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HOW EMOTIONAL TAGGING CAN PUSH LEADERS TO MAKE BAD DECISIONS

by Sydney Finkelstein and Jo Whitehead and Andrew Campbell

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One-time Ford CEO and U.S. Secretary of Defense Robert McNamara was the archetypal numbers man. No human failing such as emotions could influence a decision. Like McNamara, today’s CEOs who think they’re basing their decisions only on reason are deceiving themselves – and jeopardizing the company’s viability. These authors have written a forthcoming book on the subject, and in this article they describe how leaders can understand the powerful pull that emotions have on their decisions.

Almost from the beginning, we are encouraged to think that making decisions is a rational process involving facts and analysis. However, decisions are really acts of judgment made by people. These judgments are shaped and formed in our brain, through processes that are just now being fully understood. And what we are learning is that, in certain circumstances, our judgment process is unreliable – we believe we are making a good assessment or choice when we are actually not. In fact, in many instances, the real driver of our actions is our emotions, and often to our detriment.

Consider the example of Wang Labs. Dr. An Wang founded the company in 1951, and by the early 1980s it had become one of the most successful computer companies in the world. Wang Labs succeeded because of innovations driven by An Wang, innovations such as the magnetic core memory – a phototypesetting device that increased the productivity of news printing – and one of the first electronic calculators. Wang Labs’ most successful product, however, was its word processor. Launched in 1976, the Wang 120 WPS stored information and allowed the user to edit text. It made the electric typewriter obsolete almost overnight. It catapulted Wang Labs to the top of the industry, and, importantly, it hurt IBM in one of its core businesses.

By the early 1980s, Wang Labs was in a strong position to exploit the developments in electronic computing and distributed processing that would dominate the industry in the next 10 years. Though Wang’s sales were $3 billion compared to IBM’s $47 billion, An Wang set out to overtake IBM, and to become the leading computer company by 1990. For the next few years he carried in his pocket a scorecard charting his progress against IBM. But by the early 1990s, the result was not glory, but bankruptcy.
The ill-fated decision that started Wang Labs' decline was An Wang's reluctance to develop a personal electronic computer. Early models from Atari showed promise, while Apple was the leader in technology. Yet Wang rejected the opportunity, saying that: "The PC is the stupidest thing I ever heard of." As a result, Wang was slow to market with the 1980s killer app – the PC.

This decision was surprising. Wang had already made important innovations and the personal electronic computer was not beyond the company's technical abilities. Moreover, the impetus for developing a PC at Wang had come from an influential source – An Wang's son, Fred. It was Fred who gave us insights into his father's thinking.

In 1981, IBM entered the market with the 5150 PC, which was reasonably priced and ran on a non-proprietary operating system. Right after the introduction, the market began to explode. Four months later, the 5150 was named Time's "Man of the Year." Wang could no longer ignore the market. But then he made another bad decision. He chose a proprietary operating system when the rest of the industry was going IBM compatible. Though the Wang personal computer was not an immediate disaster, it left Wang Labs exposed. As customers replaced word processors with computers, Wang's fortunes declined rapidly.

While An Wang was not the only business leader who made wrong calls during this turbulent period, those close to him believe that the main driver of these mistakes was his emotions. First, Wang's feelings for his product went far beyond ordinary pride and commercial enthusiasm. He was reputed to be "in love" with the Wang word processor and he felt as proud and protective of it as a parent. This made it hard for him to embrace the technology that would make the word processor obsolete. Secondly, he hated IBM. Not only was IBM his competitor, it was his nemesis: Wang felt that the company had once cheated and exploited him over a technology licensing deal. Hence, he was reluctant to consider supporting a product platform that had been developed by IBM.

An Wang no doubt wanted to do the right thing for his company, and he was probably highly logical and consistent in his arguments. Nevertheless, his judgments and decisions were most likely guided by his emotions - his love of the word processor and his hatred of IBM.

A leader's ability to manage his emotions is important, especially since emotions can compromise, or even sabotage, his or her ability to make effective decisions. In this article, we explain why emotions play such a big part in decision-making. The implications of the ideas we discuss go far beyond emotional intelligence, or the ability of individuals to empathize with others. Our emotions can actually make us believe that we are right when in fact we are really wrong! In a world dominated by credit crises brought on, in part, by leaders who were unable to see the fundamental flaws in their thinking, it seems essential that we understand how a leader's emotions affect decisions.

**Military maneuvers**

In his book, *On the Psychology of Military Incompetence*, Norman Dixon, a soldier turned professor of psychology, describes a number of military campaigns in which the leader and his team pig-headedly stuck to a flawed plan, despite mounting evidence that they were headed for disaster.

One of the most striking of Dixon's examples is Operation Market Garden, the Allies' attempt to use paratroops to capture three, river bridges in the Netherlands, and send ground forces across them to outflank the German Army and end the Second World War in Europe.

By late August, 1944, the Allied landings in Normandy had resulted in the destruction of two German Armies in France. Intelligence suggested that the Germans had few reserves left in the field. The Allies had strong forces available but limited supplies, leading Field Marshal Montgomery to concentrate the Allies' efforts on supporting a single strong thrust in the north, in order to exploit the Germans' disarray before they had a chance to recover. His plan was for three airborne divisions to capture the three bridges, and an armored Corps to drive its way up.
the resulting 64 mile ‘airborne corridor’ and enter the north German plain. The first two bridges were at Grave and Nijmegen, and the third spanned the River Rhine at Arnhem. Montgomery’s boss, General Eisenhower, wanted to advance more steadily on a broad front, but he allowed Market Garden to go ahead.

The plan was bold and carried a high risk. The airborne landings needed good weather over several days, as there were not enough aircraft to deliver all the paratroopers in one lift. The airborne troops were lightly armed so it was critical that the ground forces move quickly, or the paratroopers could be overrun. The plan called for the ground forces to reach the furthest bridge at Arnhem in 72 hours. They had to advance up a single narrow road with marshy land on either side. The Germans would only need to block the very front of this column to cause serious delays. The Allies’ superior numbers would be of no use. The impassable, marshy ground meant that only the very front of the Allied force would be able to engage the enemy. Delay would give the Germans the chance to bring up sufficient reserves that could overwhelm the airborne bridgeheads. Everything had to go right. Either the failure to capture any one of the bridges or delays in the ground forces’ advance would condemn the plan to failure.

The airborne forces were led by Lieutenant-General ‘Boy’ Browning. A veteran of the First World War, he was anxious to command troops in action before the war ended. He had built up the British airborne forces from the beginning, and Market Garden would be the biggest airborne operation in history. He wanted to be part of it. The “paras” were an élite force that had spearheaded the invasion of Normandy. They were restless. Market Garden was their chance. The risks seemed acceptable.

On September 15, two days before Market Garden was due to be launched, new intelligence suggested that two SS Panzer Divisions were refitting in and around Arnhem. If correct, this force could easily block the advancing ground troops and potentially prevent the capture of the third bridge. The commander of the British 1st Airborne Division, which was due to land there, rushed to see Browning, only to be treated “as a nervous child suffering from a nightmare.” When his intelligence officer showed Browning aerial photographs of the German tanks, Browning told the officer: “I wouldn’t trouble myself about these if I were you… they’re probably not serviceable at any rate.” A medic was then sent to examine the intelligence officer. The medic advised the officer to take some leave because he was obviously exhausted. The information was ignored.

The mission went ahead, initially taking the Germans by surprise. But then the weather broke, delaying the dropping of airborne reinforcements and supplies, and depriving the Allied troops on the ground of air support. Despite unexpectedly strong resistance, the paratroopers captured the bridges at Grave and Nijmegen, but only took one end of the bridge at Arnhem. However, the ground forces were not so successful. After nine days of hard fighting, they still had not gotten through to the Arnhem Bridge. Reluctantly, the paratroopers had to be withdrawn and the campaign abandoned. The cost had been high – 1st Airborne had lost some 60 percent of its strength. As the well-known historian, Max Hastings, summed it up: “Market Garden was a rotten plan, poorly executed.”

Why were the commanding officers so reluctant to use the information that the German’s had additional forces? Dixon blames emotions. “The apparent intellectual failings of some military commanders are due not to lack of intelligence but to their feelings,” he writes. Browning was attached to the airborne concept and was desperate to prove it by getting his men into action. Doing so was clearly in his personal interests. One of his contemporaries labeled the operation, “Operation KCB”, in reference to a belief that Browning’s main motivation was to win a Knighthood, which he indeed received.

Montgomery, who was normally cautious and very careful not to bite off more than his forces could chew, might have been a counterbalancing voice of reason. But he was angered by Eisenhower’s opposition to his idea of a single thrust and so became very attached to Market Garden, ridiculing those who challenged it. Had it been a success, he stood to re-establish his prominence among the Allied commanders, and possibly be seen as the man who ended the war by Christmas. In the words of Max Hastings, “... (Montgomery’s) motives do not seem hard to read. Bitterly chastened by his removal from the Allied ground command, he was determined
to sustain the primacy of his own role in the battle for Germany. In consequence, he focused his entire attention on the issue of how the enemy’s front might be broken in Holland, where the British stood. He displayed no interest in other opportunities further south, on the front of Bradley’s US 12th Army Group….Montgomery’s jealousy of Eisenhower affected his decisions at every stage.”

Those involved in planning Market Garden were highly intelligent and competent, as their records elsewhere show. But in this case, their hearts ruled their heads at huge cost to those involved.

**The example of the Iowa Gambling Task**

The field of neuroscience has been especially helpful in expanding our understanding of the role of emotions in decision-making. Research shows that while emotions are essential for decision-making, they can also lead us far astray in ways we may not anticipate. Antonio Damasio, one of the world’s leading researchers in neuroscience, helped design a seminal experiment that assessed the role of emotions in decision-making. It is known as the Iowa Gambling Task.

Participants are seated at a table on which four decks of cards have been placed. The players are given $2,000 in play money and told that the object of the task is to make money. Some cards, they are told, will give them a payout — as much as $100 — while others will signify penalties, sometimes several hundred dollars. They can choose cards from any pile.

What the players do not know is that the gains and losses from two decks – the bad decks – are negative, while those from the other decks – the good decks – are positive. Each deck has different cards, with different payouts and penalties. The bad decks, on average, offer higher payouts but even higher penalties. If a player were to pick ten cards in a row from a bad deck, he would expect payouts of $1,000 and penalties of $1,250, leaving a net loss of $250. If the player were to pick ten cards from a good deck, the payout would be $500 and the losses $250, giving a net gain of $250.

The players are hooked up to equipment that detects fluctuations in heart rate and skin-conductance, both good measures of emotional arousal. They are also asked to describe what they are thinking as they draw cards.

At first, players draw cards, randomly noting the outcomes. However, as soon as a player draws a penalty card, his or her emotions are activated. After a few cards, it is possible to observe the increase in emotional activity when players are about to choose cards from the bad decks, even before the players make any comments about these decks. In fact, players start to prefer the good decks and avoid the bad decks before they are able to articulate what they are doing or why they are doing it. The explanation for their behavior usually comes 20 or so cards after their behavior starts to change, and as much as 30 cards after their emotions are signaling that they have concerns about the bad decks.

The order of their responses is as follows. First they exhibit an emotional response to the penalty cards. They then exhibit emotional responses whenever they draw from the bad decks. Then, they start to avoid the bad decks, without being aware that they are doing so. The process is clearly subconscious. In the next stage, they begin to articulate a preference for the good decks, without being able to say exactly why. They have a gut bias. Finally, players explain that they are avoiding the bad decks because the gains are consistently less than the penalties. From then on, they only draw from the good decks.

This experiment not only demonstrates that our emotions are part of our decision-making process, but also how powerfully our emotions can influence how we think. Indeed, emotions appear to lead the process, even in an exercise as unemotional as drawing cards from decks. The order of the decision-making process appears to be as follows. The process starts with inputs from the environment: the information from the cards. The next step is an unconscious emotional reaction. This is followed by behavioral change in line with the emotional reaction. Then we become conscious of the feelings that are driving the behavioral change. These are our
gut feelings. Finally, we are able to make a decision by reasoning. Eventually, most players avoid the bad decks entirely and are able to give a rational explanation of the differences between the decks.

It may seem odd that feelings of which we are not aware can actually influence our behavior without our knowing it. It may also seem odd that we may make emotional judgments before we make rational judgments. But this appears to be true. Damasio suggests that this brings considerable benefits. Emotion “focuses attention on certain aspects of the problem and thus enhances the quality of reasoning.” Doing so “narrows the decision-making space and increases the probability that the action will conform to past experience.” But it’s also not hard to see how these emotions – like those of “Boy” Browning – can bias the so-called “rational” judgments we make to justify our actions. Emotions are two-edged swords, and leaders that choose to ignore their importance do so at their peril.

**Games of tag**

Actions we have already taken – whether driven by rational decision-making or not – are filed in our brains with emotional tags that serve as markers that can anchor subsequent thinking. When the brain stores a memory of an event or action, it also stores an associated emotion with it. This is what we call “emotional tagging.” When we must make a decision, our brain will recall past situations that seem similar to the current one and access the emotions that are tagged to them. Players reaching towards a bad deck will engage the emotions they have experienced with this deck. If the previous emotions are negative, the player will exhibit negative emotions – signaled by a higher heart rate and sweaty palms – when taking a card from this deck. For example, when participants first consider which deck to pick from, they feel no particular emotion because they have no experience with either deck. However, as the experiment progresses they begin to experience the higher levels of punishment associated with the bad deck. Their emotions begin to warn them against selecting from this deck.

Consider how this knowledge might have affected An Wang. He is deciding whether to develop a product to compete in the evolving personal computer market. This situation is likely to cause him to think about the possible impact on word processors. His love for his most successful product causes him to feel emotionally protective. His initial instinct is likely to be to look for ways of improving the word processor, to protect it from any loss of sales.

He may also recall other situations where higher-end applications threatened a standard product. Since high-end products do not normally take significant share from the mass market, he may have felt comforted and decided that little action is needed. He may even have had a personal experience of trying to introduce a technically more sophisticated product in some other market and experienced the negative emotions of failure. This combination of emotions may have been the driving force behind his reluctance to launch a personal computer and trigger for his comment that the personal computer is one of the stupidest ideas he has come across.

We are not suggesting that managers like An Wang are completely dominated by their emotions. But, as the Iowa Gambling Task demonstrates, we are all influenced by our emotions, even when we are doing something as dull as drawing cards from decks.

Could An Wang have neutralized these emotional influences and decided to enter the personal computer market much earlier than he did? The answer is “Yes.” Our ability to reason enables us to overrule our emotions. However, it can be difficult. Wang would probably have needed input that released rival emotions, such as an impassioned plea from a colleague or a loyal customer who rejected the word processor for a personal computer.

As it turned out, he did change his mind. The success of personal computers started to hurt sales of word processors, and with the launch of the IBM PC, the threat from personal computers became much more real. We can suppose that his fear of the growing sales of PCs became greater than his reluctance to undermine sales of his word processors. So, he decided to develop a personal computer.
He now faced the decision of whether to copy IBM or create a proprietary operating system. Here, his bad feelings and longstanding competition with IBM are likely to have had an influence. These emotions were probably telling him not to play second fiddle to IBM. Other factors, of course, may have been involved. But his emotions would have been an influence, whether he was conscious of them or not.

Because strategic decisions are complex, there are normally crunch judgments that have to be made. For these judgments, reasoning and facts are typically not enough to prove the case one way or another. Instincts, gut feelings and intuition, all of which rely on our emotional tags, are called on to help. Normally, these emotional tags help us make the right call, as they did for the players in the Iowa Gambling Task. However, on occasion, they let us down.

An Wang would have relied partly on his gut feelings to judge the prospects of the PC market and to then assess the wisdom of aligning with IBM. Unfortunately, his emotional tags let him down. General Browning, faced with new intelligence about enemy forces, would have relied partly on his gut feelings to assess the importance of the aerial photographs. But in this case too, his emotional tags let him down.

**Emotions and commitment**

Emotional tags are not only relevant for accessing memory. We also need emotions to commit to a decision. We need commitment to act. We need confidence that we are doing the right thing and the energy to see us through setbacks and difficulties. Hence we generate additional emotions in the act of deciding. Consider:

Question: Five birds are sitting on a log. Two decide to fly away. How many are left? The answer “three” probably comes to mind.

The correct answer, however, is five. Two birds *decided* to fly away. That doesn’t mean they actually did.

This riddle was a favorite of managers in the Royal Bank of Scotland (RBS), a large UK bank, after its takeover of National Westminster Bank (Nat West) in 2000. The RBS managers felt that an important reason for their company’s success was its bias for action. They analyze a problem, quickly push to make a decision, and then move swiftly to execution. To RBS, “analysis paralysis” is a worse sin than acting quickly on a decision, even if the action needs to be adjusted later or has to be abandoned altogether. RBS managers used the riddle to encourage the Nat West people to make decisions and take actions. They wanted Nat West managers to understand that agreement on a choice is not enough to guarantee implementation. Action is required and action requires emotional commitment.

Emotions that trigger action do not come only from the emotional tags we already have. The process of deciding can generate its own emotions. As we get excited about a decision, we tag it with additional positive emotions. As we get reinforcement that we have made the right decision, stronger emotional tags are generated. This is probably what was behind General Browning’s seemingly incomprehensible rejection of important intelligence. His commitment to the Arnhem plan had become so great that any threat to the plan generated a negative emotion. To avoid the negative emotion that would come from accepting the intelligence, his brain would have volunteered the idea that the intelligence might be wrong. This interpretation would have been tagged with a positive emotion because it supported the plan. In looking for reasons why the intelligence might be flawed, he would have looked for confirmatory evidence. Perhaps he noticed the intelligence officer’s tired looking eyes, and built further positive emotions around his interpretation. Researchers have a label for this kind of mental process - “cognitive dissonance.” Once we have made a judgment, we embrace confirming information and discount disconfirming information. We do this by giving confirming information a positive emotional tag and disconfirming information a negative tag. The result is that our mental processes give more weight to the confirming information.

**Implications for decision-making**
Since emotions influence decisions, mainly in helpful ways, we do not want to try to eliminate their effect. In fact, because emotions mostly work on our body and unconscious, we could not eliminate their effect even if we tried. Moreover, we need emotions to make decisions. But emotions can sometimes lead us to disaster, so we need some way of anticipating when our emotions might be a problem. If we are forewarned and if we can identify potentially misleading emotional tags in advance, we can strengthen the decision process in ways that will help combat the influence of the emotion we are worried about.

We have identified four types of emotional tags that, if inappropriate, can interfere with sound decision-making:

**Intense emotional experiences:** We may have powerful memories of successes, failures, fears or pleasures that we experienced. Most of the time, these emotions help us. But these memories can also mislead us. Why did John Thain sell Merrill Lynch while Richard Fuld could not do the same for Lehman Brothers? Perhaps because Fuld had been at the helm for many years, resurrecting Lehman earlier in his career, while Thain was new to Merrill and not influenced by history.

**Previous judgments and decisions:** We can tag previous judgments and decisions with strong emotions. Where these judgments are sound, our emotions help us focus. But, if the judgments are misleading, our emotions can cause us to cling to them long after others, less committed to these judgments, have seen the light. An Wang’s statement that the "PC is the stupidest thing I ever heard of" reveals an emotional commitment to a judgment that would have contributed to his delay in launching a personal computer. General Browning’s commitment to the attack on Arnhem appears to have clouded his judgment about the aerial photographs.

**Personal interests:** We often have personal interests at stake in the decisions we make. If these decisions only affect ourselves, our emotional tags will help us get to the right answer. But when our personal interests conflict with our responsibilities for other stakeholders, our judgment can be unbalanced. It is for this reason that members of a committee are often asked to leave the room or refrain from voting if they have a personal interest at stake. In the same way, politicians are expected to place their financial investments in the hands of an independent fund manager, so that their judgments are not influenced by their personal gains or losses. In fact, the attention we give to designing incentives and aligning managers’ interests with the interests of their organizations is recognition of the degree to which we think personal interests affect decisions.

**Attachments:** Since we are social animals, we are hard-wired to become attached to other people. Love is a powerful emotion. But we can also become attached to a group, to places and even to possessions. If the decision we are involved in is likely to affect one of our attachments, the emotions generated can unbalance our thinking. For example, An Wang’s love of his word processor and hatred of IBM colored his thinking about the advantages of developing a personal computer.

The reality is that emotions are woven into the decision-making process in ways that make them a necessary and important part of decision-making. We are not conscious of how they influence us and we only become aware of them through our gut feelings. We can control the impact of these emotions to some extent, for example, by becoming more analytical and fact based or by being more aware of the source of the particular emotion. But we cannot eliminate their influence. Remember, without emotions we may well be unable to make a decision at all. The good news is that, most of the time our emotions help us get to the right answer effortlessly and efficiently. But, in the wrong situation, as happened to Wang and General Browning, they can lead us to disaster. Leaders who assume that they and others make decisions solely on the basis of “rational” thought are deceiving themselves. Such a deception can prove fatal, as these same leaders may end up believing that they are right when they are really wrong. And that would not be effective leadership at all.

ii. For example, Ken Olsen, founder of Digital Equipment Corporation famously said in 1977, “There is no reason for any individual to have a personal computer in his home.”


vii. Ibid., 39-

viii. Ibid.


xi. Ibid, 148.