

Intuitive decision-making amongst leaders: More than just shooting from the hip

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[abstract]

It may sound like heresy, but making the ‘fuzzy’ discipline of management even fuzzier is paying dividends for business leaders. Indeed, an increasing number of CEOs and senior managers are now questioning the conventional wisdom that decision-making should be strictly analytical – they have found that sometimes it should be intuitive. This article discusses the latest findings in executive decision-making which reveal how and when business leaders should ditch analysis and go with their gut feeling.

[standfirst]

“So, you want to know how I made that decision? Of course, I carefully weighed all the pros and cons and then selected the best alternative...”

“Excellent!”

“...but the choice didn’t seem quite right -- so I went with my initial gut feeling.”

“What!”

Not so long ago, acknowledging the usefulness of intuitive thought processes would have been considered sacrilegious, if not among close friends, then certainly in the workplace. We may have followed our hunch -- but shouldn’t we be going by the book, carefully analysing each decision step? That was what we were taught at business school, after all. Well, like so many things in the fuzzy discipline of management, “it depends”.

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Today's CEOs and senior managers are being made increasingly aware of the limitations of conventional decision-making. And the wider business community, grappling with changing dynamics -- such as growing uncertainty and rapidly evolving technology -- has no choice but to take notice.

Managers are often forced to make decisions in a short space of time, choosing from multiple alternatives they have not encountered before. Many problems they face are unprecedented and ambiguous as well, and often there is not enough information on which to base a decision. This is especially the case for those who work in fast-paced and high-pressure environments, where most senior managers face a smorgasbord of possibilities every day.

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Such conditions do not lend themselves easily to rational decision-making protocols. Some of us respond to the urgency of the situation by unknowingly changing the way we make decisions, and, quite frequently, this means turning to intuition. So, when recent studies found that the success rate of managerial decisions tends to hover around a meagre 50 per cent,¹ scholars at the University of Queensland Business School, concerned about the rising costs of organisational decision-making, started searching for factors that influence managers' choice of decision-making style.

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Intuition is not a new concept, even though, until recently, it has been confined mostly to the realm of philosophy. Current management research in this area has been made possible by recent discoveries in the field of psychology about the way we process information. According to the Cognitive-Experiential Self-Theory,² we routinely process information in *parallel*: using rational processes such as logic and analysis on the conscious level, while relying on instinctual and

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emotional cues on the non-conscious level. In other words, we seem to be perfectly capable of using reason and intuition simultaneously and interchangeably, without being aware of it. Of course, social conditioning tends to prepare us for effective use of our rational mind, while our intuitive skills are usually neglected.

Emotions seem to play an important role in our non-conscious switching between the two processes³ -- another frequently neglected factor in decision-making models. According to our mood, for example, we tend to scrutinise available facts or to circumvent them, looking for a decision shortcut. Sometimes, it is our desire to find a solution that triggers our *thinking*, rather than *feeling*, through the problem at hand.

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DEFINING INTUITION

Thanks to its elusive nature, the first challenge for anyone who wants to take intuition seriously – and have others do the same -- is to describe what it is. Part of the problem lies in a lack of vocabulary -- we have not been taught about intuition, so we have not developed appropriate language to describe it. This can be likened, for example, to our relationship with snow. Most English speakers, except for a few skiing and snowboarding aficionados, can happily live their whole lives using only a single word for 'snow', whereas Eskimos have many terms describing the 'white powder' which dominates their environment and which they must understand to survive.⁴ Similarly, most Western languages are quite limited in their ability to describe internal processes such as introspection, but have a rich vocabulary for reasoning, logic and analysis. Sanskrit, by contrast, has about twenty terms for 'consciousness' alone.⁵ As a result, it is hard for many people in [industrialised](#) Western societies to accept intuition as a legitimate process. This poses a special challenge for management developmental programs.

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Although we have not found much agreement among researchers about what constitutes intuition, three commonalities have emerged:

- it is a non-conscious process
- it filters information in a non-sequential manner
- it relies on emotional cues⁶

In the management context, it also draws on quick pattern-recognition and synthesis of past professional experience and expertise.⁷ In summary, *intuition is direct knowing that relies on non-sequential processing of information, and incorporates both emotions and non-conscious thoughts. It is direct because we are not aware of any reasoning that would have preceded our solution; the answer appears suddenly and we do not know where it came from. It is usually accompanied by a sense of certainty which makes it distinct from qualified guessing.*

Without much fanfare, some decision-makers are already dealing with the pressures of today's dynamic business environment by successfully integrating analysis and intuition. Their approach builds on Herbert Simon's notion that analytical and intuitive management styles are "complementary components of effective decision-making systems".⁸ These styles, according to Henry Mintzberg,⁹ enable "non-sequential processing", critical for fast digestion of dense but ambiguous data. Mintzberg further argues that rational and intuitive styles counterbalance each other's strengths and weaknesses in terms of error introduction, problem complexity, processing ease, and use of creativity.

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This seems to be music to the ears of Decision Support Systems (DSS) theorists,¹⁰ who had been calling for programs where both styles interact in a symbiotic manner by contributing complementary components to decisions. In the DSS model, analytical procedures are used to evaluate objective information, while intuition is applied to the 'grey areas' not usually amenable to objective analysis because of their high uncertainty, complexity, or other *context-specific* characteristics. The newly gained flexibility represents a valuable asset for senior

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managers and leaders in that it enables them to use a highly personalised decision-making style that is 'customised' for particular situations and specific decision tasks.

Proponents of a 'sixth sense' argue that there may be even higher levels of consciousness, yet to be explained by science. These theorists contend that, when processing information on a 'supraconscious level', intuitive insights originate elsewhere than in the experience-based ability to recognise patterns, and that [in these instances intuition acts as conduit to direct knowing](#).¹¹ Controversial new developments in physics and biology seem to provide some support for this. For example, Rupert Sheldrake has proposed that knowledge can be communicated across space and time through 'morphic resonance'.¹² This paranormal influence supposedly enables people to tune intuitively into the thoughts and knowledge accumulated by all humanity throughout its evolution. At present, however, we lack the means for rigorous scientific study and validation of sixth sense and morphic resonance.

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DECISION-MAKING MODEL

Our model envisions two parallel types of information processing, anchored in different levels of consciousness that *can* be tested using currently available scientific methods. While analysis or other rational processes function on the conscious level, intuition by default operates mainly on the non-conscious level. Both processing modes are integrated, however, in that they usually interact without the decision-maker's awareness.

As depicted in figure 1, the extent to which one mode prevails over the other frequently depends on the decision-maker's momentary mood or depth of emotional involvement in the problem or situation at hand, their cognitive style preference, and tolerance for risk. It also seems to be determined by contextual factors, such as the degree of novelty or stress associated with the problem or the environment. We have grouped the factors loosely into four categories, which we elaborate below.

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Each form of information processing in our model supports a different decision-making style, and each of these is appropriate to a specific way of solving a problem.¹³ When we adopt an analytical style, we act in a purposeful manner, verbalise most of our thoughts, and stay fairly unemotional. Our thinking follows abstract rules and occurs in a logical, linear sequence. Depending on our expertise and thoroughness, this can be time-consuming. Such an approach is appropriate, for example, for solving complex mathematical problems.

On the other hand, when we use intuition, the process is mostly automatic. It usually transpires without our awareness or verbalisation, and works through seemingly haphazard associations. We may put a problem aside, go for a walk and, suddenly, the solution dawns on us 'out of the blue'. In this instance, there is no conscious thought process on our part. Sometimes the answer is triggered by an unrelated observation, which tends to be the case when we think in a holistic, puzzle-solving manner. In other instances, we simply 'feel' the right decision as a form of emotional response. Sometimes the answer comes immediately, other times we have to sleep on it. In either case, the intuitive insight is instantaneous and final. Once we 'know', further deliberation is unnecessary.

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Paradoxically, this is often the very moment when many intuitive managers start analysing. What they do is gather data to back up their gut feeling, an ostensibly more credible and effective way to convince their colleagues or superiors, and possibly themselves, of the correctness of their decision -- frequently, intuition as such is not mentioned at all. But intuitive managers are not the only ones who make use of both styles. Research has shown that, even without deliberate effort, many successful executives do, in fact, use [analysis and intuition](#) in a combination.¹⁴

There is intrinsic value in training managers to consciously match their decision-making style with what they must decide and its context. We suggest that

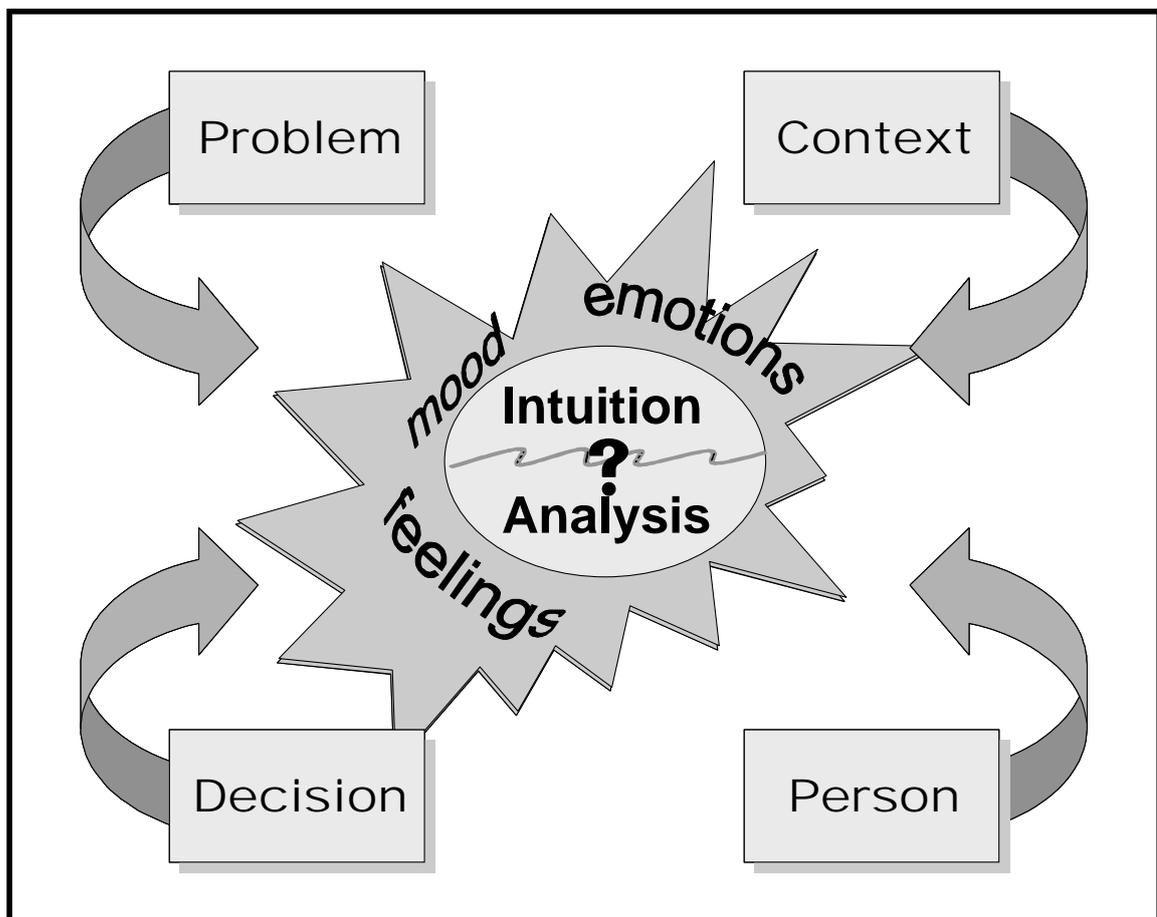
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such a developmental program might be built around decision-making factors which we can learn to recognise and manipulate at will. Having mastered this skill, we can use it as a conscious switch to appropriately access either intuition or analysis.

FACTORS INFLUENCING OUR DECISION-MAKING STYLE

As illustrated in figure 1, there are four categories of factors that seem to have an influence on how we make decisions. They are organised in table 1 according to whether they refer to the problem, decision, context, or person.

Figure 1
Model of the intuition-analysis decision



Decision-makers tend towards intuition when they deal with ambiguous or novel problems characterised by information complexity or inadequacy.

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Problem -- In general, decision-makers tend to lean towards intuition when they deal with ambiguous or novel problems, characterised by information complexity or inadequacy.

Intuition is found especially useful in situations where problems are poorly structured and there is no prior exemplar to refer to. Intuitive decision-making is also frequently employed when managers face seemingly contradictory facts. Traditionally, this dilemma has been compounded by an excess of information and not enough time to process it. In today's knowledge-based industries, a variant on this can also occur -- a problem may be so new that too little information exists about it. Traditional analytical models seem to be ill equipped to handle any of these situations.

Decision -- In terms of outcome, an intuitive style seems to be related to non-routine decisions of high significance for the organisation and the decision-maker. Pivotal, one-of-a-kind strategic decisions are, by their nature, prone to being risky and yielding uncertain results. Yet, no matter whether the decision outcome really is important, or simply perceived to be so by the decision-maker, it creates pressure. And, as such, the search for a unique solution, combined with high levels of organisational and personal stress, tends to act as a trigger for intuition.

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Context -- Organisational context plays an important role in decision-making, yet it tends to be underrated in traditional models. We propose that intuition is more likely to be present in organisations with an organic entrepreneurial configuration like 3M where dozens of technology platforms are organised around the company's three core values that allow for growth or decline of each platform depending on the commercial success of its products.¹⁵ Managers in companies with entrepreneurial configuration have more autonomy than is customary, and are encouraged to base their decisions on previous experience and professional judgment, without being forced into unwarranted justifications. In other words, these decision-makers function

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in an environment with fluid boundaries, where tacit knowledge is considered an organisational asset.

Another stressor that seems, under certain conditions, to activate intuition, is pressure of time. The deadline for a decision may be too close for a manager to conduct a thorough analysis of information and options; additionally, the real or perceived pressure may evoke emotions that could alter his or her approach to the decision. Consequently, intuitive decision-making is more common in new, fast-paced, high-pressure industries. These attract the type of manager who thrives on ambiguity and stress, and act as magnets for higher risk-takers and creative minds in general. In other words, they comprise people who tend towards using their intuition.

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Table 1
Factors of intuitive decision-making

	Factor	Description
P R O B L E M	Ambiguity	The degree to which a problem is ill-defined or lacks clarity
	Information complexity or inadequacy	The degree to which information is complex or inadequate by being insufficient or overwhelming
	Lack of precedence	The degree to which a problem is novel or without precedence
D E C I S I O N	Non-programmed nature	The degree to which a decision is nonrecurring or non-routine and requires a unique approach
	Decision importance	The degree of the perceived importance of the decision for the organisation
	Decision impact	The degree of the perceived impact of the decision outcome for the decision-maker
C O N T E X T	Organisational configuration	The extent to which an organisation adopts an organic or mechanistic structure
	Encouragement of tacit knowledge	The level of encouragement of tacit knowledge in an organisation
	Industry category	The type of industry identified by its level of speed, pressure and uncertainty or ambiguity
	Time pressure	The perceived degree of time pressure exerted on a decision-maker
P E R S O N	Cognitive style	The preference for an analytical or holistic way of organising and processing information
	Attitude to intuition	The degree of openness to intuition
	Affective orientation	The degree to which we are in touch with our own emotions and use them as information
	Creativity	The potential to combine information in a new way by means of a creative insight
	Risk tolerance	The potential to accept ambiguity and willingness to decide under such conditions
	Managerial experience	The length and depth of experience in similar management situations
	Professional expertise	The length of professional experience in the specific field and the level of job-related education

Traditionally, intuitive decision-makers have mainly been found among medical and nursing professionals, educators, and those in creative fields such as marketing and advertising. What the members of these professions have in common is the ability to draw on their extensive, though not always verbalised experience; to

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check their gut feeling and quickly decide on a course of action, despite an apparently uncertain outcome.

Interestingly, however, [research has revealed that, at the top of an organisation, the type of industry does not seem to matter](#) that much in determining which decision-making process is employed. Here, the situation described above, in which the environment shapes a person's behaviour, is turned on its head. Top decision-makers [tend to](#) shape their environment, not vice-versa. This is most obvious in the case of entrepreneurs of Sir Richard Branson's calibre and media-friendliness; but there are less flamboyant examples to be found.¹⁶ This may be why the use of intuition has come to be relatively more accepted among executives and other strategic decision-makers.

Person -- Other researchers' and our own findings¹⁷ have shown that, regardless of their position in the managerial hierarchy, decision-makers are more likely to use intuition when they have a positive attitude towards it, a holistic cognitive style, and a high level of professional expertise, experience and risk tolerance. Moreover, decision-makers' intuition tends to work better when they are creative and in touch with their emotions.

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The holistic way of thinking refers to the ability to put incongruent [fragments](#) of information together without any logical sequence, [just as if we were fitting in pieces of a puzzle until they create a meaningful picture](#). Imagine, for example, a string of numbers from 1 to 20. If we are asked to line them up and connect numbers 2 and 17, we will probably draw a direct line between the two digits or perform a calculation, such as an addition, because our mind works in a linear and logical fashion. Should we organise the numbers in a circle, however, not only does the line between 2 and 17 become shorter, we may stop seeing the two digits as numbers with mathematical qualities altogether. In other words, we have linked them holistically.¹⁸

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Entrepreneurial intuition explains such breakthroughs as the discovery of penicillin and the invention of the Polaroid camera.

We can achieve a different effect by pulling the numbers from somewhere else. If, say, we draw all of them from our 'professional memory compartment', we may retrieve a 'pre-packaged solution', which will save us much trial and error, but not produce anything new. This is very useful for medical diagnosis, fire fighting, and other forms of 'expert intuition'.¹⁹ But if we draw the numbers from different 'memory compartments' of our life experience, we can combine them creatively in a new way, and arrive at an innovative solution in the spirit of 'entrepreneurial intuition'.²⁰ This explains such breakthroughs as the discovery of penicillin and the invention of the Polaroid camera. In any case, the more we have stored in our memory, the more new combinations are available to us, be it in the form of a fleeting thought or a distinct feeling. And, since we are not certain of the outcome, we have to accept the ambiguity, trust our hunch and, sometimes, just 'go for it'.

Sometimes, we have to trust our hunch and just go for it.

THE ROLE OF EMOTIONS

Intriguingly, our decision-making style seems to be influenced by the particular emotions that we feel at a specific moment. Sometimes, their effect is direct; at other times emotions merely strengthen or reduce the impact of other factors.

Being in a good mood, for example, tends to make us feel quite confident. In decision-making, this serves as a signal that everything is fine and that we can proceed without too much caution. As a result, we are more inclined to skip steps and to follow our 'gut feeling'.

A bad mood, by contrast, acts as a warning that we should review all relevant information and deliberate carefully. This may sound like a recipe for turning off intuition and switching to analysis – and, indeed, there is nothing wrong with a more reasoned than intuitive approach [in the right context. Frequently, this is easier to achieve when our emotional involvement is not strong.](#)

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When our emotions -- be they positive or negative -- run high, their impact depends on how we use them. If we employ the emotion to search for a desired outcome, it may propel us toward intuition -- simply put, we may want something so badly, we make it happen. On the other hand, if we dwell too much on the emotion itself, it may paralyse us and block our access to intuition.

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Yet another role can be played by subtle feelings that tell us whether our intuition is genuine. Such confirmation does not mean necessarily that we have made the right decision from a management perspective -- but it does mean that we can, at least, distinguish 'true' intuition from wishful thinking. For some people, confirmation can come in the form of a sudden feeling of calmness or relief -- as if a burden has been lifted from their shoulders. Others say, "I feel certain in the pit of my stomach", or, "I have a warm feeling I'm right." In whichever form this confirmatory feeling, or signal, comes, those decision-makers who learn to remember and recognise it tend to follow their hunches more confidently when it recurs. It is simply a matter of becoming keenly attuned to that particular feeling so we can distinguish it from other emotional 'noise'. This can be likened to the skills of an experienced radiologist who can easily spot a tumour on an X-ray, where the untrained eye sees a mere confusion of shadows.

INTUITIVE DECISION-MAKING IN PRACTICE

So, does intuition work in the real world? To test our ideas, we recently conducted a large-scale study among management students with work experience; a follow-up, web-based study of senior decision-makers is currently under way.²¹ The findings of our first study have, indeed, supported most of our assumptions. In particular, our results to date confirm the feasibility of the key idea that, if managers are trained in how to manipulate their feelings or other relevant factors, they can use this newly acquired skill to shift from one decision-making style to another, as and when appropriate. For example, if **managers do** not have adequate information, or

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are under pressure to make a decision too quickly to apply analytical decision-making, they can learn to consciously trigger intuitive processing. Conversely, if they arrive at an intuitive decision, a conscious switch to the analytical process will assist in scrutinising the outcome. Intuition can thus be used to complement analytical decision-making, and possibly contribute to a manager's ability to make faster and more effective decisions. Such enhanced decision-making skills are a strategic asset to any organisation.

Intuition can be used to complement analytical decision-making and contribute to a manager's ability to make faster and more effective decisions.

To achieve this goal in terms of leadership and management practice, we need not only to develop suitable models of adult learning, but also to create an environment where decision-makers can practice their newly-acquired skills. Here, an alignment -- between the new developmental strategy and an organisational culture that rewards intuition and minimises unproductive environmental stress -- becomes crucial. This is especially important for Australian organisations, which have a history of shying away from risky and innovative undertakings, be they in the form of new business ventures or novel management concepts.²²

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CONCLUSION

The decision-making model we propose is timely because the pace and complexity of modern business life has led to a greater interest in leadership and managerial intuition. Consequently, it is imperative that we understand the underlying processes so that we can use them to our advantage. At a time when organisations are more than ever seeking to maximise the potential of their human resources, greater attention needs to be paid to decision-making skills and their optimal use. This has a direct impact on leadership and managerial effectiveness, and as a result, on organisational performance.

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