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Dynamics of Business Decision Making: Understanding the Role of Emotions

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ABSTRACT

In recent years, there has been a need for deeper understanding of the cumulating knowledge in different science disciplines about human emotions in decision making. Indeed, many traditional economic theories operate with the preconception of utility maximization, which partly contradicts with the recent findings in behavioral economics and neurosciences. In other words, science has shown that we can make suboptimal business decisions under the influence of changing emotional states. Moreover, traditional economic literature has often highlighted the strict division between rational decision making and the effective dimensions of the human mind. This conceptual article therefore challenges these conceptions by exploring the dynamic interconnected nature of business decision making and emotions. As a result, we present step-to-step instructions on practical means how to cope with emotions in a turbulent business environment.

INTRODUCTION

Mainstream theories on business decision making have historically been grounded in classical economic theories, where decisions are made by rational economic man, i.e. homo economicus, who has access to unlimited information and is capable of making fully rational decisions while maximizing his utility (von Neumann & Morgenstern 1953). Later on, Prospect theory (Kahneman & Tversky 1979, 2013) made a huge contribution to the understanding of decision making, which is not always as rationalistic, as has previously been seen. Prospect theory includes cognitive biases such as loss aversion but still does not capture the dynamic nature of decision making, which is effected by changing affective states (Bonavia et al. 2018).

Even in daily life, people tend to separate emotion and reason and say, for instance, that a decision is made either with the heart or the head. This kind of view of emotions and reason being opposing forces in the human mind penetrates the entire Western thought (Zhao et al. 2016). Also, scientific perspectives have been conceptualized using dual-process theories, in which mental processes are divided into two opposing systems. Firstly, the emotional, fast and automatic, often subconscious process and secondly the cognitive, rational, and deliberative process. These have been called for example System 1 vs. System 2 operations (Kahneman 2011) and hot vs. cold cognition (Figner et al. 2009). However, findings in neuroscience have challenged these dualistic views and revealed an interconnected bi-directionally modulating relationship between emotion and reason, where the “emotional” and “rational” processes cannot be identified as separate (Phelps et al. 2014). Therefore, this article aims to investigate the role of emotions in business decision making.

The paper is structured as follows. After the introduction, we review relevant literature on business decision making, focusing on the development of the economics field, after which review of emotions from behavioral and neuroscience fields follows. The next section elaborates on dynamic interconnected nature of decision making and emotions by providing an evaluation of risks and uncertainty in decision making process, and the role of emotions in this. As a result, we propose step-to-step instructions on how to deal with emotions in business decision making. The final section presents the discussion and conclusions of the study, with some limitations and future research suggestions.

THEORETICAL BACKGROUND

Business decision making

Business decision making can be described as a reflection of an interaction that occurs between a firm and its business environment (Ginsberg 1988). It is done by individuals that act on behalf of their companies. Decisions can be formal or informal, as well as intended or emergent (Pennings 1985, Elbanna 2006). They are furthermore difficult to assess, are associated with various risks, uncertainty and lack of universal solutions, and are difficult to change or reverse once they have been made (Wilson 2003, Elbanna 2006).

Traditional research on business decision making has been greatly dominated by economic theories, focusing on rational choices and maximization of a firm's utility (von Neuman & Morgenstern 1953). The process of decision making has even been characterized as a mathematical science of today (Figuera et al. 2005), which should be based on various criteria and sub-criteria used to rank multiple alternatives that a decision maker is facing with (Saaty 2008). However, this full rationality does not take into account subjective preferences or choices of a decision maker. Thus, the Prospect theory has been introduced (Kahneman & Tversky 1979, 2013), including some principal characteristics of decision making under risk and uncertainty. These include cognitive biases, such as loss aversion, which means that subjects make different decisions depending on whether the expected outcome is framed as a loss or gain. For instance, findings revealed that, when making a decision, decision makers tend to give more emphasis on potential losses over acquiring equal gains (Bossaerts & Murawski 2015).

Studies have shown that psychological attributes of decision makers and their discrete emotions have an influence on decision making outcomes (Raghunathan & Pham, 1999). Thus, as Tähtinen and Blois (2011, p. 907) argue: "human decision making and actions are embedded in emotions and therefore cannot be meaningfully separated". In this article we consider every decision making process that occurs in business settings and is affected by emotions. That includes buying and selling activities, recruitment, as well as managerial decision making, among others. Next, we elaborate on discrete emotions in more detail.

Behavioral science, neuroscience, and emotions

Even though the interest in the role of emotions in decision making truly started in the 1960s, the amount of articles published in this area has rapidly increased in the 21st century (Lerner et al. 2015). Also, many different science disciplines participate in this topic since it has implications for a vast array of human activity, from business to politics and medicine, just to mention a few.

In this article, we are distinguishing two major categories of emotions that are affecting the decision maker. First, there are the integral emotions that arise in the actual context of decision making and are shaped by the expectations of potential outcome (Angie et al. 2011). These emotions strongly affect human decision making (Damasio 1994). The second category of emotions is incidental emotions, the source of which is not related to the current decision making situation. In other words, objectively observed, these emotions have nothing to do with the decision at hand (Keltner and Lerner 2010). Integral emotions can serve us by giving valuable information to act purposefully but they can also lead to bias (Lerner et al. 2015). Even still, the effect of incidental emotions is often more problematic since these emotions can be strong enough to have an impact, we are not aware of, on the task not connected to an emotion trigger (Lerner & Tiedens 2006). In addition, studies in neuroscience show that incidental affective states, such as stress and mood, can have significant implications for decisions through neurophysiological pathways. For example, stress impairs the function of the part of the brain called the prefrontal cortex (PFC) (Phelps et al. 2014), which leads to a shift from goal-directed action to more habitual choices (Schwabe & Wolf 2009).

The importance of emotions becomes also evident when studying people with specific and localized brain injuries in areas that are crucial for combining emotions and cognition. For example, people with amygdala or ventromedial prefrontal cortex (vmPFC) injuries, show impaired decision making, but in a distinct way from each other. Those people with vmPFC injuries made riskier choices that lead to financial losses even though they cognitively understood the choice circumstances. (Bechara et al. 1999).

Discrete emotions are intense experiences characterized by a distinct cognitive content available to the individual who is experiencing emotions (Clore et al. 1994). These emotions are caused or triggered by “stimulus events”. The events or situations act as stimuli triggering emotions while the emotions themselves have tendencies towards certain kind of action or behavior (Angie et al. 2011). Next, we present findings regarding the discrete emotions of anger, fear, sadness, and guilt as examples.

Anger

As one of the most common and influential emotions (Averill 2012), anger often arises when a person recognizes a threat or realization of a negative outcome, and it motivates the person towards action (Angie et al 2011). It may, for example, make a person react when feeling injustice (Solomon 1976). It is also a strong emotion that is considered functional when it takes a socially suitable form (Eid & Diener 2001). Anger is among the most studied emotions as well (Angie et al 2011) and it often originates from previous circumstances to affect following decision making situations (Lerner & Tiedens 2006), making it an important incidental emotion.

In addition, risk evaluation is crucially affected by anger. When making risk estimates, angry people tend to be more optimistic and take bigger risks (Lerner & Keltner 2001). Anger causes a person to use stereotyping and heuristic judgment, show prejudices, and to support punitive policies. This might be due to anger being associated with the sense of people’s individual control and the motivation to act against the one who is responsible (Angie et al 2011).

Fear

Events or situations that impose immediate danger or harm cause the emotion of fear, which motivates the person to escape or avoid the observed cause, often functioning in a protective role. The emotion of fear has frequently been studied in contrast with anger since they have many opposing tendencies (Angie et al 2011). Fear causes a person to see negative events as unpredictable and therefore causes people to make high-risk estimates (Lerner et al. 2015) and choose low-risk alternatives (Lerner & Keltner 2001); tendencies that are opposite to those of anger.

Sadness

The emotion of sadness arises in the case of an experienced loss (Lazarus 2001) and it motivates to retreat from efforts towards the object that has been lost (Roseman & Smith 2001). Sadness increases the tendency to detail-oriented cognitive processing, which may be due to an effort to avoid thinking about the situation where sadness arose. A sad person is more likely to give emphasis on situational factors and choose more protective policies (Angie et al 2011).

An interesting finding by Lerner et al. (2004) was that the incidental emotion of sadness, which occurred in the previous situation, reversed the endowment effect in a later unrelated economic situation. Endowment effect refers to people giving more value to things simply because they are in their possession, causing selling prices to exceed buying prices. In the study, sadness caused selling prices to sink and buying prices to rise. This is perhaps due to an increased effort to change current circumstances.

Guilt

Guilt appears to be a highly significant emotion affecting decision making, according to a meta-analysis conducted by Angie et al. (2011). The emotion of guilt makes the person feel responsible and increase efforts to avoid future guilt (ibid.). This can be seen as a prosocial function since the person is motivated to reconcile with others (Frank 2004). Also, as guilty people see themselves as responsible, it is opposite to anger, which causes a person to see the fault in others (Neumann 2000). Guilt has also been found to be connected with risk aversion, which means that decision makers tend to avoid risk-taking (Mancini & Gangemi 2004). Guilt also seems to reduce the person’s tendency to search for alternatives in cognitive tasks (Gangemi & Mancini 2007).

It is important to highlight that the above-mentioned list of emotions is not exhaustive. Instead, it should be used as a descriptive work, seeking to provide details about these four common and relevant emotions in business life. We delimit our attention to negative emotions, based on their critical effect on decision making, and the fact that they have been significantly studied in the academic literature.

TOWARDS AN UNDERSTANDING OF DYNAMIC INTERCONNECTED NATURE OF DECISION MAKING AND EMOTIONS

Evaluating risks and uncertainty of decision making in changing emotional landscape

In today's fast-changing business world, a large number of decisions involve uncertainty and potential risks, or incomplete knowledge of certain choices (Platt & Huettel 2008). Uncertainty can be described as "the psychological state in which a decision maker lacks knowledge about what outcome will follow from what choice" (Platt & Huettel 2008, p. 398). At the same time, the risk is considered the most frequently examined aspect of uncertainty, both by economists and neuroscientists (ibid.). Risk can be described as a situation that could lead to undesirable results. Thus, decision making and risks are two connected and interdependent factors, which are related to a broad range of uncertainties.

Even though the classical economic theories and their expected utility models have been offering straightforward frameworks and models for making decisions under uncertainty, they have mostly missed capturing the reality of decision making process. Thus, the conclusions have been made that uncertainty in decision making actually often leads to systematic violations of these expected utility models (Camerer 1981, Platt & Huettel 2008). For instance, research conducted both by economists and psychologist have indicated that decision makers are often uncertainty averse in situations that include financial gains, but at the same time uncertainty seeking while facing risks of financial loses. Nevertheless, in situations where these risks are smaller, for any of the probabilities, tendencies of decision makers turn around (Platt & Huettel 2008).

The perceived risks can furthermore occur at the organizational and personal level. Organizational level is non-personal and consists of financial, physical, performance, and time risks (Brooker 1984). Personal risks include psychological and social risks, such as a risk of losing a job, one's network and personal connections, or personal reputation, among others (ibid.). However, as Platt and Huettel (2008, p. 400) argue: "Individuals tend to avoid risky options that could result in either a potential loss or a potential gain, even when the option has a positive expected value." As previously stated, risk assessment is not completely stable but individually and temporally affected by changing emotional states. Therefore, next, we present step-to-step instructions on how to deal with emotions in the decision making process.

Dealing with emotions: Step-to-step instructions

The fundamental message of this article is the need for certain kind of "emotion-awareness", which means that decision makers must recognize and accept that emotion, which arises in previous and current situations and affects business decision making in many ways. Also, to be able to control this we must observe our emotional states. This comes very close to modern psychological therapies, such as cognitive-behavioral therapy that approaches the problems of emotion regulation that cause psychiatric conditions (e.g. depression). To be able to control the effects of one's emotions on one's behavior, we must first be able to recognize our emotions in the very situations they appear in.

In certain business situations, in which emotions can have a negative effect on the decision making process and where risks are high, researchers are suggesting various strategies (see Lerner et al. 2015). In order to simplify these strategies, and bring them closer to business decision makers, we propose step-to-step instructions on how to deal with emotions in situations in which they are potentially harmful to the business enterprise.

Be conscious of emotions
We know that many factors in our life that are irrelevant considering a decision can affect emotional state under which we are making these decisions. There is research indicating that our awareness of these factors decreases their effect (Han et al. 2007) and gives us more neutral possibilities to evaluate risks and make decisions. This also comes close to our message about the importance of emotional awareness. By only knowing what is causing the specific emotion, already reduces its effect.

Avoid emotion suppression
There is a common misconception that emotions can be handled by simply suppressing and "controlling" them. However, according to research, emotions become even more intense this way (Wenzlaff & Wegner 2000). At the same time, this "controlling" actually impairs memory functions (Richards & Gross 1999).

Take your time
One important aspect of the role of emotions is that they are time-dependent. They appear in a certain situation, but their effect is dependent on the temporal dimension. We can use this fact when controlling the risks that emotions have on decision making. A key tool to minimize this effect is a time delay (Lerner et al. 2015). Emotions have a tendency to weaken with time and can, therefore, have a less effect if a decision is not made in an instant. Although, in many situations, it is not possible to postpone decision making, our awareness of this method gives us the possibility to use it whenever it is possible. Especially in situations where an individual recognizes the strong negative emotions, such as anger, fear, sadness, and guilt - emotions that have a great effect on decision making.

Try to get a new perspective
A good strategy to diminish the effect of emotional states is reframing (Gross 2002). Reframing means that decision makers change their perspective. In other words, they should try to give the new meaning to a stimulus that leads them to a certain emotional response. Reframing reduces negative feelings as well as the physiological and neural responses. However, changing perspective often does not come naturally, so decision makers need to make an effort to do so. They can motivate themselves by understanding that this gives them a more neutral starting position to make important business decisions.

Do not rely only on financial incentives
It is often thought in the business world that the best way to diminish the effect of emotions is to use financial incentives as motivation. However, it seems that this is often not sufficient and that incidental emotions affect the decision making process even when personal financial rewards are involved (DeSteno et al 2014).

Work with a group – but be careful about group thinking
Making decisions in a group setting may lessen the effect of emotions on the decision, according to a meta-analysis conducted by Angie et al. (2011). However, at the same time, a group dynamics may lead to avoidance of conflict and conformity, which can cause suboptimal behavior (Lerner et al. 2015). Also, when thinking of large companies, decision making is

usually made in groups. Although researchers have for example been studying how general negativity and positivity of groups can influence their decisions (e.g. Barsade 2002, Hatfield et al. 1993, Totterdell 2000), future research is necessary for better understanding this field of decision making.

DISCUSSION AND CONCLUSIONS

Both the integral emotions that arise in the decision making process, and the incidental emotions, which originate from a previous situation, have a major effect on our capacity to do optimal business decisions. Out of these two, we argue that incidental emotions are more difficult to handle since they often carry over from the previous situation without awareness (Lerner 2015). It is most likely that people differ greatly in the capacity to recognize and screen out the effect of incidental emotion. In the experimental study by Yip et al. (2013) the researchers studied incidental anxiety, which reduced risk-taking in decision making processes. Those subjects with higher levels of emotion-understanding ability were able to better minimize the effect of incidental anxiety on decision making. Our step-to-step instructions are one way to enhance these abilities to cope with emotions.

As Koporcic et al. (2017, p. 436) argue: "…emotions are a natural part of the business world and they do not need to be avoided or restricted, but understood and managed accordingly." Also, a deeper understanding of the unavoidable and crucial role that emotions play in decision making, will give us the advantage to learn how to create an optimal decision making process. This includes taking into consideration the personality differences between individuals, their cognitive limitations and differences in the capability to understand emotions and their effect, as well as individuals' current mental situation. For example, depressed mood is characterized by feelings of guilt and sadness, which have a significant effect on decision making, as stated previously. In addition, it is crucial how the organization makes it possible for decision makers to minimize the uncontrolled effect of emotions.

For many years, rational decision making has been perceived as positive, while decision making that was influenced by emotions as negative (Zinn 2006). The effect of emotions exists in any case, so maybe we should learn to consider conscious understanding and control of them as something positive. Especially since we know that suppression of emotions may intensify the very emotion one wanted to control (Wenzlaff & Wegner 2000). So just suppressing emotions does not make them go away out of the equation.

Our instruction to use time delay may be seen to be in conflict with the finding that fast decisions in high-velocity environments tend to lead to superior firm performance (Eisenhardt 1989). However, there are many possibilities for this: Does the ability to make quick and intuitive business decisions correlate with good emotion-understanding and do those become decision makers who possess both these qualities? Is the need to consult others actually, in this case, a correlate of dysfunctional emotions such as guilt or sadness which reduce self-trust and lead to bad decisions? In any case, we do know that when making fast decisions, the need to manage the effect of emotions increases.

The question about time delay is an important topic for future research since in small and medium-sized enterprises (SMEs), there is often only one individual making a decision, which often leads towards a fast decision making process. The research in this field should take into account individual emotion-understanding abilities and should be conducted in real-life organizations.

Our step-to-step instructions are meant to be interpreted as general guidelines to take into consideration. For example, there are many other factors affecting decision making outcomes such as expertise, experience, and age to name a few. For each decision maker, it is still useful to ponder how one handles our instructions individually.

As Lerner et al. (2015, p. 817) highlight: “The field of emotion and decision making is growing at an accelerating rate but is far from mature”. Future research in business decision-making needs to take this cumulative knowledge into account and integrate findings in other science disciplines into their own theories. Rational and more intuitive-emotional decision making should not be compared or studied separately since this division is not scientifically justified (Phelps et al. 2014). The more useful approach would be to study the individual and organizational factors that contribute to different decision outcomes, while simultaneously acknowledging the central and dynamic effects of emotions, which could be integrated into to study designs.

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