executive. It's also the toughest and the riskiest." [20] Entire companies have failed as a result of someone making a single decision. The ongoing barrage of new insights and tips and tools on how to make better or smarter decisions is one big acknowledgement of "decision making" posing a serious threat to organisations.

The starting point of this industry is that almost all organisations are hierarchical and know so called "hierarchical decision making". In hierarchical decision making decisions are made by people not on the basis of expertise, but on the basis of formal positions of authority. In environments which are increasingly dynamic and complex, and where wrong decisions can have devastating impacts, this not only increases risk — extra costs, delays, or even failing to achieve the desired outcome — but also causes the experts in the organisation plenty of frustration.

Hierarchical decision making is an anachronism. Historically a team leader or head of an organisation operated in a fairly stable environment of moderate complexity. More often than today this person was for all extents and purposes an expert. "Management" made substantiated choices, and when decisions did get made — and risk was increased — they did so in a world that was more forgiving.

Today, for most organisations, hierarchical decision making is an outdated and deleterious construct. Managers typically manage specialists in many disciplines and are no longer the expert themselves. In these circumstances hierarchical decision making *forces* managers into increasing risk. They lack the time and the know-how to do anything else but make decisions. Nobody expects that they are able to substantiate how each choice they are forced to make will contribute to achieving a desired outcome. It is *impossible*. Tragically but predictably the knee jerk response to this increased risk is to enter a vicious circle of more management, exerting more control, further restricting the use of expertise, and inevitably resulting in more decision making. What it achieves: a waste of resources, a demotivated workforce, and only more risk.

For the decision making industry, however, hierarchical decision making is still the starting point. Having rightfully assumed that most organisations ask certain individuals to routinely make decisions, the industry also recognises that to expect them to routinely make "the right decisions" would, indeed, be asking for the impossible. But rather than to identify and hone in on a lack of expertise as the prime reason for making poor decisions, their explanation for decisions increasing risk is related to the workings of the human brain.

The human brain — in absence of omniscience — makes use of a long list of *biases* to make sense of the world around us. These biases or "traps"[3] are at work also when asked to make a decision. What is more, even knowing theses biases exist is of little practical help. Humans are incapable of recognising their own biases: the errors we make are *intuitive* [22]. All of which makes us totally helpless when it comes to decision making.

When choices are to be made by a certain position in the hierarchy (and *not* by the one to whom the context of the choice is most transparent), then each choice will automatically become a decision and increase risk. The approach the decision-making industry takes to this situation is to try to improve upon a fundamentally flawed concept (and *not* to find alternative ways to run organisations). The industry's approach is akin to recognising that crossing a motorway is extremely dangerous, and that it should be done really carefully. The industry then provides advice, tools and methods to help you understand what "careful" means and to cross as carefully as you can — not how to find other and safer ways to get to the other side.

A few examples of such approaches — all taken from articles published in the Harvard Business Review — are the following: a 12-question checklist intended to "unearth and neutralise defects" in a team's thinking that proposes a certain action [22], seven strategies to help managers recognise and learn from near misses [23], three things to do to break a culture unable to take decisive action [24], mastering "the three C's" of decision making to arrive at the "much more productive decision-making approach of inquiry" [25], the assignment of clear roles to clarify decision accountability using "RAPID" [26], counteracting the pull of unconscious and unethical biases through "auditing your decisions", "exposing yourself to non-stereotypical environments" and "considering counterintuitive options" [27], a four step systematic analysis of decision making in your organisation which includes the institutionalisation of "decision tools and assistance" [28], and the identification of and safeguarding against three "red-flag conditions" that promote errors of judgement in the decision-making process [29].

Some of these approaches recognise the need to collect data or involve some level of expertise in the process, but none suggest to treat the resulting decision as a risk that can be managed, and none consider alternatives to decision making in running an organisation to begin with.

[3] To name a few "traps" (from [21]): anchoring, status-quo, sunk-cost, confirming-evidence, framing, estimating and forecasting Obligatory reading in this respect is Daniel Kahneman's "Thinking fast and slow", 2011 [20].

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