



# The Relationship between Cognitive Adaptability and Entrepreneurial Decision-making Quality: A Moderating Effect of Environmental Uncertainty

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## INTRODUCTION AND PURPOSE

To maintain and establish their competitive advantages in the highly uncertain entrepreneurial context, entrepreneurs need rapidly judge whether to develop a market opportunity or not, react instantly to risks and crises, and make the corresponding adjustment to environmental changes. All of these activities are closely associated with entrepreneurs' cognitive capability and decision-making. However, the issue of high-quality entrepreneurial decision-making mechanisms in an uncertain context is still less discussed.

Prior research in strategic decision-making indicates that organizations' performance largely relies on managers' decision-making quality and strategy implementation. Entrepreneurs' decision-making context is always full of uncertainty. Specifically, R&D of new products, the entry into new markets, and the application of new techniques are all experiments based on unknown results. During this situation, whether entrepreneurs can correctly make decision in an uncertain context determines the new ventures' capability on 'how far it can go' and 'how big it can grow'. Studies on strategic decision-making regard entrepreneurial decision-makers as groups of people with unique thoughts and behavioral modes characteristics. Since most existing studies conducted large established enterprises and TMT as research objects, the interaction between entrepreneurs' cognition and decision-making contexts and its complicated effect on entrepreneurial decision-making is unclear. Thus, whether the conclusion is effective to start-ups and entrepreneurial teams or not needs further examination. Cognitive adaptability refers to how entrepreneurs give feedback by embedding cognitive processes into the environment and adjusting their decision-making approach effectively and adequately, which emphasizes the effect of entrepreneurs' self-reflection and self-adjustment on cognitive process and ability.

## RESULTS AND ANALYSIS

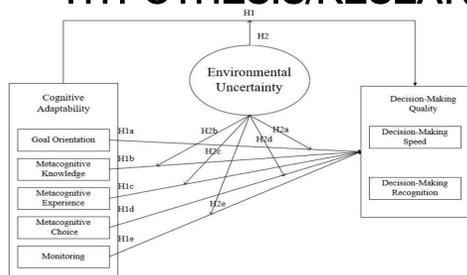
The impacts of the five dimensions of cognitive adaptability on decision-making quality are discrepant. Cognitive adaptability's significant positive effect on entrepreneurial decision-making quality is directly shown through two dimensions: entrepreneurs' goal orientation and monitoring; metacognitive knowledge, metacognitive choice, and metacognitive experience all negatively affect the decision-making quality, but only the impact of the metacognitive experience is significant. The reason for this result indicates that explicit goal orientation and monitoring are more important to enhance entrepreneurs' decision-making quality compared with metacognition.

The moderating effect of environmental uncertainty on the relationship between five dimensions of cognitive adaptability and decision-making quality is diversified. We found differences in how entrepreneurs' cognitive adaptability relates to decision-making quality partially depending on environmental uncertainty. Specifically, environmental uncertainty moderates significantly and positively the relationship between goal orientation and decision quality, which indicates that entrepreneurs with a higher degree of goal orientation can better effectively keep decision-making cognition in control in highly uncertain entrepreneurial environments. Meanwhile, environmental uncertainty significantly negatively moderates the relationship between metacognitive knowledge and decision-making quality. That means the stimulation effect of metacognitive knowledge on the improvement of decision-making quality would be weakened when the degree of environmental uncertainty is higher.

## CONCLUSION

The insights from our research are the byproduct of bringing together two essential impact factors of entrepreneurial decision-making, cognitive adaptability and cognitive context, to explore thoroughly how cognitive adaptability affects entrepreneurial decision-making and the moderation role of environment uncertainty during this process. Our findings indicates that five dimensions of cognitive adaptability influence decision-making quality differently due to diversified moderating effects of environmental uncertainty. Theoretically, it reveals under what conditions entrepreneurs' cognitive adaptability can be more beneficial in generating high-quality entrepreneurial decision-making, and discusses cognitive adaptability from five dimensions with Person-Environment Fit theory introduced. Practically, the entrepreneurs are inspired to develop more robust cognitive adaptability to cope with unexpected threats and tasks in an uncertain environment, and to prudently refer to prior management experience. In future research, scholars are supposed to refine and extend our work to shed further light on the generation mechanism of high-quality decision-making and drive academic attention to the unique context of entrepreneurial decision-making.

## HYPOTHESIS/RESEARCH METHOD AND MAIN PROCESS



The data of 183 valid samples was from company founders, team leaders, and company executives from 21 provinces involved in entrepreneurial decision-making. Variables are all measured by mature scales whose validity has been verified. Multiple regression analysis was conducted to test the proposed hypotheses.