

Revisiting Marketing Intuition in the Age of AI: Evidence from Digital Marketing Practice

Tareq N. Hashem

Full Professor of Marketing, Marketing Department, Faculty of Business, Applied Science Private University,
Amman, Jordan
Email: t_hashim@asu.edu.jo

Abstract

The current study contextualizes marketing intuition in digital marketing practice driven by AI, and critically examines how the AI-driven Analytics utilization of an organization influences its marketing intuition through the effect of big data analytics, predictive analytical capability and AI-supported decision-making. It utilized a quantitative method, with data collected from 410 digital marketing professionals in MENA region through the use of a structured questionnaire. Data were analyzed using descriptive and multiple regression analyses.

The results show that all variables related to AI have positively significant effects on marketing intuition, suggesting that data-driven market conditions do not reduce intuition but shape it by grounding it in a more disciplined analytical process. AI powered analytics will improve insights, predictive analytics will enhance anticipation, AI-supported decision-making refines judgment through continuing interaction with intelligent systems and big data expands the informational base for instinctive deduction.

The research adds to the extant literature by demonstrating that marketing intuition develops into a hybrid construct that combines human cognition with artificial intelligence (AI) learning. In addition, it provides heuristics for organizations that want to combine analytical tools with intuitive capabilities in order to improve the effectiveness of decision-making.

Keywords

AI-Driven Analytics, Big Data Analytics, Digital Marketing, Marketing Intuition, Predictive Analytics.

INTRODUCTION

Artificial intelligence (AI) and other digital technologies have rapidly changed marketing in energy and natural resources, especially where data is prevalent. As organizations turn towards analysing vast amounts of data through AI-driven systems which are trained to produce predictive insights, they organically need decision-making processes. These technologies have vastly improved marketing effectiveness through more accurate, efficient and real-time decision making [1], [2].

AI tools in the form of analytics and big data systems are also used to evaluate customer behavior, tailor marketing strategies, and increase customer interaction during digital marketing practice [3], [4]. This predictive analytics capability also allows organizations to predict future market trends and maximize strategic planning. Consequently, marketing decision-making has gradually moved from intuition-based methods to data-driven decisions.

For instance, marketing intuition has traditionally been regarded as the ability to make decisions under uncertainty based on experience, tacit knowledge and cognitive judgment [5]. Traditionally, intuition was regarded as a superpower in marketing that allowed managers to think quickly and creatively about complicated circumstances. Nevertheless, as we become more accustomed to adopting AI solutions, it would worth exploring the new place of intuitions in marketing environments.

AI-driven analytics continue to be the primary approach,

however intuition might be useful in ambiguous circumstances with inadequate information and changing dynamics [6], [7]. Instead of being dethroned, intuition is starting to be affected and improved by Artificial Intelligence technology resulting in a hybrid decision making process combining human knowledge from experience with data driven insights [8]. Thus, the current study reassesses the importance of marketing intuition in terms of its relevance in digital marketing practice considering the increasing automation by means of AI-driven technology. The research is focused on the evolution of intuition in 4 areas: AI-powered analytics, Predictive Analytics capacity, AI supported decision making and use of Big Data for a holistic understanding.

PROBLEM STATEMENT

Over-reliance on Data- With the impulse of AI tools in digital marketing, analytical-based approaches have played an important role in changing the decision-making process. These advancements improve accuracy and efficiency, but they lead to questions of how human intuition plays a role in marketing practice. Most of the currently published literature [2] is focused on how AI affects performance and decision-making outcomes rather than cognitive processes like marketing intuition.

Moreover, the literature has approached intuition statically, ignoring its metamorphosis within the digital and AI-enabled contexts [6], [7]. This restricts the potential of organizations to seamlessly combine human decisions with technology.

Hence, this study tackles the key deficit of empirical exploration of how AI-enabled technologies shape market intuition and its downstream effects on digital marketing practice.

Therefore, the research questions are

- How does AI-driven analytics influence marketing intuition?
- What is the impact of predictive analytics capability on marketing intuition?
- How does AI-supported decision-making affect marketing intuition?
- What role does big data analytics utilization play in shaping marketing intuition?

RESEARCH OBJECTIVES

This study aims to:

- Investigate the impact of AI-driven analytics on marketing intuition
- Analyse the effect of predictive analytics capability on marketing intuition
- Investigate the influence of AI-supported decision-making on marketing intuition
- Evaluate the role of big data analytics utilization in shaping marketing intuition

SIGNIFICANCE OF THE STUDY

This research adds to the theory and practice of marketing and artificial intelligence.

Theoretically, it builds on the literature by examining how various AI-linked variables come together as a mechanism to predict marketing intuition. Pointing to how AI technologies alter cognitive processes in marketing, previous studies examined intuition and analytics separately [6], [8].

The study provides practical implications for organizations to streamline decision-making processes in digital contexts. The results provide a way for managers to reconcile human judgment with analytic tools. Following the principles of evidence-based management, these findings illustrate how the intuitive approach of marketers is transformed to a data-evidence-based cognitive process [3].

LITERATURE REVIEW

AI is changing how organizations are analyzing their business and making strategic decisions with the ability to analyze large volumes of data and provide useful insights. The areas to do with analyzing past and present trends have expanded with the rapid advances in analytics powered by artificial intelligence (AI). It gives a business the capability to analyze large-scale data, spot trends and forecast insights that result in an increase in revenue growth and a competitive advantage [1]. The marketing evolution from expert-driven decision-making to data-driven has produced the requirement for speed, precision and scalability. AI improves customer experience and marketing productivity by assessing real-time explanation of customer behavior

signals through algorithms [9], [10]. Big data analysis assists organizations in consolidating their various and diverse data sources to obtain full information about their customers' preferences and demands [9] and enables data-driven activities aligned with strategic objectives. The related work suggests that the integration of customer relationship management (CRM) and knowledge management systems allows organizations to learn and improve their customer due diligence [11]. Structured knowledge exchange is important for marketing operations. We expect this to grow in larger firms with AI-powered insights. Similarly, decision support systems and marketing engineering foster creative marketing decisions using a mix of analytic tools and managerial judgment [12], [13].

One more dimension of AI-powered environments is predictive analytics ability. Predictive analytics is one of the approaches used to render decisions about what is going to happen in the future and supports proactive decision making by organizations using machine learning algorithms on historical data. This has the potential to decrease uncertainty and be useful for strategic planning, which is crucial in fast-paced and competitive digital markets [2]. In this context, AI-supported decision-making systems are recommendation or automation of routine decisions which is used to improving the efficiencies of organizational process or consistency [14].

Not to get too philosophical about it, marketing conjecture is almost useless against the data behemoths we face but yet remains a critical component of our decision-making tool kit. Intuition is historically characterized as a cognitive process based on experience and tacit knowledge enabling an actor to make quick decisions under uncertainty [5]. Research on marketing in particular highlighted intuition as a key to improved performance since situations with too many variables or ambiguous information may not be adequately captured with an analytical model, meaning that intuitive information could be used [7].

But new research shows that AI's rise doesn't mean intuition's death, but rather transformation in data-saturated contexts. More than ever marketers are making decisions using analytical data and intuition together, the decision hybrid of gut instinct meeting data-driven macro empirical proof [6], [8]. The authors characterize this sort of transformation as moving us from experience-based gut response to a new generation of "augmented intuition," where cognitive processing and the resulting action still occur but humans are assisted in decision making by AI tools that augment human intelligence rather than replace it.

The continuing evolution into digital marketing As technology becomes more and more sophisticated and complex, it requires a greater knowledge of how human brain works. These socio-digital platforms generate a flow of client data that are the basis of analytical processes that convert into spontaneous decision making [15]. Feedback from customers system and service quality offer systematic structures to assist better approaches of marketing [16]. Such changes reconfigure marketing intuition as a data-driven ecology.

This study attempts to fill the research gap in this area by examining the relationship between AI-powered analytics, predictive analytics, AI assisted decision-making and big data on marketing intuition in digital marketing. This helps to highlight AI and its importance in today's marketing toolset.

HYPOTHESES DEVELOPMENT

AI-driven Analytics is changing the way marketers create, analyze and explain data. AI-based analytics, compared to traditional data analysis, enables companies to discover complicated patterns and less obvious trends in large datasets, thus improving the volume and depth of information accessible for decision-making [1]. This movement has shifted from gut-feel guided techniques in marketing landscapes to attitudes which are supported by data.

But the more powerful analytics that come from AI don't supplant intuition: It is reformulated and a more systematic information basis is created, upon which intuitive choices can be made. Digital marketers have stopped depending on experience, or tacit knowledge, and started weaving insights from AI into their cognitive processes. Hence, resulting in "augmented intuition" which might have analytical corroborate (or contradict) intuitive conclusions [6], [8].

AI-based analytics also increase their trust in decision-making by mitigating uncertainty and providing real-time information to validate intuitive actions [2].

H:AI driven analytics has a significant effect on marketing intuition

Predictive analytics is an important next step in artificial intelligence (AI) technology as this helps firms to forecast future trends and customer behavior using machine learning algorithms over previous data. It also has the predictive side that transforms everything and turns marketing on its head from reactive to proactive decision-making.

From a cognitive point of view, predictive analytics extends our intuition by giving us expectations of others about the future. Predictive insights enable marketers to go from intuition approximated by experience to direction informed by probabilistic projections. This reduces vagueness by allowing intuition to work in a more structured and contextualized environment.

Further, predictive analytics is one of the crucial factors for quicker decision making as it helps marketers recognize patterns and forecast circumstances far better. This is consistent with the assumption that intuition is resilient when people are confronted with steady and genuine informational cues [7]. So predictive analytics cannot replace intuition but it can make the intuition more accurate and relevant in a dynamic setting.

H1: Predictive analytics capability has a significant impact on marketing intuition.

In many modern firms, AI-supported decision-making tools offer advice to decision-makers and in certain instances automate everyday judgments and support complicated strategic choices [17]. These systems are the means by which

information presents architects and decisionmakers with alternatives.

Moreover, AI-supported decision-making leverages learning processes to enable marketers to try out their gut feelings with AI recommendations. This improves your capacity to employ intuition and aligns the way human judgment is more closely tied to data. This suggests a transition away from what might be called independent intuition, to what might be called 'interactive intuition', where holistic intuitive understanding is the result of ongoing engagement with artificial intelligence systems [8].

Hence, the role of AI-enabled decision making is to convert intuitive decisions into a more flexible and analytics-based cognitive process.

H2:AI-supported decision-making has a significant impact on marketing intuition.

Organizations apply big data analysis to analyze and cross-reference huge quantities of data from multiple sources, which helps them gain an extensive knowledge of client behaviors and market dynamics [4], [18]. The sheer volume of data accessible has a profound impact on how marketers evaluate information and make decisions.

From a theoretical point of view this seems pretty intuitive to me. Intuition is very much dependent on what we perceive through exposure. In data-rich situations, big data analysis expands the informational world of marketers, and this influences the development of their intuitive judgments [6]. Marketers re-calibrate their cognition in response to the vast datasets they currently work with – data-driven insights become part of their intuitive thinking.

In addition, big data enhances the capacity to detect patterns, which is a fundamental step for intuitive decision-making. [19] This evolution of better comprehension of market behavior based upon the identification of trends and correlations in vast data sets further strengthens how their intuitive responses are established. This evolution moves intuition from a non-empirical experiential way of knowing to a cognitive capacity that is analytical and data-informed.

Big data analysis also supports personalization as well customer-centered tactics in which marketers have to decipher huge and complex data. This underscores the significance that data plays to influence intuition in digital marketing scenarios.

H3: Big data analytics utilization has a significant positive impact on marketing intuition.

METHODOLOGY

The present study applied a quantitative, cross-sectional research approach to explore the effect of AI-related analytical capabilities on marketing intuition in digital marketing practice.

A systematic questionnaire was provided to digital marketing experts in the MENA region. The study employed a convenient sampling because of the lack of a comprehensive sampling frame of digital marketing experts across the region.

Based on a convenience sampling method, 500 questionnaires were issued, and 410 valid questionnaires were retained for analysis, with a valid-response percentage of 82.0%. Questionnaire items were developed based on the literature utilized to operationalize predictive analytics capabilities, AI enabled decision making, big data analysis utilization and marketing intuition. Data quality was evaluated through screening of valid responses and internal-consistency reliability using Cronbach's alpha. The study records do not provide a distinct pilot-test statistic, factor-analytic validation or an independent content-validity index and hence should not be asserted without supporting data. Descriptive statistics detailed demographic variables while means and standard deviations summed construct answers. Multiple regression was used to evaluate the hypotheses.

RESULTS

The sample consisted of 55.6% males and 44.4% females, as such, the representativeness between genders was balanced improving the external validity and minimising demographic bias. The majority of the respondents (71.0%) had more than 15 years and (20.2%) between 11–15 years' experience, which indicates experienced and informed professionals. In terms of education, 65.6% are degree holders, 22.0% have postgraduate qualifications and a further 12.4% hold diplomas – a fairly well-informed sample indeed! As stated above, mean scores for AI-driven technology variables (greater than 3.00) indicate positive perspectives of the latter. The top four regarding the degree of use were predictive analytics (M=3.8829), marketing intuition (M=3.7836), AI-supported decision making (M=3.7205) and big data analytics (M=3.7063).

Table 1. Variables Results

	N	Minimum	Maximum	Mean	Std. Deviation
Predictive Analytics Capability	410	1.00	5.00	3.715	.634
AI-Supported Decision-Making	410	1.00	5.00	3.347	.713
Big Data Analytics Utilization	410	1.00	5.00	3.233	.804
Marketing Intuition	410	1.00	5.00	3.7836	.75416

Reliability

To check the reliability of the scale, Cronbach's Alpha was performed. The values were good because they were above the accepted 70% threshold [20].

The table below gives you a summary of the results:

Table 2. Cronbach Alpha test

Variable	α
Predictive Analytics Capability	0.83
AI-Supported Decision-Making	0.79
Big Data Analytics Utilization	0.858
Marketing Intuition	0.935

Hypotheses Testing:

H: AI driven analytics has a significant effect on marketing intuition.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702 ^a	.492	.489	.53925
a. Predictors: (Constant), Big Data Analytics Utilization, Predictive Analytics Capability, AI-Supported Decision-Making				

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	114.558	3	38.186	131.315	.000 ^b
	Residual	118.063	406	.291		
	Total	232.621	409			
a. Dependent Variable: Marketing Intuition						
b. Predictors: (Constant), Big Data Analytics Utilization, Predictive Analytics Capability, AI-Supported Decision-Making						

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.581	.176		3.295	.001
	Predictive Analytics Capability	.217	.054	.184	4.046	.000
	AI-Supported Decision-Making	.170	.064	.153	2.670	.008
	Big Data Analytics Utilization	.466	.056	.453	8.299	.000
a. Dependent Variable: Marketing Intuition						

Multiple regression was used to test the hypothesis, and a r value of 0.702 suggests a strong relationship between the independent and dependent variables. The independent variables are found to account for 49.2% of the variation in the dependent variable. Furthermore, the F value was statistically significant at the 0.05 level, indicating that AI driven analytics has a significant role in way of marketing intuition for better results in digital marketing practice.

Furthermore, the t-values for each variable are significant at the 0.05 level. In other words, the following was reached:

- Predictive analytics capability has a significant impact on marketing intuition.
- -AI-supported decision-making has a significant impact on marketing intuition.
- Big data analytics utilization has a significant positive impact on marketing intuition.

DISCUSSION

The empirical evidence highlights the predicted hypotheses and can be interpreted as confirmation of how marketing intuition shifts through AI technologies in practice in digital classes. The positive and significant effect of AI-driven analytics provides evidence that structured, data-oriented discovery enhances but not replaces intuitive judgement; this aligns with previous research showing how AI improves human decision quality in terms of decision aiding or about finding valuable patterns instead of mere correlations [1], [2]. Besides, to the third effect basic predictive analytics capability indirect proves this forward-looking anticipatory information outcomes enhances intuitive thinking by reducing the uncertainty in making a decisions consistent with [7]. Moreover, the impact of AI-enhanced decision-making indicates that the presence of intelligent systems embedded in organizational practices influences marketers' evaluation of alternatives and training their judgment over time [14]. At last, the relationship between usage of big data analytics on marketing intuition computation emphasize that the access to data was ascertained to be a catalyst for improving pattern recognition and changing deeper cognitive processing therefore this is aligned with the outcome of [19], [18].

Implications for theory and practice Overall these results further confirm theoretical notions that marketing intuition is not diminished but instead transfigured into a data-supported systematic cognitive ability in the context of AI Experience. This aligns with the theory of complementary analytics and intuition as data driven insights lead to less reliance on intuitive judgment-based decisions while allowing for more contextually sensitive intuition-based conclusions [6], [8].

CONCLUSION

The results reveal that predictive analytics capabilities, AI-enabled decision making and standard use are major positive indicators of marketing intuition in the practice of digital marketing. These results suggest that AI does not inherently replace intuition but rather redefines it by offering more information, forward-looking cues, and frequent opportunities to compare human judgment with analytical output. This study is the *raison d'être* of this shift in marketing intuition from an experience based method to a more analytical informed cognitive capability.

However, the findings should be considered in light of the methodological limitations of the present investigation. The cross-sectional approach is limited to statistical relationships

but not temporal causality; convenience sampling limits generalizability at the population level across the MENA area. Moreover, while the study reports internal-consistency reliability, it does not give additional factor-analytic validation. Future studies should include stronger measurement-validation processes and more representative sampling strategies.

RECOMMENDATIONS

Based on the findings of this study, we suggest several recommendations. Enhanced AI products with human-decision making instead of automated systems A mix of analytical tools and intuitive judgment will increase the efficiency and effectiveness—and likely the agility—of marketing.

Accordingly, firms should invest in training programs that develop the analytical and intuitive thinking of marketing professionals. This will guide employees in interpreting insights generated by the AI and using these insights meaningfully when making a decision. Also, along with this, marketers have been able to evolve to be more strategic and forward-looking in their efforts to enhance the predictive and big data infrastructure that provides marketing input.

Finally, you should serve as a witness to how the marketing intuition is transforming and it takes the next step under the influence of data driven decision making.

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