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Great Decisions – Great Results: exposing the bottlenecks to effective decision-making

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Abstract

Today's workers are not being adequately equipped to make sound decisions. Research indicates that more than fifty percent of business decisions either fail outright or fail to be implemented. And no wonder. The traditional decision-making process many of us have been taught is of limited use and is often ignored. Why? Because this process does not take into account the uncertainty of situations, the culture and values of the organisation, and the knowledge and mindset of the individuals involved. This is especially important for knowledge workers — the largest group of workers in the developed world.

This paper exposes the causes of bottlenecks in decision-making. It is these bottlenecks which directly impact on the productivity of individual knowledge workers. The paper suggests there are eight human dimensions that either help or hinder decision-making. Understanding how these dimensions operate enables knowledge workers to be better equipped to carry out knowledge work.

Keywords

Decision-making, knowledge workers, knowledge work, productivity.

Introduction

The Australian Bureau of Statistics defines knowledge workers as being managers and administrators, professionals and associate professionals, and estimates that 40% of the Australian work force are knowledge workers.[1]

For the purposes of this paper, I will use the term 'knowledge worker' to mean a person who, in collaboration with others, is skilled in obtaining, organising, analysing, interpreting and using information for the purposes of solving problems, learning and anticipating possible futures. This could include every worker – certainly in 'knowledge-creating' organisations.[2]

Knowledge work and decision-making

We spend our lives making decisions – from the simple, mundane everyday decisions – such as 'Which Email should I answer first?' – to the more complex decisions with long term consequences – such as 'What career move should I take?' or 'Which product should we release and when and how?'

A key requirement of any manager is that of decisiveness but it's not only managers that make decisions. In the past, senior managers made the decisions and the workers were expected to carry them out. It is increasingly the case that key decisions are being made at all levels of the organisation.[3]

How do knowledge workers process information? This is best understood by studying a suitable model. One such model is the Delta Control Loop® as shown in Figure 1. Here the vertical axis is *External World – Internal World* with *Time* along the horizontal axis.

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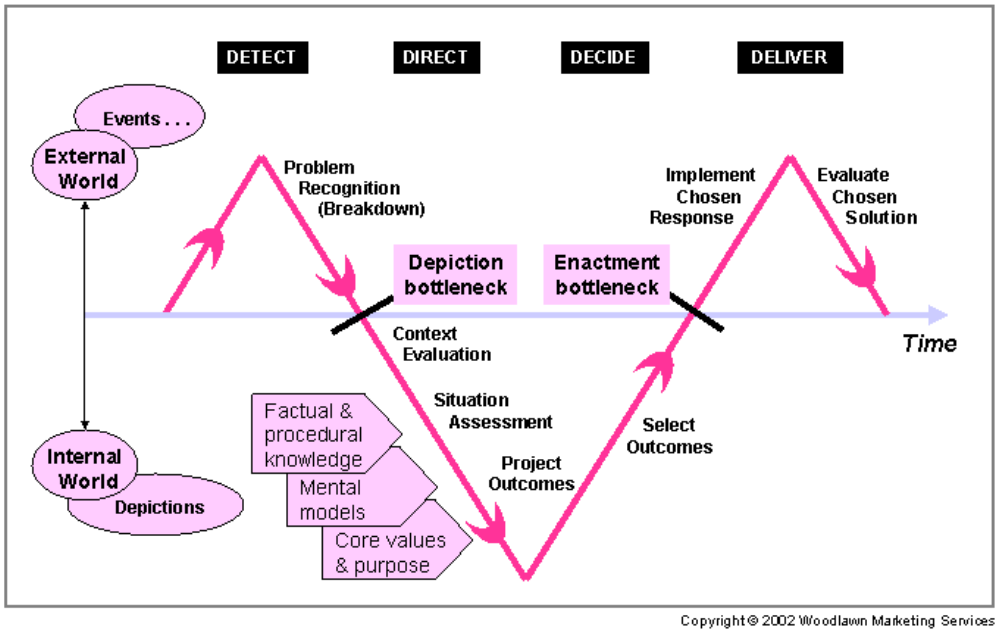

Figure 1 – Delta Control Loop®

We live in two worlds: the external (real) world of events, announcements, stories, opinions, and intentions of others, and our internal (represented) world made up of our depictions, interpretations, impressions, emotions, and reactions to the real world.

The inward flow of data and information about the external world comes via our senses while the outward flow of responses comes as a result of our sense-making, decisions and actions.

Surveys indicate the number of decisions to be made by knowledge workers is increasing, while the time available for decisions seems to be decreasing.[4] Those surveyed also report they are having trouble assessing, understanding, and using the information they need, amidst the flood of available data.

The problem is that many of our decisions fail. Over a 20-year period, Paul Nutt, a professor at Ohio State University, examined the success rate of decisions made by executives and managers at 356 different companies. He found that more than 50 percent of all business decisions failed, were quickly abandoned, only partially implemented, or never adopted at all.[5]

At the same time, it's unrealistic to expect that all decisions will prove to be the correct ones. After all, business involves risk taking which means there is always the possibility of things going wrong. But in the cases Professor Nutt studied, they were major decisions that would cost dearly if they failed. Success was judged on whether the decision was fully put into practice, and two years after the event, was still effective.

While there are a great many training and development programs to assist in leadership development, there is very little worthwhile training available on decision-making itself. The classical model of decision-making involves analysing a problem, determining available options, evaluating these alternatives based on a common set of criteria, and selecting the option with the highest score. The reality is that the classical decision-making process does not work very well in practice and is frequently ignored.[6]

So what can we observe going wrong with decision-making? The problem for many individuals is that bottlenecks occur causing 'friction', which interrupts or distorts the flow of information to and from the individual's internal world.

Randall Whitaker calls these the *Depiction Bottleneck* and the *Enactment Bottleneck.*[7] These bottlenecks occur when information is moving across the interface between our internal world and the external world (refer to Figure 1). Some of these are the result of external influences while most are internal deficiencies that are cultural in nature.

Common decision bottlenecks

Depiction bottlenecks occur when there is a breakdown in the translation of external events, announcements, stories, threats, opinions, and intentions of others into our depictions of what is really happening external to us.

Some of the common depiction bottlenecks we can often observe taking place in organisations are:

- Taking shortcuts ('ask no questions and . . .')
- Arrogance ('we already have the answers')
- Ignoring unpleasant news ('we hear no evil!')

Enactment bottlenecks occur when there is a breakdown or deliberate distortion in the transition from our internal world into actions in the external world. Some examples of enactment bottlenecks are:

- Ego ('*I'll do it my way!*')
- Copying others ('*They must know what they're doing!*')
- Procrastination ('*If I leave it, the problem might go away!*')
- No decision ('*See, it's gone away!*')

Deborah Sawyer refers to these most common bottlenecks as 'the seven deadly sins of decision making'.[8]

Taking shortcuts is a major cause of decision failures, with excess of ego responsible for at least a third of failures according to the research by Paul Nutt.[9] Other enactment bottlenecks that affect the integrity of information outputs include misinformation, spin and acquiescence (especially by subordinates).

Whitaker suggests the depiction bottleneck is the more critical of the two as 'deficiencies in navigating through this bottleneck will likely propagate downstream, practically ensuring deficiency at the enactment bottleneck.' [10]

We can recognise most of these bottlenecks because they are visible to the external world, if not immediately, then at some later time. The goal is to eliminate these bottlenecks from occurring, not just with individuals, but across the organisation.

To eliminate these bottlenecks, we must first ask why these bottlenecks occur. I suggest there are eight critical human dimensions that impact decision-making in today's fast-moving, dynamic workplaces. If we visualise Figure 1 as a 3-D display, we can derive a view of the hidden human dimensions by performing a 3-D rotation. By doing so, we're viewing a cross-sectional slice of the timeline dimension.

Figure 2 results from turning the horizontal axis of Figure 1 by 90 degrees. The *External World – Internal World* axis is still the same but instead of *Time* being along the horizontal axis, it is made up of *Individual – Community*. *Time* is now the Z-axis running vertical to the page and is now hidden from view. The venue is still the same, but the view has changed.

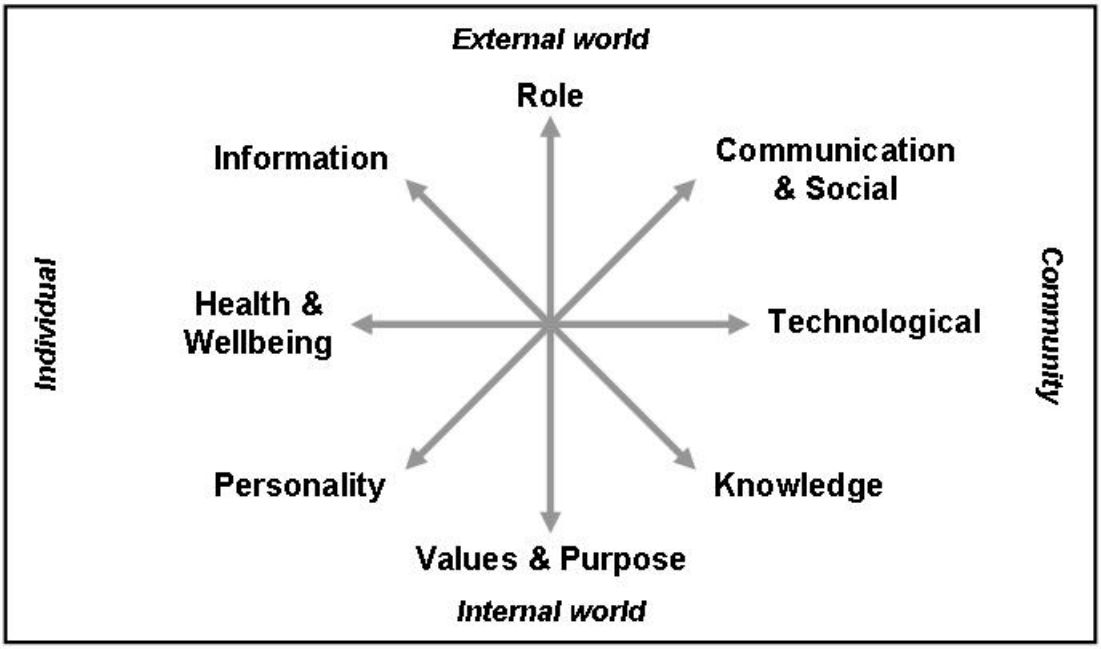

Figure 2 – The Eight Dimensions of Decision-Making

What we now see are the human dimensions or forces which help or hinder the decision-making process. Here is a brief description of each of the eight dimensions:

1. **Role dimension**
   This refers to the role or function that an individual takes within an organisation. These can be formally assigned positions, such as Chief Financial Officer, or an informal role a person could take on, such as leader, follower, coach, mentor, mentoree, protagonist, bully, conscience, expert, whistle-blower, volunteer and so on. All of these roles will involve handling information inputs and outputs in particular ways to achieve outcomes – good or bad.
2. **Information dimension**
   This dimension refers to our ability to recognise when information is needed, together with the ability to locate, evaluate, and use effectively the needed information. It can be further broken down into three sub-dimensions: *Discovering Information* in the external world, *Developing Information* in the internal world, and *Delivering Information* to the external world.
3. **Communications and social dimension**
   This dimension refers to our social and emotional competence to communicate effectively as individuals and work collaboratively in groups. It has been shown by Cantrel *et al.*. that a primary source of information used by knowledge workers in solving problems comes from our social network.[11]
4. **Health and wellbeing dimension**
   This dimension refers to our cognitive and social skills which determine our motivation and ability to gain access to, understand, and use information in ways which promote and maintain the health and emotional wellbeing of ourselves and others. This includes developing safety awareness.

5. **Technological dimension**
   This dimension refers to our knowledge of the use of technology to accomplish various tasks. We need to be able to think critically about technological issues and act accordingly. This dimension is not restricted to information technology – it applies to any relevant technology. It can involve continuous improvement or breakthrough technologies.
6. **Personality dimension**
   This dimension is a holistic dimension which is inclusive of those integrated qualities, impulses, habits, interests, ideals, and other characteristics that give us our individuality in society.
7. **Knowledge dimension**
   This dimension includes our personal factual knowledge, procedural knowledge, contextual knowledge and mental models. In addition, there is the unconscious knowledge that is the basis of our intuitive decision-making.
8. **Values and purpose dimension**
   This dimension comes down to what it is that's important to us and what it is that drives us. Stephen Covey refers to this as the spiritual dimension and suggests that only by serving others is our purpose 'right'.[12]

Are these dimensions valid? A simple test is to ask the question, 'Can this dimension cause a bottleneck to decision-making?' It becomes clearer once you examine what happened in well-documented failures, such as the NASA *Challenger*[13] and *Columbia*[14] space shuttle disasters. In both reports there are many examples of the human dimensions at play in the poor decisions that were made.

Some dimensions, such as the technological dimension, will result in depiction bottlenecks, while others, such as the communication and social dimension will cause enactment bottlenecks, while others can affect either. For example, an intoxicated person (health and wellbeing dimension) can result in a depiction bottleneck and/or an enactment bottleneck.

Up to this point we've looked at how information can be filtered and how this relates to our eight dimensions of decision-making. Now we need to undertake a self-analysis that will help us clear away the bottlenecks and clarify the dimensions to our decision making.

Making great decisions

Learning to make great decisions comes from reflecting on experiences.

Some decisions – such as those involving safety issues or dealing face-to-face with customers – may need to be made rapidly. In these situations there is simply insufficient time to consider all possible options and then choose the optimum one. Instead, we choose to respond according to what our experience (and gut feel) tells us is likely to work.

At other times we assume we must make rapid decisions when this is not the case and we should take the time to gather sufficient information to make an informed decision.[15]

Regardless of how we make decisions, it's important that we analyse the success or otherwise of our decisions after the event.

One way to do this is to use experiential learning techniques,[16] such as the technique used by the US Army called an 'After Action Review' or AAR.

This approach can be extended to become double-loop learning by asking questions such as:

- What are we doing that causes this pattern of poor performance to continue to happen?,
- What makes us think that our action strategies will actually result in the improvement we seek?, and
- What beliefs do we hold that cause us to value this intended outcome in the first place? [17]

Another useful tool is a carefully designed and executed 360 degree feedback assessment to give individuals feedback on their performance with a view to improving it. As Edwards and Ewen suggest, '360 degree feedback systems act as a catalyst to increasing productivity because feedback from others is the most important motivator to behaviour change.' [18]

To continue to be a valued contributor in the workplace, it is essential that every worker at every level, in consultation with others, explores their personal 'critical success factors' – that is, the essential parts of a knowledge-worker's job. This is necessary for the sake of their own development (and even survival) in their workplace, as well as for the sake of their organisation.

Peter Drucker[19] suggests the two questions a knowledge worker needs to ask are:

1. 'What information do I owe to the people with whom I work and on whom I depend? In what form? And in what time-frame?'
2. 'What information do I need myself? From whom? In what form? And in what time-frame?'

I recommend a third question be added:

3. What bottlenecks are occurring? What's causing them?

These may seem to be simple questions but they need to be explored in depth and on a regular basis. Peter Drucker recommends that you ask yourself these questions every 18 months, or whenever there is a substantial change in your role, the business, when personnel change, or when you have a change in job assignment.[20]

Answering these questions will give you a solid basis on which to undertake a new job or assignment and confidence to make your decisions. They will help to identify the bottlenecks you will be facing and clarify the dimensions of your decision-making.

Conclusion

Collaborating with others in obtaining, organising, analysing, interpreting, and using information is not always a smooth process. A myriad of issues get in the way that causes friction and slows down or even stops the process. These range from having an unclear mission as to what is to be done, or from procrastination, ignorance, arrogance, prejudice, lack of trust, lack of motivation, lack of systems knowledge, and many more. As explained earlier, this friction causes bottlenecks in the transfer or flow of information from the outside world to the inner world and vice versa.

We have learned by now that cultural factors are very much involved in knowledge management. Here I have attempted to demonstrate, through visualising what's happening, that there is a very tight link between knowledge work and the eight human dimensions.

Why is this important to knowledge managers? Karl Wiig sums it up well when he says:

> Increased understanding leads us to realize how we have misunderstood the way people handle situations and make decisions by believing that decision-making is a rational and often conscious deliberation.
>
> These generally held misconceptions have misled – and still mislead – development of many KM-related management practices with results that lead to disappointments.[21]

Only by understanding what's behind the bottlenecks to effective decision-making can we hope to eliminate them, and in so doing deliver, great decisions and great results.

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Notes

1. Delta Control Loop® is a registered trademark of Workhorse Systems Australia Pty Ltd.