



## TOP MANAGERS AND RISK-TAKING: DOES THE AGE MATTER?

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### Abstract

*Strategic decision-making is a complex process that requires a high cognitive effort, a lot of information and analysis, many managerial skills and organizational resources. While the external environment is becoming increasingly dynamic and organizations have to orient towards innovation as one of the main pillars of competitive advantage, strategic managers must face complex situations and make decisions under risk and uncertainty conditions. This study focuses into the specific case of Albanian banking institutions and examines age impact on risk-taking by top managers. It seeks to analyze variables and discover possible relationships between them, so as to be able to define some general reflections about risk assumption. By employing a quantitative approach, this study aims to provide an understanding of age differences in strategic decision-making. Through reviews of industry reports, publications and questionnaires, the study explores how strategic decisions are made by top managers and their behavior towards risk. A sample of 215 top managers, including CEOs, COOs and CFOs, was analyzed. The results suggest that there are some important differences between adult and young top managers, confirming an association between age and risk-taking. By analyzing the multifaceted nature of the age impact on decision-making, this study offers valuable recommendations for scholars, managers and policymakers, aiming to enhance the knowledge base in the fields of strategic management and decision-making.*

**Keywords:** Strategic management, Decision-making, Top manager, Risk-taking, Age

## INTRODUCTION

Strategic decisions and their implementation determine organizational performance. Strategic decision-making is a complex process that requires a high cognitive effort, because needs a lot of information and analysis, many managerial skills and organizational resources.

There are two basic model of decision-making. According to the classical model, managers act and make decisions under certainty conditions, have all the necessary information and an absolute rationality. So, managers know all the possible alternatives and their consequences and the choice is optimal (Robbins & Coulter, 2017; Andreou, 2020). According to the behavioral model, the manager does not have a complete information, but even if he has, his information processing skills are limited because of the bounded rationality (Rothaermel, 2021). The decision maker acts under risk and uncertainty conditions and therefore doesn't know all the alternatives and their consequences. Moreover, the decision is influenced by how a given situation is perceived and the choice is considered satisfactory (Kahneman & Tversky, 1979; Kutschera & Ryan, 2009; Bromiley et al., 2019). There is evidence that the classical model, compared to the behavioral model, is not suitable for strategic decisions. The external environment is increasingly characterized by dynamism and turbulence, and certainty is a condition that rarely occurs, especially for strategic decision-making (Dane & Pratt, 2007; Deep, 2023). So, strategic managers make decisions about new situations that are non-programmed, unstructured and complex. Thus, they constantly face risk and uncertainty.

The current research investigates the relationship between age and risk assumption in the context of strategic decision-making. Research on age impact on risk propensity has shown mixed results. So, some empirical evidence shows that adults are more risk-averse than young individuals (Botwinick, 1969; Okun, 1976; Wilson et al., 2021; Nolte & Hanoch, 2024). Other studies found no differences in risk-taking between adults and young individuals (Kovalchik et al., 2005). There is also empirical evidence for positive relationship between age and risk-taking (Guo et al., 2022). Although substantial and growing literature focuses on risk-taking and its determinants, the relationship between them is not yet clear. Only a few of them attempt to provide concrete explanations for differences in risk behavior and there is a gap referring to individual characteristics impact. There is evidence that top management characteristics, such as age, are essential for decision outcomes (Hambrick & Mason, 1984; Hambrick, 2007).

This research focuses on the Albanian top managers. After the '90s, Albania has faced a number of important changes and developments that have put the country in front of many challenges. The transition from the totalitarian and centralized system to the free market has been accompanied by events that have influenced the Albanian economy. Even with all its developments and steps forward, the Albanian economy has not yet reached the stability. The

government of Albania is undertaking important structural reforms to strengthen law implementation and create a competitive business environment. The new economic model, focused on tourism, production and exports, will improve business climate and will affect the future development of companies. Until the environmental sustainability is achieved, Albanian companies have to operate under risk and uncertainty.

The multifaceted objectives of this research extend beyond a mere exploration of the relationship age - risk assumption. The study aims also to find explanations about the results obtained. Firstly, the research aims to understand the attitudes of the Albanian strategic managers towards risk. Secondly, the study aims to investigate the age impact on risk-taking for strategic decisions when is a fact that in Albania young people are less preferred for strategic or executive positions compared to adults. A plausible reason for this could be just risk attitude. Thirdly, this study tries to identify variables and elements and discover possible relationships between them, so as to be able to define some general reflections about risk assumption, offering important insights on the dynamics of strategic decision-making, competitive advantages and organizational performance.

## LITERATURE REVIEW

Defining risk is certainly not easy. Trimpop (1994) states that risk-taking is any conscious or unconscious behavior, with a perceived level of uncertainty regarding its outcome, its benefits and costs that affect the physical, economic and psychosocial well-being of oneself or others. According to Aven & Ren (2009), the risk refers to the possibility of an undesired event. Risk behavior can be seen in two different ways: as a behavior that depends on characteristics of the situation, or as a behavior that depends on decision maker characteristics.

An important variable that influences risk attitude is age. Adult managers may differ from young managers in how they perceive risk. Many studies have attempted to highlight the relationship between age and risk-taking, but their conclusions are often contradictory. Some empirical studies have shown that as individuals age, they become more risk-averse (Wallach & Kogan, 1961; Botwinick, 1969; Okun, 1976, Wilson et al., 2021; Nolte & Hanoch, 2024). When faced with a complex situation, adults demonstrate low concentration and consequently take fewer risk (Chagnon & McKelvie, 1992; Ruthruff & Lien, 2016). According to Rabbitt (1965) and Ebaid & Crewther (2019), is difficult for adults to identify which part of the information is more relevant. This can be an explanation for their risk aversion. The differences in risk behavior due to age also can be a consequence of changes in two cognitive factors: the speed of information processing and memory (Henninger et al., 2010). Referring to Ritchie et al. (2014), there is a decline of attention, speed of visual information processing and working memory with the age.

Roalf et al. (2012) believe that risk aversion may be due to the fact that adults have accumulated more experience and can therefore evaluate outcomes better or because physiological and cognitive changes orient them towards more conservative behaviors. However, understanding adults' risk attitudes is very complicated. For example, Dror et al. (1998) concluded that there are no differences in cognitive processes between adults and young people and in their attitudes towards risk. Also, Kovalchik et al. (2005) found no differences in risk behavior, reasoning and choice processes due to age. Previously, a study of Brouthers et al. (2000) on top managers in the banking and insurance sector concluded that adult top managers made more aggressive decisions than younger top managers.

Wilson et al. (2021) found for older adults a significantly less risk-taking than younger adults on the behavioral measure of risk. Older adults also had significantly lower analytic thinking, slower processing speed, and worse executive control compared to younger adults. Nolte & Hanoch (2024) found that older adults self-report less favorable attitudes towards risks and risk-taking across many studied contexts. According to the authors, age differences in behavioral risk-taking vary based on task characteristics and cognitive changes may impede the ability to engage in beneficial risk-taking.

Adults are more cautious than young individuals (Lopatto et al., 1998). On the other hand, the attitude towards risk can also depend on the way the outcomes of the decision are presented. Thus, Kahneman & Tversky (1979) with the Prospect Theory argue that decision makers tend to overestimate low probabilities and underestimate high probabilities, introducing the concept of certainty effect. Individuals tend to overestimate certainty and when the outcomes are formulated in terms of gains, they choose the alternative that offer them a certain gain instead of a possible gain. But if the outcomes are formulated in terms of losses, decision makers tend to choose an alternative with a possible loss, rather than one with a certain loss. According to Mata et al. (2012), older adults weigh certainty more heavily than younger adults. The analysis of Xu (2024) demonstrate that advanced age significantly increases susceptibility to the framing effect, especially in response to negative frames, and calls for greater attention on the importance of affect heuristics in decision-making among older adults.

According to Lauriola & Levin (2001), when adults have to choose between two possible gains, they are more risk-averse than young people, but they are more risk-seeking when they have to choose between two possible losses. The authors argue that adults' attitudes towards risk are a consequence of the fact that they are more influenced by the certainty effect than young people. The authors hypothesized that the differences between adults and young people regarding risk could also be influenced by stress, but no differences were found between the two categories. This result is contradictory to the findings of Mather et al. (2009) according to

which stress leads to risk aversion in adults, compared to young people in the context of an emergent decision. Also, Frank & Seaman (2023), states that older individuals may have a harder time optimizing under uncertainty and therefore struggle to reach their optimization goals.

Risk behavior can also be a consequence of the level of sensations the decision maker seeks (Zuckerman & Kuhlman, 1978; Breivik et al., 2017; de-Juan-Ripoll et al., 2021). So, since young people are always looking for new experiences and emotions, they are more inclined to take risk than adults who become more cautious as time goes by (Roalf et al., 2012).

An important relationship could be that between risk-taking and need for achievement. Recalling McClelland's theory (1961), people with a high need for achievement take intermediate levels of risk, while those with low needs for achievement take high or low levels of risk. Heckhausen (1967) concluded that the need for achievement begins to decline around the age of 50. According to Heidemeier & Staudinger (2014), there is an age-related decline for achievement goals. Also, performance-avoidance is most likely to be a dominant goal among older males. Referring to Denzinger et al. (2016), as we age there is a decline in the motivation for achievement and power. Sigmundsson et al. (2022) found that the need for achievement decreases until the age of 50-59, and slightly increases for the remaining age groups. Thus, based on this empirical evidence, we can assume that adults decision makers are more risk-averse than younger decision makers also because they have low levels of motivation, grit and need for achievement.

A large body of research underlines the importance of emotions impact on risk behavior (Mather, 2006; Hurman et al., 2023). However, once again conclusions are not consistent. Carstensen et al. (2000) concluded that even if negative emotions such as fear, anger, disgust and sadness decrease in adults over time, it is not possible to reach a conclusion, because different negative emotions influence risky decisions in different ways. Lerner et al. (2003) believe that fear orients decision-maker to risk-aversion, while anger leads to higher risk-taking. According to Wake et al. (2020), fear is related to decreased risky decision-making and increased risk estimation. Schieman (1999) found a negative association between age and anger. This leads us to assume that adults are more risk-averse compared to younger decision makers.

Referring to emotions, we must also consider regret, which occurs when the decision maker realizes that the current situation could have been better if he had decided differently. In this regard, adults are more susceptible and consequently often try to avoid the choice, or make a less risky decision (Mather, 2006). Older adults tend to recall more intense regrets, but not a higher number of regrets compared to younger individuals (Nolte & Löckenhoff, 2024). Contrary to this, Kim et al. (2008) and Carstensen & DeLiema (2017) demonstrated that adults may have

a lower sense of regret because they emphasize positivity when they have to interpret the outcomes of their decisions. So, adults maintain higher levels of satisfaction with their decisions compared to young people. According to Eberhardt et al. (2018), older age is correlated to more experience-based knowledge and less negative emotions about financial decisions. Positivity leads the decision maker to more overconfidence. Risk-taking is positively related to overconfidence (Burkhard et al., 2022). According to García et al. (2022), overconfidence decreases with age and educational level. This conclusion leads us to the assumption that the lower overconfidence of adults, makes them less inclined to risky decisions.

We emphasize that it is not easy to draw conclusions about adults' risk behavior because most of the research has limitations and the results are often contradictory. However, based on the empirical data cited above, we believe that the results provided can be also extended to managers and thus we hypothesize that adult top managers are less risk-taking compared to younger top managers.

## RESEARCH METHODOLOGY

For the current investigation is adopted the quantitative research and for the data collection is used the questionnaire. Through the questionnaire we try to assess age impact on the attitude and tolerance of Albanian top managers towards risk, based on self-reporting. In doing this, it should be said that we do not refer to a specific model, but the statements included in the questionnaire are formulated on the basis of literature review and conclusions of previous investigations. In consistency with the hypothesis of the research, the questionnaire is built and developed on the basis of eight statements to be evaluated on the Likert scale 1-5. Cronbach's alpha was calculated to assess the internal reliability or consistency of the questionnaire, resulting in a value of 0.715, indicating that the data are reliable. The data processing is done through SPSS.

A total of 280 questionnaires are distributed and 215 collected, with a response rate of 76.8%. The target population refers to the top managers of banking institutions operating in Albania. We have chosen to conduct our study by analyzing the banking industry because we believe that top managers in this industry face more risk and uncertainty.

For the current research is chosen the non-probability sampling technique, in the form of convenience sampling. So, the units of analysis are chosen for participating to strategic decision-making and for being top-level managers. In some cases was also used the information provided from important or privileged subjects in order to identify other participants, anyway trying to meet certain criteria established previously. So, in addition to convenience sampling it was also used the snowball technique. Another important sampling criterion is the

geographical one. Thus, the research is focused on the banking institutions operating in Tirana and Durrës, as the two most important cities of Albania from an economic and industrial context.

To identify banks and participants were used reliable data sources such as Chambers of Commerce registers. Also, secondary data from industry reports and official publications were utilized to identify potential institutions to include in the present study. Data on banking institutions governance were collected manually based on the consulting of their websites and other contacts. This allowed us to have managers' attendance of different age ranges.

While the quantitative approach is considered appropriate for this investigation, alternative methods could also provide valuable insights for conducting the research. For instance, case study approach could be used to collect qualitative data, having the opportunity to go deeper into issues that can help to better understand and explain the results obtained. Also, experimental research could be employed to test age impact on strategic risk-taking. This method would involve designing controlled experiments to manipulate variables and measure their impact on participant responses.

## EMPIRICAL FINDINGS

The findings of this research provide an understanding of how age impacts risk-taking with focus on strategic decision-making. Through the analysis of 215 questionnaires collected from top managers (CEOs, COOs and CFOs), key patterns, challenges and opportunities have emerged, shedding light on the multifaceted nature of risk behavior and its determinants. Following are reported statistical analysis (descriptive statistics and correlations).

Table 1. Descriptive statistics

Variables	N	Mean	Median	Mode	Std. Dev.
1. I always prefer a certain outcome instead of a possible one.	215	3.80	4.00	4	1.081
2. Being cautious makes the decision maker a boring person.	215	2.60	2.00	2	1.245
3. Taking some risk is necessary.	215	3.91	4.00	4	2.193
4. I always anticipate precautions to avoid the unforeseen consequences of a decision.	215	3.93	4.00	4	0.823
5. For complex and risky situations I try to avoid or postpone the decision-making.	215	2.95	3.00	4	1.225
6. Risky situations represent a challenge and stimulate me to increase the engagement.	215	3.81	4.00	4	0.912
7. To achieve high and important results I prefer to risk.	215	3.42	4.00	4	1.144
8. Risky decisions imply a threat, so they should be avoided.	215	2.47	2.00	2	1.154

Table 2: Correlation for Statement 1

			Age group	1. I always prefer a certain outcome instead of a possible one.
Spearman's rho	Age group	Correlation Coefficient	1.000	.093
		Sig. (2-tailed)	.	.147
		N	215	215
	1. I always prefer a certain outcome instead of a possible one.	Correlation Coefficient	.093	1.000
		Sig. (2-tailed)	.147	.
		N	215	215

Table 2 shows that there is not a correlation statistically significant between age and the preference for certain outcomes instead of possible ones (Sig. =  $p = 0.147$ ,  $r_s = 0.093$ ).

Table 3: Correlation for Statement 2

			Age group	2. Being cautious makes the decision maker a boring person.
Spearman's rho	Age group	Correlation Coefficient	1.000	-.093
		Sig. (2-tailed)	.	.147
		N	215	215
	2. Being cautious makes the decision maker a boring person.	Correlation Coefficient	-.093	1.000
		Sig. (2-tailed)	.147	.
		N	215	215

As in Table 3, there is not a statistically significant correlation between age and the second statement in the questionnaire (Sig. =  $p = 0.147$ ;  $r_s = -0.093$ ). So, there are not differences between age groups in the perception of a cautious decision maker as a boring person.

Table 4: Correlation for Statement 3

			Age group	3. Taking some risk is necessary.
Spearman's rho	Age group	Correlation Coefficient	1.000	-.136*
		Sig. (2-tailed)	.	.033
		N	215	215
	3. Taking some risk is necessary.	Correlation Coefficient	-.136*	1.000
		Sig. (2-tailed)	.033	.
		N	215	215

Note: \* Correlation is significant at the 0.05 level (2-tailed)



Table 4 shows a correlation statistically significant for statement 3. So, the perception of risk-taking as a necessity is influenced by age (Sig. =  $p = 0.033 < 0.05$ ,  $r_s = -0.136$ ). Spearman correlation coefficient is negative, but weak, indicating that adult top managers are not inclined to take risks.

Table 5: Correlation for Statement 4

			Age group	4. I always anticipate precautions to avoid the unforeseen consequences of a decision.
Spearman's rho	Age group	Correlation Coefficient	1.000	.053
		Sig. (2-tailed)	.	.404
		N	215	215
4. I always anticipate precautions to avoid the unforeseen consequences of a decision.		Correlation Coefficient	.053	1.000
		Sig. (2-tailed)	.404	.
		N	215	215

Table 5 shows a correlation not statistically significant for statement 4. So, the anticipation of precautions to avoid the unforeseen consequences of the decision does not depend on age (Sig. =  $p = 0.404$ ,  $r_s = 0.053$ ).

Table 6: Correlation for Statement 5

			Age group	5. For complex and risky situations I try to avoid or postpone the decision-making.
Spearman's rho	Age group	Correlation Coefficient	1.000	.133*
		Sig. (2-tailed)	.	.036
		N	215	215
5. For complex and risky situations I try to avoid or postpone the decision-making.		Correlation Coefficient	.133*	1.000
		Sig. (2-tailed)	.036	.
		N	215	215

\* Correlation is significant at the 0.05 level (2-tailed)

As reported in Table 6, there are differences due to age regarding the avoidance or postponement of the decisions for complex and risky situations. The calculations indicate that the age impact is statistically important (Sig. =  $p = 0.036 < 0.05$ ). Spearman correlation

coefficient is positive, indicating a tendency for adult top managers to avoid or postpone the decision-making for complex and risky situations more than young top managers.

Table 7: Correlation for Statement 6

			Age group	6. Risky situations represent a challenge and stimulate me to increase the commitment.
Spearman's rho	Age group	Correlation Coefficient	1.000	-.177**
		Sig. (2-tailed)	.	.005
		N	215	215
6. Risky situations represent a challenge and stimulate me to increase the commitment.		Correlation Coefficient	-.177**	1.000
		Sig. (2-tailed)	.005	.
		N	215	215

\*\* Correlation is significant at the 0.01 level (2-tailed)

As we can note in Table 7, there are differences due to age regarding the perception of risky situations as challenges that stimulate to increase the personal commitment. The calculations indicate that the age impact is statistically important (Sig. =  $p = 0.005 < 0.01$ ). Spearman correlation coefficient is negative, indicating a tendency for adult top managers to not consider risky situations as challenges that call for commitment compared to young top managers.

Table 8: Correlation for Statement 7

			Age group	7. To achieve high and important results I prefer to risk.
Spearman's rho	Age group	Correlation Coefficient	1.000	-.131*
		Sig. (2-tailed)	.	.040
		N	215	215
7. To achieve high and important results I prefer to risk.		Correlation Coefficient	-.131*	1.000
		Sig. (2-tailed)	.040	.
		N	215	215

\* Correlation is significant at the 0.05 level (2-tailed)

Table 8 indicates that there is a correlation statistically significant between age and the seventh statement in the questionnaire (Sig. =  $p = 0.04 < 0.05$ ,  $r_s = -0.131$ ). Spearman

correlation coefficient is negative, indicating a tendency for adult top managers to not consider risk-taking as the way for high and important results compared to young top managers.

Table 9: Correlation for Statement 8

			Age group	8. Risky decisions imply a threat, so they should be avoided.
Spearman's rho	Age group	Correlation Coefficient	1.000	.118
		Sig. (2-tailed)	.	.064
		N	215	215
8. Risky decisions imply a threat, so they should be avoided.		Correlation Coefficient	.118	1.000
		Sig. (2-tailed)	.064	.
		N	215	215

Table 9 indicates that there is not a correlation statistically significant between age and the perception of risky decisions as threats to be avoided (Sig. =  $p = 0.064$ ,  $r_s = 0.118$ ).

## CONCLUSION

This study contributes to a deeper understanding of the role and significance of age on top managers' decision-making behavior. More specifically, we examined the attitudes towards risk of top managers of banking institutions operating in Albania, including CEOs, COOs and CFOs. We are not aware of any previous investigation in Albania that has studied the influence of age on managers' behavior towards risk. Outside the borders of Albania, there is a large body of empirical evidence on the age-risk assumption relationship, but the results offered are inconsistent and also, there is a lack of explanation in order to better understand the relationship between these two variables. Furthermore, it is worth noting that previous studies which try to analyze the impact of age on managers' attitudes towards risk are very limited. So, although there is a large body of research on the correlation between age and decision-making under risk conditions, most of them refer to risk-taking differences across the life span.

The findings of the present research lead to important conclusions. There are no differences between age groups in the preference for a certain outcome compared to a possible one. However, we find an important negative correlation between age and the way a cautious decision maker is perceived. So, adult top managers do not perceive a cautious decision maker as a boring person. This finding is in line with the results of previous studies, which show that adults are more cautious compared to young people. Furthermore, there are important differences due to age in the perception of risk as a necessity. The correlation is negative and

means that adult top managers do not perceive the risk as a necessity. Other findings of the present research reveal that the anticipation of precautions to avoid the unforeseen consequences of a decision is not influenced by age. There are differences in the behavior of adult top managers and young top managers for complex and risky situations. So, under these conditions, adult top managers prefer to avoid or postpone decision-making more than their younger colleagues. On the other side, in contrast to young top managers, adult top managers do not perceive risky situations as challenges that stimulate them to increase the engagement and also they do not prefer to risk in order to achieve high and important results. Referring to the perception of risky situations as a threat that should be avoided, there are not differences due to age.

Since our study found some significant correlations that indicate different behaviors between adult top managers and young top managers, leading to the conclusion that adult top managers are more risk-averse than young top managers, we can say that age is an important variable that influences risk attitudes.

The research provides some implications for scholars and policymakers. Scholars can build upon the insights gained from the present research to explore related topics, expand the geographical scope, or delve into specific aspects of strategic decision-making. These contributions collectively enhance the knowledge base in the fields of strategic management and decision-making. Referring to policymakers, first, they should encourage and incentivize ethical practices of employment, promotion and performance evaluation. Although there is an improvement of the legal framework and a greater awareness of the negative consequences of age discrimination on organizational climate, negatively impacting also organizational performance, the data is not encouraging, showing that age-related biases in the workplace are still present. Second, policymakers and managers can actively collaborate for policies that support young managers' growth, age equality and prohibition of discrimination. There is empirical data indicating that for top-level managers, age and years of experience are important variables for their recruitment. So, results show that adults are more careful, make fewer bad decisions, are more innovative and inspire more trust in others. Because of these characteristics, they are more likely to be recruited, from outside or inside, for top-level positions. This would demoralize young people because it means fewer opportunities for them to advance in career. Finally, policymakers in cooperation with managers should invest in training programs that enhance the skills of the workforce in strategic management and decision-making because the external environment is becoming increasingly dynamic and top managers are facing more non-programmed and unstructured decisions. Acting by this,

managers and policymakers improve not only strategic decision-making, but also ensure that everyone has equal opportunities to grow within the organization.

Even with some progress, the data in Albania show that young people are still discriminated in many aspects, leading to important barriers in their career and lives. Although the results of the current research show that adult top managers are more risk-averse than young top managers, this does not mean that the latter are more irresponsible and make decisions that would expose the company to significant risks.

## LIMITATIONS AND FURTHER STUDIES

This study provides some limitations, but at the same time can be a starting point for future research. First, it specifically investigates age differences in risk assumption for strategic decisions, taking into analysis banking institutions operating in Albania. While this investigation allows for in-depth generalizable insights on the behavior of top managers in strategic decision-making, we cannot understand if the findings are directly related to the company size, characteristics of the industry, management philosophy and organizational culture. Companies of different sizes and industries, with different management philosophies and organizational cultures may face unique challenges and opportunities during strategic decision-making process. These could be interesting topics for future research. Second, this study employs a quantitative methodology. While such methodology provides results that can be generalized, they may lack rich and context-specific insights. Also, due to the sample size and the focus on a geographic area the findings may not be representative of the entire population of Albanian top managers, and variations in the behavior towards risk for strategic decisions among top managers may exist. Third, this study is conducted within a specific timeframe, and the findings are reflective of the economic, social, and political conditions prevailing during that period. Economic and market dynamics, as well as government policies, can change over time, impacting the strategic decision-making. A future research, based on data collected in different timeframes, could provide interesting conclusions regarding top managers' behavior on risk-taking and age impact.

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