The Impact of Cognitive Biases on Corporate Decision-Making: Analysis and Mitigation Strategies

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Abstract. In the business world, decisions are like the heartbeat of an organisation. They determine the strategy a company follows, influence its financial results, and shape its unique company culture. This paper analyzes three cognitive biases-confirmation bias, fundamental attribution error, and conformity bias-and explores their effects and consequences on corporate decision-making. These biases can lead to misjudgments by senior management in areas such as employee evaluation, hiring decisions, team collaboration, and customer relationship management. Additionally, they may foster a culture of flattery within the organization, which can negatively affect overall innovation and growth. By implementing strategies such as diverse team-building, data-driven decision-making, and fostering a culture of open feedback, companies can effectively mitigate the adverse effects of these cognitive biases on decision-making. While this study does not cover all biases that affect corporate decision-making, it offers a new perspective for understanding and improving the decision-making process, providing valuable insights for future research and practice.

1 Introduction

Decision-making is an essential part of any company. Almost all top managers need to make decisions, and the most important job of a manager is to make sound and correct decisions. The scope of these decisions often encompasses a wide range of plans, from company development to personnel, from long-term to short-term, and so on. The pioneers of capitalism, Adam Smith, David Ricardo, and John Stuart Mills, believed that people's behavior and decisions were entirely rational [1]. Although rational economic thinking and reasoning are still important in education, many people now recognise that they make decisions that are not always driven by rational thinking. Richard Thaler has noted that economists "must stop making excuses and accept the fact that humans are human, fallible, and susceptible to irrational beliefs and biases" [2]. Yes, people cannot always be rational in the face of contingencies or when emotions rule them; hence, the concepts of confirmation bias, fundamental attribution bias, and conformity bias explain people's behavior and remind company managers to detect misconceptions caused by these biases in order to make the right decisions. And company managers must recognize that these three biases do not always work

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in isolation. They are all part of a team of cognitive biases that influence judgment. Indeed, as in the case of the basic attribution bias, it often works in partnership with other biases, such as the confirmation bias and the consistency bias, which make senior managers' judgments more prone to error.

This study analyses and answers four questions: firstly, what are confirmation bias, fundamental attribution bias, and conformity bias? Secondly, why and how can they influence firms' decisions? Third, what are the consequences for the company? Fourthly, how to minimize the influence of these three biases in decision-making. While previous research has yet to specifically analyze how these three biases work together at different levels to influence company decision-making, this study will explore the reasons why these three biases influence company decision-making and delve deeper into the consequences of influencing decision-making. This study will also further provide ways to avoid wrong decisions influenced by biases, which may reduce wrong decisions influenced by biases. Moreover, this study will provide companies with new perspectives on decision-making errors, which will facilitate reflection and lessons learned by top managers, which can increase the probability of making the right decisions in the future.

2 Biases in Corporate Decision-Making

2.1 Three Types of Cias

When people analyse the behaviour of others, they tend to place too much emphasis on individual personality traits and ignore the role of environmental factors, a phenomenon known as the basic attribution bias. [3]. For example, the manager of a company receives a report from the employees containing a number of errors and mistakes. Managers usually blame the errors on the employees' carelessness and lack of attention to detail, or even on their lack of competence, without taking into account external factors such as time pressure, incorrect data provided to them, or lack of clear instructions. In addition, there is another example: Salespeople often attribute order closure to their excellent negotiation skills, but overlook the fact that the customer's urgent need for the product greatly simplifies and accelerates the transaction process. In summary, the basic attribution bias causes people to be prone to quickly judge others based on what they perceive to be their personality or traits, while being more forgiving of themselves and attributing their behavior to external distractions and contingencies. Or they may think too highly of their abilities and ignore the fact that success is due to the trend of the times or other reasons and that there is an element of luck involved.

In recent years,Confirmation bias is the tendency of an individual to seek out information that is consistent with his or her beliefs and to ignore or misinterpret evidence that challenges them. [4, 5]. The term "confirmation bias" refers to the various ways in which beliefs and expectations can shape the selection, retention and interpretation of evidence. [6]. These include four types of perceptions: (1) information-seeking and interpretation of hypothetical decisions, (2) failure to pursue falsificationist strategies in the context of conditional reasoning, (3) resistance to changing beliefs or perspectives once they have been formed, and (4) overconfidence or illusions about the validity of one's views [7]. Confirmation bias is often viewed as a cognitively harmful tendency. For example, this bias prevents the formation of well-founded beliefs, reduces people's ability to correct erroneous views, and causes them to be "overconfident" in their reasoning [8, 9]. Similarly, the bias involves "cognitive distortions, including supporting evidence that unreasonably endorses a person's beliefs, which can lead to such beliefs becoming unreasonably confident or extreme [10].

Conformity can be defined as the tendency to follow group norms and to follow them passively, thus exhibiting a lack of agency [9]. Conformity bias arises from a strong desire to fit in with a group of people. This feeling is called belonging, and it is normal for people to want to be accepted, so they involuntarily comply. This bias can lead people to imitate the behaviors or beliefs of others rather than follow their independent judgment or wishes. For example, this bias usually comes into play when some people agree with the decisions of the rest of the group; some people comply simply because they think that others may have more experience or knowledge than they do, and they have no opinion on the information being discussed. Others may be afraid of making a mistake that could lead to shame and embarrassment. So even if they don't agree with others or they have ideas of their own, they remain silent because the majority of the group already agrees with the concept.

2.2 Three Types of Bias Impact Corporate Decision-making

Fundamental attribution bias can affect decision-making in four ways. Firstly, from the perspective of staff appraisal and promotion, when managers are victims of bias, employees may face unfair evaluations. This is because managers may evaluate employees based on perceived personality traits rather than objective performance indicators. Second, in terms of hiring decisions, fundamental attributional bias can also affect the recruitment process. Interviewers may make quick judgements about applicants based on perceived traits, but may miss out on potentially great employees due to a lack of accuracy. Third, with regard to team dynamics and collaboration, fundamental attribution bias may foster misunderstandings and impede effective cooperation within a team. Team members may need to understand each other's behaviors and intentions, leading to conflict and ambivalence, which ultimately leads to reduced productivity and possibly even incalculable losses. Fourth, in terms of customer interaction and relationship management, fundamental Attribution Bias can even affect the way a company interacts with its customers. If employee representatives responsible for customer service attribute a customer's dissatisfaction or aloofness exclusively to the customer's temperament or personality without asking further questions, they may miss out on vital feedback about problems with the company’s products or services. All of these factors subconsciously influence the company’s decisions.

Confirmation bias can affect corporate decisions in two different ways. There are two different types of confirmation bias: “motivated” and “unmotivated” confirmation bias.The former operation can be viewed as motivated reasoning because it involves the selective processing of information in order to reinforce a viewpoint that is consistent with what a person wants to believe to be true. However, the unmotivated confirmation bias comes into play when individuals process data in a biased or selective manner that aligns with their preconceived views, regardless of whether those views benefit them or not [9]. Most people’s problems don’t happen because they don’t know, and they happen because what they see, they don’t actually know [10]. This is confirmation bias. In layman’s terms, confirmation bias is described as “seeing only what people want to see or hearing only what people want to hear” [10]. In practice, it is more than that. It involves consciously or unconsciously avoiding information that contradicts or disagrees with people’s currently held views. It is a cognitive bias that tends to confirm previously held beliefs or biased information. It affects the way people gather information and the way they communicate. For instance, entrepreneurs are told that they must ignore everyone who tells them they won’t succeed. But what if some of those people have accurate and valid objections? Instead, entrepreneurs adopt the mantra “fake it till you make it”. This is just confirmation bias.

There are three causes of consistency bias. First, social pressure may be caused by an individual's peers or the majority of the population as a result of social pressure. It can manifest in different negative ways, such as coercion, bullying, criticism, or teasing. Due to social pressures, individuals may disguise themselves as most group members just to be seen as usual and accepted by the group, especially in a company, in the face of the leader or most of their colleagues. These individuals rely on the group to fulfill their desire to be accepted and to perceive reality accurately. However, this social pressure may force people to go against their values and beliefs in order to avoid making mistakes or judgemental errors. Second, because of the fear of rejection, people who struggle with loneliness or low self-esteem, in particular, are vulnerable to consistency bias. As a result, they mimic the behavior of others to gain their approval and prevent rejection. If a person has been rejected in the past, he usually obeys and accepts the norms of the group more readily to prevent isolation or ostracism. Third, When thinking collectively, groupthink is a phenomenon where individuals make irrational or incorrect decisions due to the pressure to conform to shared beliefs. Consequently, people push for a uniform agreement within the group to maintain harmony.

In contrast to critical thinking, individuals prioritise consistency and harmony, thus setting aside personal beliefs or concerns and adopting the views of others in the group. Here's an example of a workplace where people almost always dress in the same style to fit in with other co-workers. If a new employee notices that others are dressed more formally on their first day, they are likely to adjust their dress code to blend in and avoid drawing attention to themselves. Conformity bias hinders the generation of new ideas because employees tend to cling to common, uncreative ideas. It fosters groupthink, which stifles innovation and contributes to a group mindset. People may stop using their independent judgment as free-thinking individuals. As a result, team members may give up ideas that are favorable to the company and avoid being in the limelight as a result of their creativity.

3 Effects and Mitigation of Biases in Decision-Making

3.1 The Impact and Consequences of Biases on Corporate Decision-making

Business leaders affected by fundamental attribution bias may need to make better decisions rooted in incorrect assumptions about the reasons behind business success or failure. For instance, a company may blame a drop in sales on poor marketing while overlooking wider market tendencies or changes in consumer priorities. Or a surge in profits may be incorrectly attributed to exceptional leadership when it is actually related to an unexpected increase in demand for products in the industry. In the long run, these can result in individuals who actually give less and are less competent being promoted and honored while more deserving employees are overlooked. The diversity of employee types is hampered by fundamental attributional bias in the hiring process, looking for a single type that meets the usual criteria, resulting in a company's talent pool being limited and the innovation of its products or services being undermined.

Confirmation bias kills companies more than anything else. As a result of confirmation bias, entrepreneurs may focus only on information that supports their entrepreneurial vision and ignore potential risks. This can lead to underestimation of risks and overconfidence, which in turn can lead to reckless decision-making. In addition, Confirmation bias causes leaders to seek out information that confirms their beliefs and reject information that does not. Confirmation bias may lead entrepreneurs to selectively absorb information in the decision-making process, often seeking out only information that supports their views while ignoring negative information and thus drawing flawed conclusions. For example, entrepreneurs may consider only positive market feedback and ignore negative feedback. Potential opportunities may be missed due to the underestimation of risk and poor decision-making. For example, due to fear of failure, entrepreneurs may not explore opportunities with higher risks but also higher rewards.

Deutsch and Gerard were the first to distinguish between normative and informational social influence [11]. Normative social influence means conforming to the positive expectations of others, whereas informational social influence implies accepting information received from others as evidence of reality [11]. Both definitions implicitly view social influence as synonymous with conformity and can be seen as the first significant bifurcation of the concept of conformity. Viewpoint congruence is believed to trigger a similarity-attraction bias, which can have a positive impact, as there is ample evidence that shared attitudes promote reciprocal influences and mutual fondness [12]. Opinion congruence is also an indirect form of flattery: in agreeing with another person's opinion, a person will actively validate their judgment [13]. Although early studies on the social psychology of congruence were mostly done in laboratory settings, an expanding amount of field research has explored how flattery and congruence within organizations affect various outcomes. This combined literature provides fairly consistent evidence that flattery and consistency of opinion have a positive impact on interpersonal attractiveness [14, 15]. So, conformity bias can lead to an undesirable culture of flattery by company employees and senior management's favourability towards different employees can have an unknown impact on decision-making.

3.2 Solution on Avoiding Biases from Influencing Company Decisions

A company can have the following initiatives for grassroots employees. First, training programs should be implemented to raise employees' awareness of cognitive biases, including basic attributional bias, confirmation bias, and consistency bias, and educators should instruct staff to stop and assess contextual elements before forming judgments. Second, build diverse teams. Team members have diverse backgrounds and perspectives. This is because a diverse group is more likely to face challenges head on and make more holistic decisions. Third, data-driven decision-making and data coaching should be encouraged. Analyzing objective data can help counteract the effects of reliance bias. Consider using digital mentoring as a powerful tool to address cognitive bias. Digital coaching programs can offer tailored guidance and practices to help employees recognize and address these biases in the decision-making process. Fourth, encourage a culture of open feedback. Develop a culture where employees are open to offering feedback and questioning biased decisions. This openness can serve as a check on whether decisions are biased.

For company executives and entrepreneurs, first, remain curious and sceptical. Make a sincere attempt to understand why a company would want to buy their company's product. What would they do with it? How will it save or make them a lot of money? Will it solve a significant problem that other companies are currently facing? Many companies create products that work but don't really matter. Other companies either have a lot of options or maintain the status quote. Continuously improve the functionality of the product through in-depth thinking and analyses until it is difficult to replace it with other products. Second, senior leaders or entrepreneurs are willing to kill their ideas. It's tough. But if they really want to avoid bias and not waste money and time on an idea that doesn't work, they should kill those useless ideas early on.

4 Conclusion

The fundamental attribution bias is a cognitive distortion that can dramatically affect organizational decision-making. Acknowledging its existence and taking active steps to counteract it is critical for organizations striving to make smarter, fairer and more successful decisions. By adopting practical solutions such as digital coaching, organizations can instill a culture of fair decision-making that leads to improved results and greater success in a dynamic business environment.

Even seasoned leaders can fall victim to confirmation bias because of the natural tendency to turn a blind eye to flaws in a plan. These disastrous decisions adversely affect both the business and the leader's reputation. To address this problem, leaders need to practice examining their decisions in an attempt to prove themselves wrong. This best practice forces leaders to acknowledge that their ideas are unreliable and to avoid listening to their gut feelings. Instead, they bravely face the truth of reality and make more intelligent, more favorable decisions, no matter how uncomfortable.

Conformity bias hinders the generation of new ideas, reduces innovation, and leads to group mentality. As a result, team members may give up ideas that are beneficial to the company and instead attach themselves to others to avoid team conflict. In addition to this, conformity bias can lead to hiring teams favoring specific types of people who fit their views. This can lead to poor selection decisions, a lacking in variety, and an unhealthy work atmosphere. In order to tackle conformity bias, people need to be conscious of how groups affect their decisions. With this realisation, people will be capable of making better choices and avoiding conformity bias.

However, this study still has some limitations, and it did not include all the biases that affect corporate decision-making. So, future research and analyses may revolve around other biases affecting corporate decision-making or may examine factors other than biases affecting corporate decision-making.

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