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DOI:  
[10.1002/mar.21988](https://doi.org/10.1002/mar.21988)

*Document Version*  
Peer reviewed version

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*Citation for published version (APA):*

Montecchi, M., Gvirtz, A., Plangger, K., Prendergast, G. P., & West, D. (2024). Marketing experts are always right...aren't they? Disentangling the effects of expertise and decision-making processes. *Psychology & Marketing*, 41(7), 1432-1442. <https://doi.org/10.1002/mar.21988>

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**MARKETING EXPERTS ARE ALWAYS RIGHT...AREN'T THEY?  
DISENTANGLING THE EFFECTS OF EXPERTISE AND DECISION-MAKING  
PROCESSES**

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**How to cite this article:**

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**MARKETING EXPERTS ARE ALWAYS RIGHT...AREN'T THEY?**  
**DISENTANGLING THE EFFECTS OF EXPERTISE AND DECISION-MAKING**  
**PROCESSES**

**ABSTRACT**

Marketing experts are tasked with making important decisions that influence firms' performance. Some decision tasks are decomposable and can be broken down into smaller parts (e.g., pricing new products). Others are non-decomposable and are challenging to break down (e.g., selecting creative work for advertising campaigns). The literature remains divided on whether expertise aids decision-makers in addressing these different decision tasks, as well as how different decision-making processes (critical analysis, intuition, introspection) improve decision-makers' performance when they face these tasks. Using experiments with comparative samples of senior marketing managers (experts) and general public participants (non-experts), we test whether expertise provides advantages when making decisions. Our results suggest that experts perform better than the general public with decomposable decision tasks, though not with non-decomposable decision tasks. Furthermore, decision-makers who rely on critical analysis perform better compared to intuition when addressing decomposable decision tasks, but the decision process is less important with non-decomposable decision tasks. These findings provide insight into the conceptual boundaries of marketing professionals' expertise. Managers could apply these insights to potentially save resources (e.g., time, finances) by delegating decisions to more junior staff or even by leveraging external counsel through crowdsourcing.

**Keywords:** Managerial decision-making process; professional expertise; decision performance; (non) decomposable decisions; intuition; critical analysis

## INTRODUCTION

Marketing experts, such as senior advertising executives, marketing strategy consultants, and brand managers, are widely celebrated in the popular press for their visionary ideas and strategic acumen (Lee et al., 2023; McKinsey & Company, 2019). Their marketing expertise is derived from their extensive knowledge and experience of the ‘tricks of the trade’ that enable their employers to succeed in the face of the most challenging market conditions (Plangger et al., 2020). Firms often enlist these ‘marketing gurus’ and task them with making complex managerial decisions that should steer strategic resources in promising directions (Hoffmann et al., 2022; Kaiser et al., 2023). However, while these experts can add value by capitalizing on acquired marketing knowledge and skills, their expertise can also prevent them from considering new, less familiar solutions to marketing problems, leading to detrimental effects on organizational performance (Finkelstein, 2019). Therefore, while employing marketing experts can add to a firm's competitive advantage, their expertise likely comes with boundaries that firms must carefully understand.

Psychological research on managerial decision-making has focused primarily on formulating explanations of managerial behavior and performance by examining cognitive processes (critical analysis, intuition, and introspection; West et al., 2020). However, less is known about how those cognitive processes interplay with the specific nature of the decision task that marketing experts face. Some studies suggest that the effectiveness of decision-making is circumstantial, that is, it is dependent upon the nature of the task at hand (Dane et al., 2012; Inbar et al., 2010) rather than solely dependent upon the cognitive process involved in making the decision.

Conventional conceptualizations of decision tasks largely revolve around the construction of binary opposites (Dane et al., 2012). This paper follows this approach and considers two opposite types of decision tasks: those that are decomposable and those that are non-decomposable. On the one hand, some evidence indicates that decision tasks that can be *decomposed* (i.e., fully deconstructed) require some degree of expertise (Huang & Pearce, 2015) and reliance on critical analysis of evidence. For example, setting a price for a new product may involve the careful examination of market research data (e.g., consumer preference and past behaviors) and firm economics (e.g., production costs, marketing overheads, etc.). In the process, marketing experts may combine objective criteria (e.g., expected market share, ROI) with their experience of market dynamics to interpret insights and formulate such pricing decisions. On the other hand, decision tasks that are *non-decomposable* (i.e., cannot be deconstructed) generally require a more holistic examination of contextual factors that do not necessarily follow a logical process of critical analysis (Haeussler & Vieth, 2022). For example, such decisions might involve the evaluation of an advertising campaign's creativity (Bundgaard, 2009). Creativity decisions are non-decomposable, as they cannot be broken down into smaller components and, therefore, carry a substantial degree of subjectivity. As such, it might be questioned whether experts have any advantage over non-experts with such tasks as these decisions involve holistic evaluations that might rely on marketing experts' intuition or 'gut feelings' (West et al., 2020).

Within this context, we conceptualize and empirically investigate how well marketing experts make decisions compared to non-experts by manipulating the decomposability of the decision task and the cognitive process employed by the decision-maker (i.e., critical analysis, intuition, or introspection). In this paper, we propose that marketing experts have a clear advantage over non-experts (i.e., members of the public) when the decision task is

decomposable, as they can access prior marketing knowledge and skills. However, this advantage is likely to evaporate with non-decomposable tasks, which require holistic judgments that transcend the application of objective criteria. Furthermore, as decomposable decision tasks often require integrated examinations of different sources of evidence against set criteria, we anticipate that experts will be more effective when applying critical analysis to this type of decision task. Conversely, given non-decomposable decision tasks are the less-structured and more subjective, this forces decision-makers, regardless of their expertise, to rely on intuition.

We test our predictions through two sequential experimental studies involving 91 experts (senior marketing managers) and 201 non-experts (members of the public). Furthermore, we test whether decision performance changes when decision-makers reflect on their decision tasks through a process of introspection (Mendl & Dreisbach, 2022). We find evidence that introspection reduces decision-makers' performance only when they face non-decomposable decision tasks.

## **BACKGROUND AND HYPOTHESES DEVELOPMENT**

### ***Decision Task and Expertise***

There is no clear agreement regarding the nature of decision-making and the circumstances where specific decision tasks might or might not influence decision performance (Chng et al., 2015; Wierenga, 2011). Most decision tasks have varying degrees of decomposability, which affect decision-makers' ability to break down the decision into its various component parts to be solved sequentially. Decomposable decision tasks can be fully deconstructed and addressed sequentially by applying rules and objective criteria (Haeussler & Vieth, 2022). Decisions involving a new product launch, or a new market-entry strategy rollout

can be considered mostly decomposable as they encompass a series of steps and the evaluation of multiple sources of evidence against set criteria. Conversely, non-decomposable decision tasks require holistic, more subjective judgments that are extremely difficult to deconstruct (Haeussler & Vieth, 2022). Examples of such decision tasks include morality assessments (Haidt, 2001; Lo et al., 2019) or the judgment of an artwork's creativity (Bundgaard, 2009).

A great deal of empirical work in the cognitive sciences focused on comparing the outcomes of decisions made by experts to non-experts (West et al., 2020). Experts are individuals who have acquired significant experience in successfully making decisions in a certain domain or context (Dane & Pratt, 2007; Kahneman & Klein, 2009). Comparisons have been made, for example, between managers and students, faculty and students, students with and without expertise on a task, experts versus evidence from the academic literature, statistical modeling, and commercial databases. Comparisons between experts and students have been the dominant approach, with several studies indicating that managers perform best. Managers have been found to make decisions more quickly than students (Day & Lord, 1992), need to draw upon less information (Isenberg, 1986), and are less affected by the context (Fredrickson, 1985).

Taken together, this literature and a wealth of anecdotal evidence show that experts hold a significant advantage over non-experts when making decisions. However, this advantage might not be absolute, and important boundary conditions likely exist. Specifically, extant evidence suggests that decision tasks that cannot be deconstructed place experts and non-experts on the same 'neutral territory' because prior knowledge and skills offer no significant advantage when split decisions on the unknown must be made (Armstrong, 1991; Newell et al., 2009). However, when it comes to decision tasks that can be decomposed, it is likely that experts will outperform non-experts (Acker, 2008; Thorsteinson & Withrow, 2009). Experts have an advantage because

they can effortlessly tap into prior marketing knowledge and skills, which non-experts do not possess, and are more efficient in processing and retrieving this acquired information (Dane et al., 2012; Hutchinson et al., 2010). Based upon these arguments, we propose the following hypotheses on the effect of expertise on decision task performance:

**H1a:** When faced with non-decomposable decision tasks, experts and non-experts will perform equally.

**H1b:** When faced with decomposable decision tasks, experts will outperform non-experts.

### ***Decision Task and Decision-making Processes***

The roots of the discussion over managerial decision-making can be found in Simon's (1955) work on bounded rationality. Managers, like most individuals, hope to make rational decisions based on evidence and critical analysis (Kahneman, 2003). However, assumptions of complete rationality when making decisions are unrealistic, as humans remain boundedly rational (Kolsarici et al., 2020). The scarcity of time and other resources often requires decision-makers to settle for outcomes that both satisfy and suffice their needs (Schwartz et al., 2002). To aid complex decision-making efforts, oftentimes, managers rely on intuition (Nordin & Ravald, 2023; van Bruggen & Wierenga, 2000) and formulate emotionally charged judgments that are based on heuristics (i.e., fast and unconscious mental shortcuts; West et al., 2020).

The bounded rationality assumption does not imply that a deeper critical analysis is not attempted or does not occur in managerial decisions. Rather, it implies that managerial decision-making has limitations (Kolsarici et al., 2020). Most managerial decisions are based upon the detailed examination of available data, applying logic and probability in a process we call *critical analysis* (Delre et al., 2017). Such procedural rationality of logic generally necessitates



well-structured problems based upon the evaluation of multiple sources of evidence and objective criteria that can be applied to reach an expected outcome. As such, critical analysis is likely to be relatively effective when decision-makers face decomposable decision tasks that can be deconstructed and examined sequentially against specific criteria.

Many managers, however, face incomplete information on external and internal dynamics, which requires them to balance probability and logic to make informed decisions (Dean & Sharfman, 1993, 1996; Thanos, 2023). Due to such constraints, decision-making often revolves around accuracy and speed trade-offs (Gigerenzer et al., 2022; Gigerenzer & Gaissmaier, 2011), with time and resource-poor managers having to rely on intuition and gut feelings to guide their choices (Kruse et al., 2023). As intuition allows individuals to make ‘free’ and ‘holistic’ judgments without the constraints of conscious and sequential thinking (Evans, 2008; Wilson, 2004), it is likely to lead to better decision performance in the context of non-decomposable tasks that are less reliant on the sequential evaluation of multiple sources of evidence. Drawing on these arguments, we formulate the following research hypotheses:

**H2a:** When faced with non-decomposable decision tasks, both experts and non-experts perform better when relying on intuition instead of critical analysis.

**H2b:** When faced with decomposable decision tasks, both experts and non-experts perform better when relying on critical analysis instead of intuition.

### ***The Role of Introspection***

Aside from their intrinsic nature, there is another aspect of decision tasks to consider. While there is a tendency to examine decisions as discrete and finite events, in reality, managers often introspect their past decisions to consider alternative scenarios, fallacies, or risks (Sukhov et al., 2021). Introspection is commonly understood as the mental procedure of examining a

person's own thoughts and feelings regarding both their mental and emotional state (Cohen & Andrade, 2004; Mendl & Dreisbach, 2022). Depending on the time frame, managers may often make changes to their original decisions due to such introspection. Nevertheless, there is considerable evidence to suggest that introspection generally degrades rather than enhances decision performance (Nordgren & Dijksterhuis, 2009; Wilson & Schooler, 1991). This is frequently the case when motor skills are central. For example, evidence from sports scientists suggests that baseball players who overly think about their shots do worse than when they just 'go with the flow' (Gray, 2004), as do golfers who analyze their putts (Beilock et al., 2004) or soccer players who analyze their shots (Beilock et al., 2002). Furthermore, intuitive decisions by students about the quality of modern art paintings are generally more accurate than those who ruminate over their judgments (Dijkstra et al., 2012). Moreover, students who introspect over forthcoming course choices make worse choices because they are less able to focus on the information most relevant to the decision (Tordesillas & Chaiken, 1999). The reason is that introspection may disengage sensory, intuitive skills that enable decision-makers to perform well. The above discussion leads to the following hypotheses:

**H3a:** After introspection on their initial non-decomposable decision task, both experts and non-experts will perform worse compared to those who did not have a chance to introspect on their initial decision task.

**H3b:** After introspection on their initial decomposable decision task, both experts and non-experts will perform worse compared to those that who did not have a chance to introspect on their initial decision task.

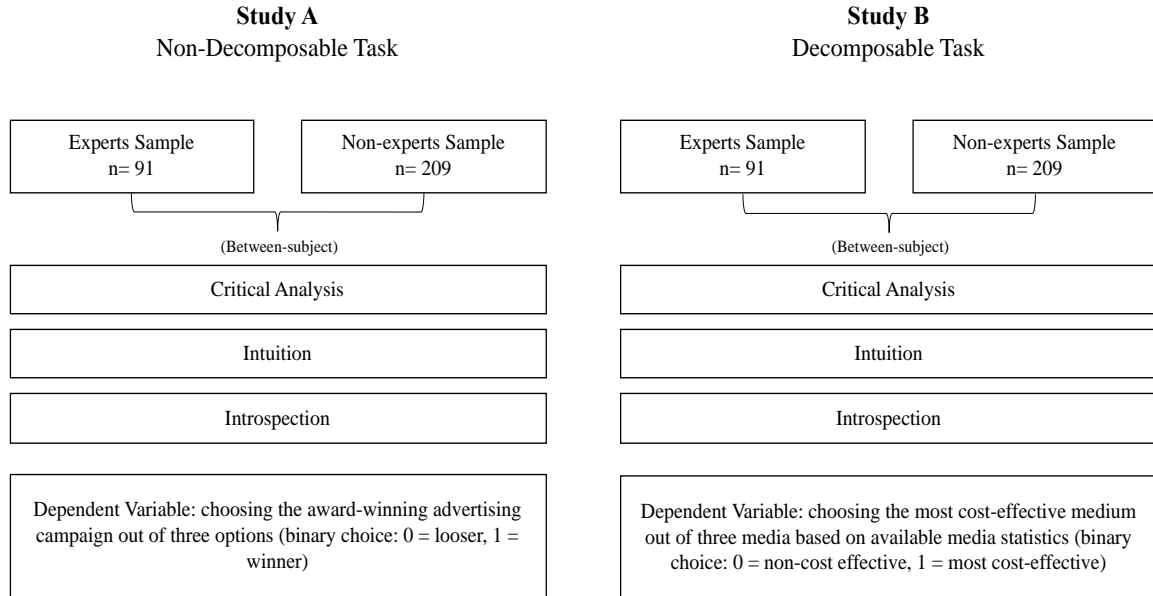
## METHOD

To test these hypotheses, we devised two experiments involving either a non-decomposable (Study A) or a decomposable (Study B) decision task. Both studies were run using a 2 (Expertise: expert vs. non-expert) x 3 (Decision-making process: critical analysis vs. intuition vs. introspection) between-subject design. Finding experts to participate in academic research projects is notoriously difficult. In both studies, the expert sample included senior marketing managers recruited from the industry standard Dun & Bradstreet paid database service. The non-experts sample included members of the public recruited from the research crowdsourcing platform Amazon Mechanical Turk. After deleting participants who did not complete the survey, failed the manipulation or attention checks, or did not have a unique IP address, the final sample contained 91 experts and 209 non-experts. The difference in the number of respondents in the samples is due to the difficulty of finding experts who agree to partake in academic research.

Following their expression of informed consent, participants undertook both the non-decomposable (Study A) and decomposable (Study B) decision tasks, presented randomly to avoid order effects. For each decision task, participants were randomly allocated to one of three alternative decision-making processes (i.e., critical analysis, intuition, introspection). At the end of the study, participants were asked some demographic questions. Figure 1 provides a diagrammatic representation of the experimental design implemented in this research.

We provide additional details on the decision tasks and decision-making process manipulations in the Web Appendix, alongside a detailed description of the participants' sample and the pretest conducted to ensure the validity of the experimental manipulations.

**Figure 1** – Overview of the experimental design



*Note.* Both were studies run sequentially with the same sample of participants due to the complexity of recruiting the expert sample. Non-decomposable and decomposable tasks were presented in randomized order to avoid order effects.

## RESULTS

To test our hypotheses, we examine the decision outcomes of the non-decomposable (Table 1) and decomposable (Table 2) decision tasks separately. To evaluate the likelihood of a participant identifying the correct answer for each of the two tasks, we estimate two probit regression models with expertise (expert, non-expert) and decision-making process (critical analysis, intuition, introspection) as independent variables. For the decision-making process condition, intuition is the baseline condition that we compare to the performance of those in the critical analysis and introspection conditions. To ease interpretability, we also compute the average marginal effect (AME) for all predictors included in the model, which indicates the average change in the probability of selecting the correct answer (Williams, 2012).

**Table 1** – Non-Decomposable Decision Task (Study A) – Frequency Count (Percentages by row)

Expertise	Decision-making process	Decision outcome		Total
		Wrong	Correct	
Consumer	Intuition	36 (52.2%)	33 (47.8%)	69
	Critical analysis	34 (48.6%)	36 (51.4%)	70
	Introspection	44 (62.9%)	26 (37.1%)	70
	Total	114 (54.6%)	95 (45.5%)	209
Manager	Intuition	13 (46.4%)	15 (54.6%)	28
	Critical analysis	14 (45.2%)	17 (54.8%)	31
	Introspection	21 (65.6%)	11 (34.4%)	32
	Total	48 (52.7%)	43 (47.3%)	91
Total	Intuition	49 (50.5%)	48 (49.5%)	97
	Critical analysis	48 (47.5%)	53 (52.5%)	101
	Introspection	65 (63.7%)	37 (36.3%)	102
	Total	162 (54.0%)	138 (46%)	300

**Table 2** – Decomposable Decision Task (Study B) – Frequency Count (Percentages by row)

Expertise	Decision-making process	Decision outcome		Total
		Wrong	Correct	
Consumer	Intuition	61 (88.4%)	8 (11.6%)	69
	Critical analysis	53 (73.6%)	19 (26.4%)	72
	Introspection	52 (76.5%)	16 (23.5%)	68
	Total	166 (79.4%)	43 (20.6%)	209
Manager	Intuition	21 (63.6%)	12 (36.4%)	33
	Critical analysis	15 (57.7%)	11 (42.3%)	26
	Introspection	22 (68.8%)	10 (31.3%)	32
	Total	58 (63.7%)	33 (36.3%)	91
Total	Intuition	82 (80.4%)	20 (19.6%)	102
	Critical analysis	68 (69.4%)	30 (30.6%)	98
	Introspection	74 (74.0%)	26 (26.0%)	100
	Total	224 (74.7%)	76 (25.3%)	300

The probit model for the non-decomposable decision task is not statistically significant ( $\chi^2 (3, n = 300) = 6.22, p = .101$ ), while the model estimated for the decomposable decision task returns statistically significant results ( $\chi^2 (3, n = 300) = 12.04, p = .007$ ) (Table 3). Consistent with our first hypothesis, experts do not outperform non-expert when facing non-decomposable decision tasks (H1a;  $\beta = 0.051, p = .750$ ; Figure 2a) but do so when facing decomposable decision tasks (H1b;  $\beta = .498, p = .003$ ; Figure 2b). Specifically, our results show that experts

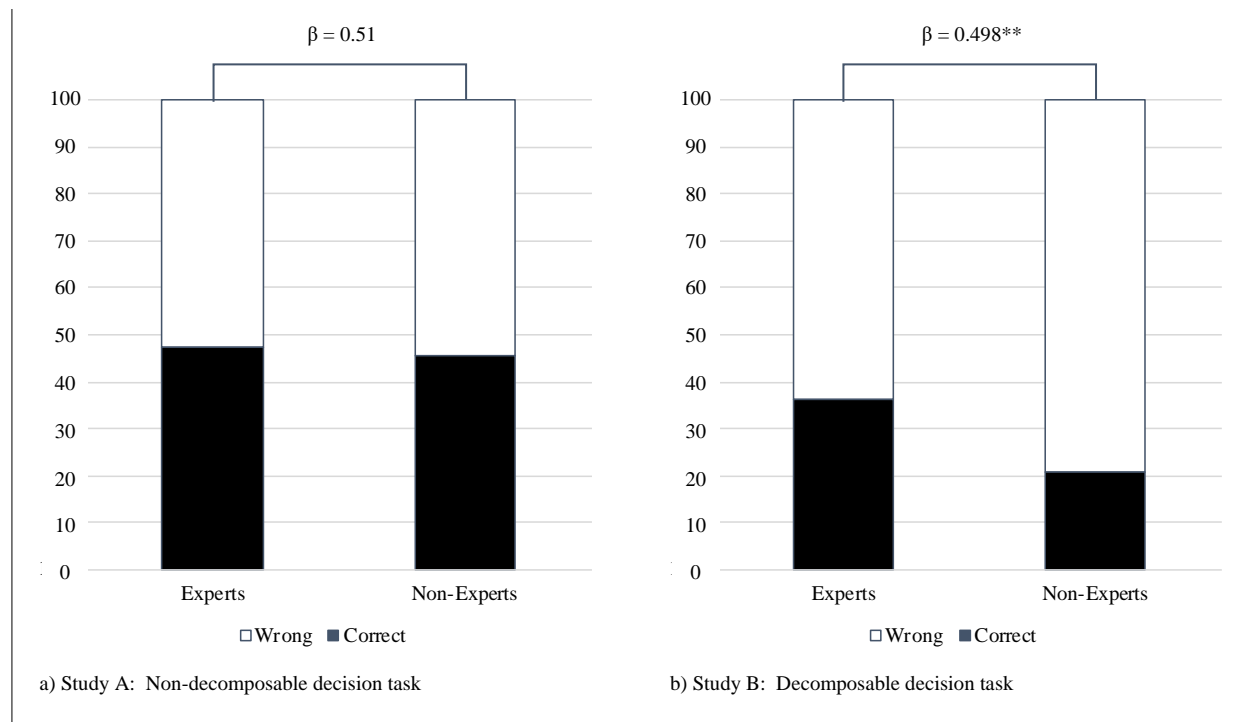
have a 15.3% higher probability of choosing the correct answer in the decomposable decision task condition compared to non-experts (AME = .153,  $p = .002$ ).

**Table 3** – Results of probit regression

Independent variables	Effect	Non-decomposable decision task		Decomposable Decision task	
		$\beta$	AME	$\beta$	AME
(Intercept)	(Intercept)	-0.078	-	-1.546***	-
Expertise	Experts – Non-experts	0.051	2.0%	0.498**	15.3%
Decision-making process	i) Critical analysis – Intuition	0.074	2.9%	0.399*	12.3%
	ii) Introspection – Intuition	-0.339	-13.3%	0.233	7.2%
	iii) Critical analysis – Introspection <sup>a</sup>	0.414*	16.1%	0.166	5.1%
		$\chi^2 (3, n = 300) = 6.22$		$\chi^2 (3, n = 300) = 12.04**$	

<sup>a</sup>Based on Post-Hoc tests. \* < .05, \*\* < .01, \*\*\* < .001

**Figure 3** – Proportion of correct and wrong decisions for non-decomposable (Figure 3a) and decomposable (Figure 3b) tasks by expertise

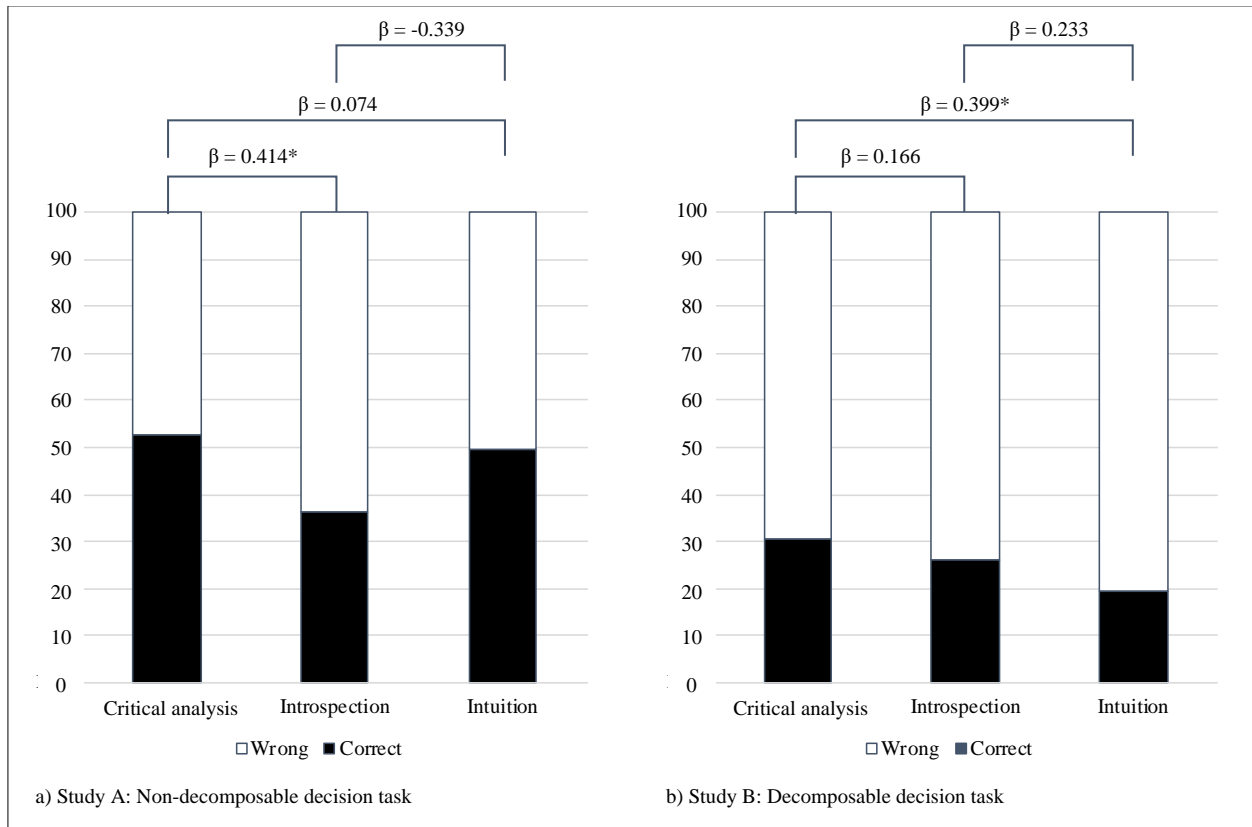


Note.  $\beta$  = probit regression coefficient. \* < .05, \*\* < .01

Next, we examine the effects of different decision-making processes on participants' likelihood of selecting the correct option. In the context of the non-decomposable decision task, we do not find statistically significant differences between the critical analysis and intuition

conditions (H2a;  $\beta = 0.074$ ,  $p = .678$ ; Figure 3a). Conversely, we find evidence that addressing decomposable decision tasks through critical analysis leads to a 12.3 % increase in the likelihood of selecting the correct answer compared to intuition (H2b;  $\beta = 0.399$ ,  $p = .044$ ; Figure 3b).

**Figure 3** – Proportion of correct and wrong decisions for non-decomposable (Figure 3a) and decomposable (Figure 3b) tasks by decision-making process



Note.  $\beta$  = probit regression coefficient. \* < .05, \*\* < .01

To test our third and final hypothesis, we examine how introspection affects the likelihood of selecting the correct answer. For non-decomposable decision tasks, introspection does not affect the likelihood of selecting the correct answer when compared to intuition (H3a;  $\beta = -0.339$ ,  $p=0.059$ ; Figure 3a). However, we find evidence that, for non-decomposable decision tasks, critical analysis outperforms introspection by 16.1% (H3a;  $\beta = 0.414$ ,  $p = .020$ ; Figure 3a), thus suggesting that introspection can have a detrimental effect on decision performance. For the

decomposable decision task, we do not find evidence that introspection affects the likelihood of choosing the correct option when compared to intuition (H3b;  $\beta = 0.233$ ,  $p = .241$ ; Figure 3b) or critical analysis (H3b;  $\beta = 0.166$ ,  $p = .388$ ; Figure 3b). Table 4 provides a summary of how the results of this study support and diverge from the hypothesized effects.

**Table 4** – Summary of research findings

Research hypothesis	Decision task	Proposed effect	Results	Overall assessment
<b>H1a:</b> When faced with non-decomposable decision tasks, experts and non-experts will perform equally.	Non-decomposable	Experts = Non-experts	No differences	Supported
<b>H1b:</b> When faced with decomposable decision tasks, experts will outperform non-experts.	Decomposable	Expert > Non-experts	Experts outperform non-experts	Supported
<b>H2a:</b> When faced with non-decomposable decision tasks, both experts and non-experts perform better when relying on intuition instead of critical analysis.	Non-decomposable	Intuition > Critical analysis	No differences	Not supported
<b>H2b:</b> When faced with decomposable decision tasks, both experts and non-experts perform better when relying on critical analysis instead of intuition.	Decomposable	Critical analysis > Intuition	Critical analysis outperforms intuition	Supported
<b>H3a:</b> After introspection on their initial non-decomposable decision task, both experts and non-experts will perform worse compared to those who did not have a chance to introspect on their initial decision task.	Non-decomposable	Introspection < Intuition Introspection < Critical analysis	No differences Critical analysis outperforms introspection	Partially supported
<b>H3b:</b> After introspection on their initial decomposable decision task, both experts and non-experts will perform worse compared to those who did not have a chance to reflect on their initial decision task.	Decomposable	Introspection < Intuition Introspection < Critical analysis	No differences No differences	Not supported

## DISCUSSION

Our experiments confirm some effects hypothesized in previous research while going further by presenting new insights into decision-making regarding both decomposable and non-decomposable decision tasks. Confirming manipulated expertise effects reported in the literature (Åstebro & Elhedhli, 2006; Dane et al., 2012; Wübben & Wangenheim, 2008), our results show



that experts outperform non-experts in decomposable decision tasks. However, this advantage disappears when experts undertake a non-decomposable decision task.

By providing evidence that prior domain-specific knowledge and skills offer little help to individuals when faced with hard-to-deconstruct tasks (Armstrong, 1991; Hoch, 1988; Newell et al., 2009), this study identifies an important boundary condition to the advantage that marketing experts can offer to firms (Lynch & West, 2017; Novemsky & Kahneman, 2005; O'Connor et al., 2018). Specifically, we suggest that firms should rely on their senior marketing staff to make decisions that can be systematically broken down and addressed sequentially. Yet, they might also rely on junior staff or even novices, who have no or little expertise, to make just as good judgments when faced with tasks that require a holistic approach. Thus, our findings provide theoretical support for crowdsourcing marketing solutions by involving members of the general public as effective decision-makers (Cappa et al., 2019; Wilson et al., 2017), though, of course, organizational circumstances (e.g., organizational culture, resources available) will likely mitigate against employing such processes.

Furthermore, we show that in the context of decomposable decision tasks, both experts and non-experts perform significantly better when they rely on critical analysis compared to intuition. The structured nature of decomposable decision tasks requires decision-makers to implement procedural logic to solve the problem at hand sequentially, a process consistent with the analytical cognitive process (Delre et al., 2017).

As noted earlier, the negative effect of introspection on judgment is well documented in the literature (Nordgren & Dijksterhuis, 2009; Wilson & Schooler, 1991). Nevertheless, these findings provide more insight into the conditions in which this effect is present. Participants addressing non-decomposable decision tasks through critical analysis perform significantly

worse when they reflect on their initial decision. The common explanation in the literature is that individuals second-guess their initial decisions when they are encouraged to rethink or reflect, which leads to a reduction in decision performance. However, those addressing decomposable decision tasks, where the correct answer could be found through some cognitive effort, did not experience this negative effect on their performance, which seems in conflict with the findings of other studies that involved complex decisions (Tordesillas & Chaiken, 1999; Wilson & Schooler, 1991). Thus, our findings suggest there may be other yet to be investigated important boundary conditions to the negative impact of introspection on managerial decision-making that requires more research.

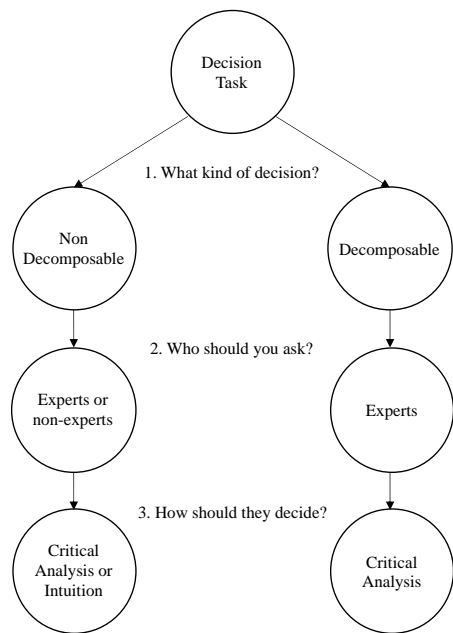
## **IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH**

### ***Research Implications***

This paper contributes to the managerial decision-making literature by investigating the advantage marketing experts have over non-experts in making decisions based on the decomposability of the task. This investigation leads to several important implications for researchers and managers. Specifically, our findings suggest that managers faced with major decisions that require extra input from marketing experts might benefit from formalizing whether those decisions are decomposable or not. If they are more decomposable, investing in hiring marketing experts might be a wise move as they can apply their specialized knowledge to the decomposable decision tasks. However, if the decision task is non-decomposable, we suggest a more general and less resource-intensive way of gathering decisions or opinions. This could range from engaging non-specialist colleagues all the way through to, depending on the context, involving members of the public via crowdsourcing platforms.

A caveat that needs to be considered when leveraging non-experts in managerial decision-making is that firms usually do not trust the wisdom of the “general” crowd and do not consider members of the public as legitimate decision-makers (Buckley, 2016), even when evidence suggests otherwise. Firms that do not have previous experience with crowdsourcing their decision-making might begin by engaging with selected crowds, which have a track record of accurate and robust judgments. Research shows that these selected crowds produce decision outcomes that outperform even the best experts, leading to an increased perception of crowdsourcing legitimacy (Mannes et al., 2014). Reflecting on the nature and context of the decision task can help prioritize when outside counsel should be sought to avoid wasting critical organizational resources.

**Figure 4** – A three-step decision model to determine what decisions should be taken by whom in which way



**Step 1) What kind of decision?**

**Non-decomposable decision** tasks are those that cannot be deconstructed, meaning that they cannot be broken down into smaller components. Examples include judging creativity, morality, and other decisions that require a holistic judgement that carries a substantial degree of subjectivity.

**Decomposable decision tasks** can be broken down into smaller components, which can be subsequently addressed by systematically applying rules and objective criteria. Examples are often quantitative in nature, (e.g., did marketing campaign A or B have a better ROI?)

**Step 2) Who should make the decision?**

**Experts** are those with significant experience and a history of successful decisions within a domain, that have in previous research been shown to outperform **non-experts** in accuracy, speed, and need to take in information.

That being said, our research highlights that experts only perform better for tasks that can be decomposed, cautioning practitioners to not always default to classically more expensive expert advice.

NOTE: While we find no differences in accuracy between **experts and non-experts** for **non-decomposable** tasks, future research still needs to investigate how **non-experts'** decisions might be accepted within companies.

**Step 3) How should they decide?**

As time and other resources are often scarce, managers often need to rely on their **intuition**, making decisions based on heuristics – fast and unconscious mental shortcuts. Our research highlights that **decomposable decisions** should be taken by **experts**, who rely on **critical analyses**. In contrast, **non-decomposable** decisions can be taken by **experts or non-experts** and rely on **critical analysis or intuition**.

Furthermore, we find that critical analysis leads to more effective decision-making when individuals face decomposable decision tasks. As well, there may be a significant negative effect when reflecting on original non-decomposable decision tasks undertaken through critical

analysis. This implies that decision-makers should try and avoid second-guessing when faced with subjective judgments. We represent these findings in a diagram (Figure 4) that articulates (1) the type of decision task under scrutiny, (2) the most appropriate decision-maker, and (3) what decision process might lead to better outcomes.

### ***Research Limitations and Future Research Directions***

As with most research, there are several limitations to note that can inspire future research on managerial decision-making. First, in this research, we focus exclusively on marketing expertise applied to a specific decision task setting (task-stimulus materials). This choice is largely driven by the complexity of recruiting an elite sample of participants who possess a substantial level of marketing expertise. While our research offers promising insights into important factors that shape managerial decision-making, future researchers might explore whether the conclusions we derive from the findings are applicable in other business and management contexts. Furthermore, researchers might also explore a wider range of decision tasks and identify the different types of business expertise involved in addressing those tasks successfully. Future research could also examine instances of expertise producing negative effects on decision performance. For example, overconfidence and advanced knowledge of business dynamics can make experts less willing to challenge assumptions or experiment with new and untested ideas (Finkelstein, 2019).

Second, while our findings identify two important factors (i.e., expertise and decision-making process) that explain differences in decision performance, we do not test further indirect mechanisms behind the identified main effects. For example, experts might be more effective at organizing, retrieving, and applying relevant information to new tasks (Dane et al., 2012;

Hutchinson et al., 2010). Such efficient information processing could explain why experts outperform non-experts in the context of decomposable decisions that require the assessment of multiple information sources and data points.

Third, in this research, we adopt a dichotomous view of task decomposability that is predominant in the managerial decision-making literature (c.f., Dane & Pratt, 2007; Huang & Pearce, 2015). While we examine specific decision tasks that can either be non-decomposable or decomposable, managers are often faced with higher-order, composite problem-solving processes that could involve a combination of non-decomposable and decomposable decision tasks. For example, repositioning strategies are highly complex and involve the simultaneous assessment of evolving target market needs, as well as the careful coordination of multiple marketing mix decisions. Thus, a more nuanced scrutiny of these complex, composite problem-solving processes could reveal critical insights into other important boundary conditions within managerial decision-making.

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**MARKETING EXPERTS ARE ALWAYS RIGHT...AREN'T THEY?**  
**DISENTANGLING THE EFFECTS OF EXPERTISE AND DECISION-MAKING**  
**PROCESSES**

**WEB-APPENDIX**

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## DESCRIPTION OF PARTICIPANTS' SAMPLE

We recruited 232 senior marketing managers (experts) through D&B (Dun & Bradstreet) paid database service, along with 229 members of the general public (non-experts) from the research crowdsourcing platform Cloud Research. Out of 232 managers who initially agreed to take part in the study, only 48% completed it, and 39% returned usable responses. We discarded illegible and incomplete responses, responses from participants who failed the manipulation or attention checks, or who did not have a unique IP address, bringing the final usable sample to 91 experts and 209 non-experts (see Table WA1).

**Table WA1** – Summary of sample demographics

	Experts	Non-Experts	Comparison F-statistic	Total
<b>Gender</b> (male)	69.7%	54.5%	p = .015	59.1%
<b>Age</b> (above 35)	88.0%	38.8%	p < .001	54.3%
<b>Education</b> (university)	67.1%	70.3%	p = .892	69.8%
<b>n</b>	91	209	-	300

The expert sample was made up of more men (69.7%) compared to the non-expert sample (54.5%). As expected, participants in the expert sample were older, reflecting their tenure in the marketing profession (Table WA1). Over 80 percent of participants in the expert sample reported being at a senior manager level, and nearly 60 percent of the non-expert sample reported being employed on a full-time basis (Table WA2). Participants in both samples were generally well-educated.

**Table WA2** – Participants in the expert sample by job title, business and gross sales

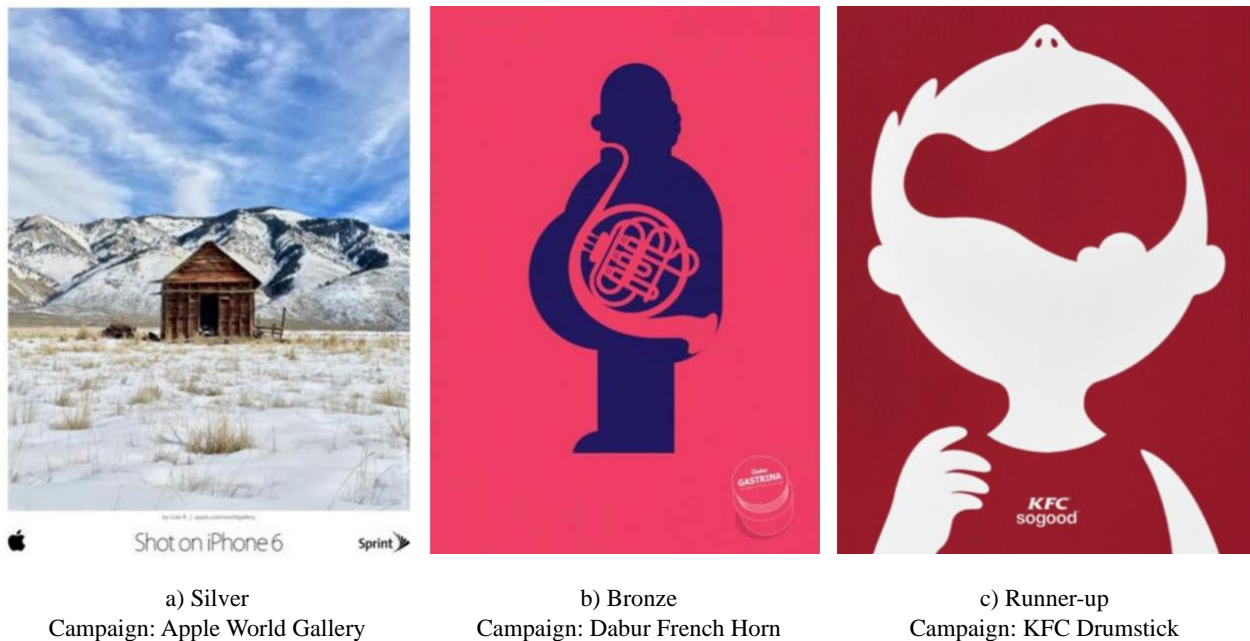
<b>Variables</b>	<b>Frequencies [N = 91] (%)</b>
Job title	
CEO/Managing Director	30 (33%)
New Business/Planning/Media Director	12 (13%)
Sales Director	10 (11%)
Marketing Director/Manager	9 (10%)
Creative Director	6 (7%)
No answer	24 (26%)
Business	
Advertising: Agency/Consulting/Design/Digital/Services	42 (46%)
Advertiser (client)	46 (51%)
No answer	3 (3%)
Gross Sales	
Mean	\$2.7m
Range	\$0.9 - \$843m

## DESCRIPTION OF EXPERIMENTAL STUDIES

### *Decision Tasks*

Participants completed two studies involving a non-decomposable (Study A) and decomposable (Study B) decision task, respectively. All participants undertook the two studies in random order and were then evaluated based on their ability to successfully choose the correct answer. The non-decomposable decision task consisted of judging the best advertisement from three options. These three options were chosen from silver (Figure WA1a), bronze (Figure WA1b), and runner-up (Figure WA1c) submissions to the 2015 Clio Print Awards. A gold submission was specifically not chosen to avoid making the best or correct choice too apparent to participants. While non-decomposable tasks are highly subjective, using ranked submissions to one of the leading international advertising awards enabled us to objectively identify a correct answer, thus ensuring the validity of the research design.

**Figure WA1** – Stimuli used in the non-decomposable decision task study (Study A)



The decomposable decision task involved participants reading a short advertising management scenario where participants had to choose the best medium (most cost-effective) between newspapers, direct mail, and email (Figure WA2). Participants were provided with simple medium statistics, including unit cost, number of prospects reached, and the response rate. These statistics were designed to enable quick calculation to evaluate the options and select the best medium. This task was chosen to reflect the highly strategic importance of media planning decisions. Given the proliferation of media channels, marketing managers are often tasked with making media mix decisions that have major financial and strategic implications for the firm (Lin et al., 2013).

**Figure WA2** – Stimuli used in the decomposable decision task study (Study B)

**Brief**

Elizabeth Gould from Aleksei Mobile, based in Moscow, is considering a greenfield market entry into Asia for this fledgling Russian telecom company.

*The Tools*

Gould decided that direct marketing offered the best route for any greenfield development. After several meetings with her marketing team she decided that to attract customers Aleksei would need to invest in a combination of (1) direct mail, (2) e-mail, or (3) newspapers. Direct mail and e-mail would be used to specifically target the best prospects and would need good lists and materials and web support. Newspapers offered a broader reach and brand awareness, but would lead to a lot of wastage.

*The Research*

AKL Research in Hong Kong carried out a four-month market test which produced 40,000 customers. Here are the basic results extrapolated from the market tests in Hong Kong:

Medium	Unit Cost (£)	# Prospects Reached ('000)	Response %
Direct Mail	4	250	5
E-Mails	1	2,000	1
Newspapers	3	5,000	2

We pretested these decision tasks by using 40 students at a large international university to ascertain the difficulty of the tasks. If the decision tasks were too easy, expertise and decision-making process adopted would likely not have an impact on decision performance. Pre-test participants selected the correct option 60% of the time in the non-decomposable decision task condition (ad contest) and 45% of the time in the decomposable decision task condition (medium choice). Thus, we felt that this was an acceptable level of variation for the experiment and proceeded to collect the expert and non-expert samples.

### ***Decision-making Process Manipulation***

In both decision-task studies, participants were randomly allocated one of three decision-making processes and directed to address the task through either critical analysis, intuition, or introspection. In the critical analysis condition, participants were asked to base their *“decision on a very careful analysis and ignore any first impressions or ‘gut instincts’ that might arise.”* This condition did not involve any time limitations to avoid pressuring participants to make a split decision. In the intuition condition, participants were directed to base their *“decision entirely on (their) intuition or first impression and avoid thinking very hard about what is the right answer”*. This direction was combined with a timer that counted down from 15 seconds for the non-decomposable task study and 30 seconds for the decomposable task study to allow for mental calculations. The use of timers in experiments is a common method to encourage intuitive decisions (Dane et al., 2012). The introspection condition involved participants making an intuitive decision at first with a timer as described above. Subsequently, participants were directed to go back and further analyze and confirm their choice without any time constraint.

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