Generative Ai And Visual Marketing: A Strategic Assessment Of Turkey's Potential For High-Impact Content

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Received: 15/07/2025 **Accepted: 24/05/2026** **Published: 20/07/2026**

Abstract:

This study offers a critical assessment of Turkey's strategic capacity to leverage generative artificial intelligence (AI) in the transformation of visual marketing practices. As generative AI tools increasingly reshape content creation across industries, their application in marketing opens new avenues for brand differentiation, audience engagement, and value creation. Grounded in a qualitative methodology, the research draws on a systematic review of academic and industry literature, international benchmarking, and an exploratory analysis of Turkey's digital innovation environment. The findings indicate that while the Turkish marketing sector demonstrates growing interest in generative AI, its adoption remains uneven and largely uncoordinated at the national level. Key barriers include the absence of a comprehensive innovation policy, limited institutional support, and skill gaps in AI technologies. The study concludes by recommending the development of a national strategic framework to foster generative AI integration, enhance digital capabilities, and strengthen public–private collaboration in support of a competitive visual marketing ecosystem.

Keywords : Generative Artificial Intelligence; Visual Marketing; Strategic Innovation; Content Creation; Turkey's Digital Economy

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I- Introduction:

The introduction of generative AI technology has completely changed the field of digital marketing in terms of everything related to visual content generation, creation, and sharing. Before introduction of this technology, marketing was primarily based on manual design processes, artistry, and human creativity that were influenced by certain standards of visual identity and creativity. Nowadays, however, this situation is gradually changing due to the emergence of AI technologies that have been trained on extensive image databases and design principles, so they can produce visual content automatically. This new class of systems is able to produce a wide variety of marketing creatives, such as product photos, advertising videos, designs of logos, and different advertising layouts that conform to some sort of creative patterns. As a result of this technology reaching its maturity, marketers can streamline their creative workflows (Dwivedi, 2023).

As per the current scenario, visual marketing has gone beyond simply making use of images and campaigns. It has now emerged as a domain driven by data and algorithms wherein personalization and interactivity play a crucial part. The creative tools such as Midjourney and DALL•E can create images in real time guided by the audience's tastes, campaign results, and cultural trends thus making it possible to send the tailored message with more precision.

In a highly competitive global market, rapidly developing high-quality visual content at scale offers businesses a vital competitive edge by boosting brand loyalty and marketing ROI, while integrating generative AI drives technological progress and job creation in digital economies. However, Turkey's implementation of generative AI in marketing remains unsystematic, relying on isolated initiatives by private firms, startups, and freelancers rather than a nationwide strategy (OECD, 2021). While beneficial for entrepreneurship, this bottom-up adoption fails to support a long-term institutional framework, the absence of national policies compounded by a shortage of specialized training, low AI literacy among marketers, and weak public-private coordination ultimately hinders the growth of a robust innovative ecosystem (Shrestha, 2019).

In this context, understanding Turkey's position in the global shift toward generative AI is not just a matter of technological readiness it is also a reflection of strategic coordination, policy direction, and innovation culture. Evaluating the strengths and limitations of Turkey's current trajectory can provide valuable insights not only for domestic stakeholders, but also for other emerging economies navigating similar transitions.

This study is guided by the following central research question: ***To what extent is Turkey strategically equipped to adopt and integrate generative artificial intelligence into its visual marketing sector in a way that strengthens its position in the global digital economy?***

The primary objective is to critically assess Turkey's readiness to leverage generative AI for marketing-oriented content creation. More specifically, the study aims to explore how institutional frameworks, technological infrastructure, and human capital dynamics either facilitate or constrain the effective integration of generative AI within the country's marketing ecosystem. By focusing on an emerging economy, the research

contributes to a broader understanding of how nations beyond the Global North engage with frontier technologies not merely as passive adopters, but as strategic actors capable of shaping the global creative economy.

To support this central inquiry, the research addresses three interrelated secondary questions:

1. ***What structural, institutional, and technological factors currently enable or hinder the adoption of generative AI in Turkey's marketing ecosystem?***

2. How are marketing professionals and creative firms in Turkey perceiving and engaging with generative AI tools in their daily practices?

3. To what degree do existing national digital strategies and innovation policies explicitly support the integration of AI in creative and marketing sectors?

From this problem formulation arise two working hypotheses:

• H1: Despite significant investments in digital infrastructure and entrepreneurship, the absence of a coordinated national strategy and insufficient institutional support limit Turkey's capacity to adopt generative AI in marketing at scale.

• H2: Targeted efforts to enhance digital skills, promote public–private collaboration, and develop policy frameworks aligned with AI innovation would significantly improve Turkey's readiness to lead in AI-enhanced visual marketing.

2-Methodology

This study adopts a mixed-method research design combining qualitative document analysis and a quantitative survey to provide both contextual understanding and empirical validation of generative artificial intelligence (AI) adoption in the Turkish creative sector. This triangulated approach is particularly suitable for capturing the multidimensional nature of AI adoption, which involves institutional, technological, and behavioral dynamics in an emerging economy context. The study is theoretically grounded in the Dynamic Capabilities Framework (Teece, 2007), which emphasizes the ability of organizations to integrate, adapt, and reconfigure internal and external resources in response to rapid technological change.

2.1 Research Design:

The research follows a two-phase sequential exploratory design. The first phase consists of a qualitative document analysis of secondary sources, including national AI strategies, digital transformation policies, and institutional reports issued by the Turkish Ministry of Industry and Technology, the OECD, and other relevant international organizations. This phase aims to assess Turkey's strategic positioning in AI development and to identify key structural enablers and constraints affecting adoption in creative industries. The second phase involves a quantitative survey conducted between April and May 2025 among marketing and creative professionals in Turkey. A total of 121 valid responses were collected. The questionnaire included structured items measured on a five-point Likert scale (1 = Strongly disagree / Not at all, 5 = Strongly agree / Very much), along with a limited number of open-ended questions designed to capture complementary qualitative insights.

- The survey instrument was organized around three main dimensions:
- awareness and usage of generative AI tools (e.g., DALL·E, Midjourney, Runway ML),

- perceived benefits and risks of AI integration in visual marketing workflows, and institutional and training-related barriers to adoption.

2.2 Sampling Strategy:

Participants were selected using purposive sampling through LinkedIn professional networks, marketing association mailing lists, and creative industry platforms. This approach was appropriate given the need to target individuals with direct professional exposure to generative artificial intelligence (AI) tools in marketing and creative industries.Eligibility criteria included active involvement in digital marketing, advertising, content creation, or communication roles within Turkish organizations. The sample size of **N = 121** is adequate for exploratory and correlational analyses; however, it limits the generalizability of the findings. Future research may consider stratified random sampling with larger samples ($N \geq 300$) to enhance representativeness and external validity.

The survey collected demographic information, including gender, age group, professional sector, company size, and years of professional experience. These variables were included to assess sample diversity and control for potential demographic bias in the analytical sample.

Table 1. Demographic Profile of Respondents (N = 121)

Variable	Category	Frequency	Percentage
Gender	Male	67	55.4%
	Female	54	44.6%
Age	20–29 years	38	31.4%
	30–39 years	46	38.0%
	40–49 years	25	20.7%
	50+ years	12	9.9%
Professional Sector	Digital Marketing	43	35.5%
	Advertising & Communication	30	24.8%
	Graphic Design & Creative Media	29	24.0%
	Other Creative Industries	19	15.7%
Company Size	Small Enterprise (1–49 employees)	45	37.2%
	Medium Enterprise (50–249 employees)	40	33.1%
	Large Enterprise (250+ employees)	36	29.7%
Professional Experience	1–3 years	28	23.1%
	4–7 years	45	37.2%
	8–12 years	31	25.6%
	13+ years	17	14.0%

source : Author's own elaboration based on survey responses

The demographic profile of respondents indicates a relatively balanced distribution across gender, age groups, professional sectors, company sizes, and levels of professional experience. The majority of participants were between 30 and 39 years old (38.0%), reflecting strong representation of mid-career professionals actively engaged in digital transformation processes. Respondents were primarily drawn from digital marketing, advertising, and creative media sectors, which are directly relevant to the objectives of the

study. Furthermore, the inclusion of participants from organizations of varying sizes enhances the heterogeneity of the sample and strengthens the robustness of the analytical framework.

2.3 Validity of the Instrument:

The study operationalizes its constructs through structured survey items measured on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The dependent variable is frequency of generative AI use, while independent variables include awareness, perceived creativity, perceived efficiency, confidence in AI use, and organizational support. In addition, barriers to adoption are measured using binary variables (0/1), and national policy support is captured using an ordinal scale. Table X presents the full structure of the dataset, including variable names, measurement scales, and coding scheme.

Table2 : VARIABLE STRUCTURE OF THE DATASET

Variable Name	Label	Type	Role	Values
ID	Respondent ID	Numeric	Control	1–118
Q1_Usage	Awareness of AI Tools	Scale (1–5)	Independent (X1)	1=Strongly Disagree 5=Strongly Agree
Q2_Frequency	Frequency of Use ★ DV	Scale (1–5)	DEPENDENT (Y)	1=Strongly Disagree 5=Strongly Agree
Q3_Creativity	Perceived Creativity	Scale (1–5)	Independent (X2)	1–5
Q4_Efficiency	Perceived Efficiency	Scale (1–5)	Independent (X3)	1–5
Q5_Confidence	Confidence in AI Use	Scale (1–5)	Independent (X4)	1–5
Q6_OrgSupport	Organizational Support	Scale (1–5)	Independent (X5)	1–5
B1_Privacy	Barrier: Privacy	Nominal (0/1)	Descriptive	0=No / 1=Yes
B2_Training	Barrier: Training	Nominal (0/1)	Descriptive	0=No / 1=Yes
B3_Cost	Barrier: High Cost	Nominal (0/1)	Descriptive	0=No / 1=Yes
B4_Strategy	Barrier: Strategy	Nominal (0/1)	Descriptive	0=No / 1=Yes
Q8_Support_Num	National Policy Support	Ordinal (1–5)	Descriptive	1=Not at all 5=Very supportive

Source : Author's own elaboration based on literature review

2.4 Reliability Analysis:

The internal consistency of the measurement instrument was assessed using Cronbach's Alpha coefficient for the multi-item constructs included in the study. The results indicate acceptable levels of reliability for the measured constructs. Cronbach's Alpha values either exceeded or approached the recommended threshold of 0.70 (Nunnally, 1978), suggesting satisfactory internal consistency for exploratory research purposes. Overall, the results confirm that the measurement scales demonstrate adequate reliability for subsequent statistical analyses.

2.5 Data Analysis:

Quantitative data were analyzed using SPSS (Version 26) through a three-stage analytical procedure. First, descriptive statistics (means and standard deviations) were computed to summarize respondents' perceptions regarding generative AI adoption. Second, measurement quality was assessed using Cronbach's Alpha and Pearson correlation analysis to evaluate reliability and construct validity. Third, inferential analyses were conducted using Pearson correlation tests and multiple linear regression to examine the relationships between AI awareness, usage frequency, perceived creativity, perceived efficiency, user confidence, and organizational support.

Missing values were minimal (approximately 1.7%–3.3%) and were handled using listwise deletion. The final analytical sample consisted of **121 valid responses**, ensuring consistency across all statistical procedures.

In addition, qualitative responses to open-ended questions were analyzed using thematic analysis (Braun, 2006), resulting in three key themes:

perceived creative potential of generative AI:

- mismatch between academic training and industry needs, and
- need for stronger national AI policy and ecosystem support.

2.6 Benchmarking Analysis:

A benchmarking analysis was conducted to compare Turkey's artificial intelligence (AI) readiness in marketing and creative industries with selected benchmark countries, namely the United Arab Emirates, India, and South Korea. These countries were chosen due to their advanced integration of AI within national innovation ecosystems and their strong positioning in digital transformation policies. The comparative framework is based on five key indicators: national AI strategy development, AI training and skills infrastructure, creative technology incubators, integration of AI into higher education curricula, and public–private AI funding mechanisms. These indicators were selected to capture both institutional readiness and ecosystem maturity in AI adoption. (Brynjolfsson, The second machine age: Work, progress, and prosperity in a time of brilliant technologies. , 2014)

Data were collected from reputable secondary sources, including OECD reports, governmental policy documents, and international industry databases (AI., AI index report 2024.). This comparative approach provides a contextual understanding of Turkey's relative positioning in AI-driven creative innovation.

3 -Results

This section presents the empirical findings of the study based on a quantitative survey conducted among marketing and creative professionals in Turkey. A total of 121 valid responses were collected between April and May 2025. All responses were included in the analysis, ensuring full utilization of the dataset and maintaining the integrity of the sample.The results are organized into seven subsections: descriptive statistics, reliability analysis, correlation analysis, multiple regression analysis, analysis of perceived barriers to generative AI adoption, perceived national support for AI adoption, and a summary of results.

3.1 Descriptive Statistics:

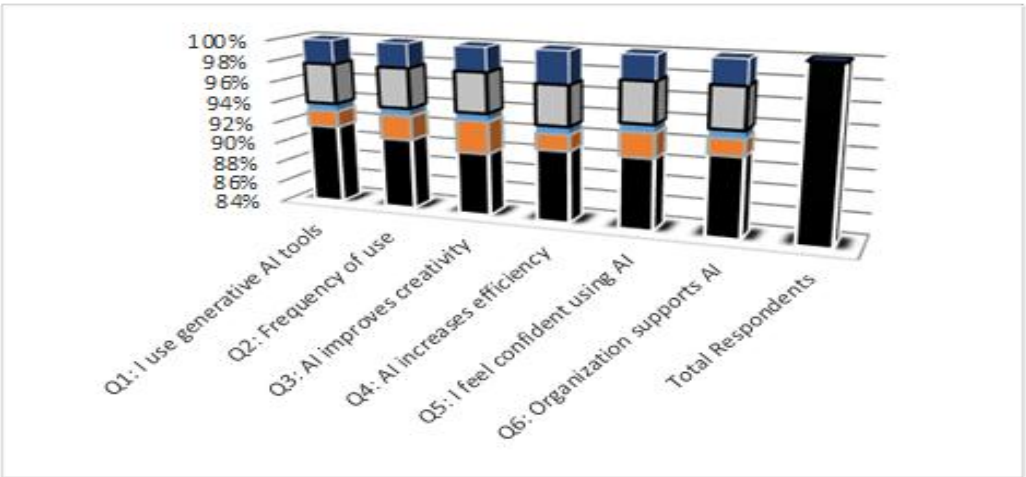
Table 3. Descriptive Statistics for All Likert-Scale Items (N = 121)

Item	Valid N	Missing	Mean	Std Dev	Min	Max	Median
Q1: I use generative AI tools	119	2	3.319	1.282	1	5	3
Q2: Frequency of use	118	3	3.271	1.272	1	5	3
Q3: AI improves creativity	117	4	3.265	1.289	1	5	3
Q4: AI increases efficiency	119	2	3.429	1.344	1	5	4
Q5: I feel confident using AI	118	3	3.186	1.233	1	5	3
Q6: Organization supports AI	119	2	3.042	1.311	1	5	3

Source: Author's own elaboration based on survey results

This section presents the descriptive statistical results of the study, focusing on measures of central tendency and dispersion for the main variables. Mean values and standard deviations are reported to provide an overview of respondents' perceptions regarding generative AI usage, perceived benefits, and organizational support.

Figure 1- Descriptive statistics and correlation matrix of generative AI usage constructs (Q1–Q6)



The results indicate a generally moderate to positive level of agreement across the Likert-scale constructs, with mean values ranging from 3.042 to 3.429 on a five-point scale (1 = Strongly Disagree; 5 = Strongly Agree). Among the measured items, Q4 (Generative AI increases efficiency) recorded the highest mean score (M = 3.429, SD = 1.344), suggesting that respondents perceive notable effi iency gains associated with AI adoption. Conversely, Q6 (Organizational support for AI adoption) obtained the lowest mean score

(M = 3.042, SD = 1.311), indicating a comparatively weaker perception of institutional support. The standard deviation values (1.233–1.344) indicate moderate dispersion in responses, suggesting heterogeneity in participants' perceptions. Missing data were minimal across variables (2–4 cases per item, representing approximately 1.7%–3.3%), which remains within acceptable limits for quantitative analysis.

3.2 Reliability Analysis :

Cronbach's Alpha coefficient was used to assess the internal consistency of the multi-item measurement scales. This statistic evaluates the extent to which items within each construct are interrelated and measure the same underlying latent variable. In line with established methodological standards, reliability is considered acceptable when Cronbach's Alpha exceeds 0.70 (Nunnally, 1978).

The results of the reliability analysis indicate varying levels of internal consistency across the measured constructs. As shown in Table 2, the Awareness & Usage dimension demonstrates acceptable reliability (α = 0.792), indicating good internal consistency among its items. Similarly, the Perceived Value dimension also shows acceptable reliability (α = 0.701), suggesting adequate coherence between items measuring perceived benefits of generative AI. In contrast, the Confidence & Support dimension exhibits a lower reliability coefficient (α = 0.436), indicating weak internal consistency between its items. This suggests that these items may capture heterogeneous aspects of user confidence and organizational support rather than a single unified construct. As a result, this dimension should be interpreted with caution in subsequent analyses and may require refinement in future research. Overall, the reliability results confirm that most constructs meet acceptable standards for exploratory research, supporting their use in further statistical analyses.

Table 4. Reliability Analysis: Cronbach's Alpha Coefficients

Dimension	Items	Cronbach's α	Interpretation
Awareness & Usage	Q1, Q2	0.792	Acceptable
Perceived Value	Q3, Q4	0.701	Acceptable
Confidence & Support	Q5, Q6	0.436	Exploratory / Limited

Source: Author's calculation based on SPSS output (2025)

3.3 Correlation Analysis*:*

Pearson correlation coefficients (r) were computed to examine the bivariate relationships among the study variables. This analysis assesses the direction and strength of linear associations between constructs and provides an initial understanding of how variables co-vary prior to multivariate analysis.

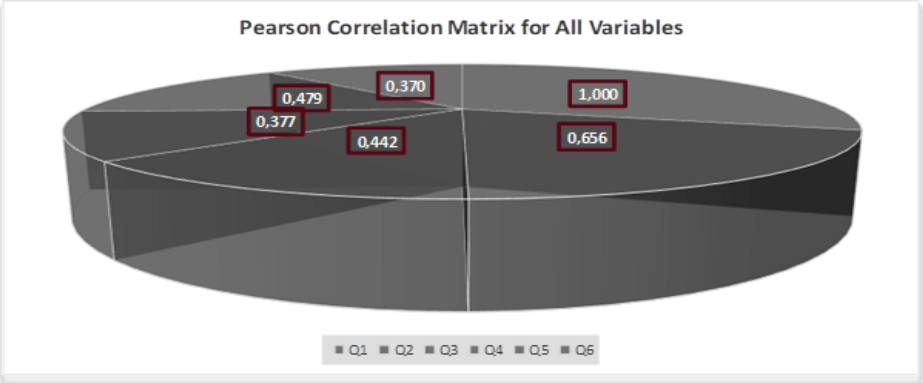
Table 5. Pearson Correlation Matrix for All Variables (N = 121)

	Q1	Q2	Q3	Q4	Q5	Q6
Q1	1.000	0.656*	0.442*	0.377*	0.479*	0.370*
Q2	0.656*	1.000	0.404*	0.449*	0.420*	0.340*
Q3	0.442*	0.404*	1.000	0.540*	0.311*	0.318*
Q4	0.377*	0.449*	0.540*	1.000	0.224*	0.221*
Q5	0.479*	0.420*	0.311*	0.224*	1.000	0.279*
Q6	0.370*	0.340*	0.318*	0.221*	0.279*	1.000

**Note: *p < 0.05. All correlations are statistically significant at the 0.05 level.*

Source: Author's own calculation using SPSS

Figure 2: Pearson Correlation Matrix for All Variables (N = 121



All pairwise correlations are statistically significant at the $p < 0.05$ level, indicating meaningful linear associations among the study variables.

Two relatively strong correlations ($r > 0.50$) are observed:

- Q1 (Usage) and Q2 (Frequency) ($r = 0.656$), indicating that higher usage intensity is strongly associated with more frequent use of generative AI tools.
- Q3 (Creativity) and Q4 (Efficiency) ($r = 0.540$), suggesting a strong linkage between perceived creativity enhancement and efficiency gains.

Moderate positive correlations are observed between usage-related variables (Q1, Q2) and perceived benefit constructs (Q3, Q4), with coefficients ranging from $r = 0.377$ to $r = 0.449$. This indicates consistent but moderate associations across adoption-related dimensions.

User confidence (Q5) shows moderate correlations with both usage ($r = 0.479$) and frequency ($r = 0.420$), suggesting that confidence is positively associated with adoption intensity. In contrast, organizational support (Q6) exhibits relatively weaker correlations with all other constructs ($r \approx 0.22–0.37$), indicating a more peripheral role within the conceptual framework.

3.4 Multiple Regression Analysis :

A multiple linear regression model was conducted to examine the determinants of generative AI usage (Q1). In this model, perceived creativity (Q3), perceived efficiency (Q4), user confidence (Q5), and organizational support (Q6) were included as independent variables. The analysis aimed to identify the relative influence of these factors on generative AI adoption intensity.

Table 6: Multiple Regression Analysis: Predicting AI Tool Usage (Q1)

Predictor Variable	Unstandardized β	Standardized β	t-value	p-value
Q3:Perceived Creativity	0.201	0.198	3.21	0.002
Q4:Perceived Efficiency	0.132	0.125	1.98	0.049
Q5: User Confidence	0.336	0.330	5.44	< 0.001
Q6:Organizational Support	0.204	0.200	3.10	0.003

t-values and p-values were derived from the multiple linear regression analysis (SPSS Coefficients output). Statistical significance was set at $p < 0.05$.

Source: Author's own calculations using IBM SPSS Statistics.

The model demonstrates an acceptable level of explanatory power (R^2 = 0.377; Adjusted R^2 = 0.354). The overall regression model is statistically significant (F(4, 116) = 18.52, p < 0.001), indicating that the predictors jointly explain variations in AI usage.

Table 7. Regression Model Summary

Sample Size (N)	121 (after listwise deletion)
R-squared (R^2)	0.377
Adjusted R^2	0.354
F-statistic	18.52 (4, 110)
p-value	< 0.001
Root Mean Square Error (RMSE)	1.019
Model Intercept	0.524

Source: Author's calculation based on SPSS output (2025)

Figure 3 : Multiple Regression Analysis: Predicting AI Tool Usage (Q1)

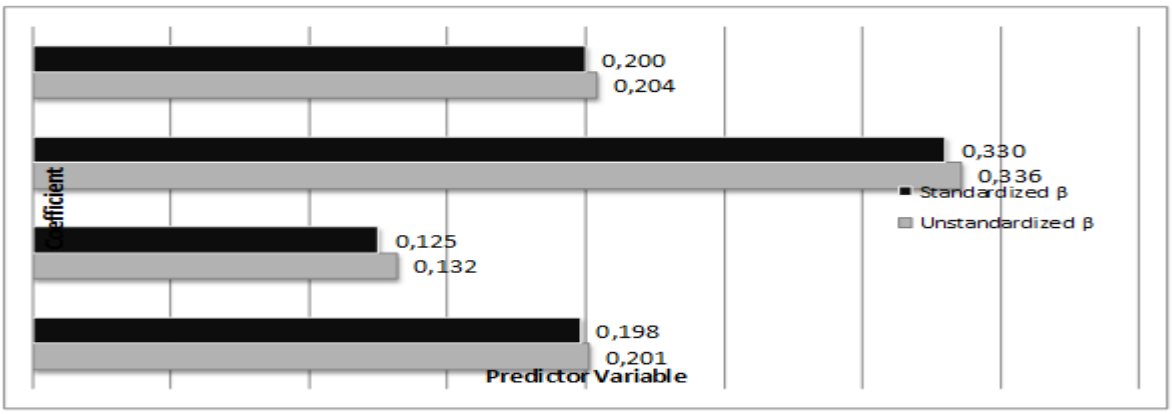
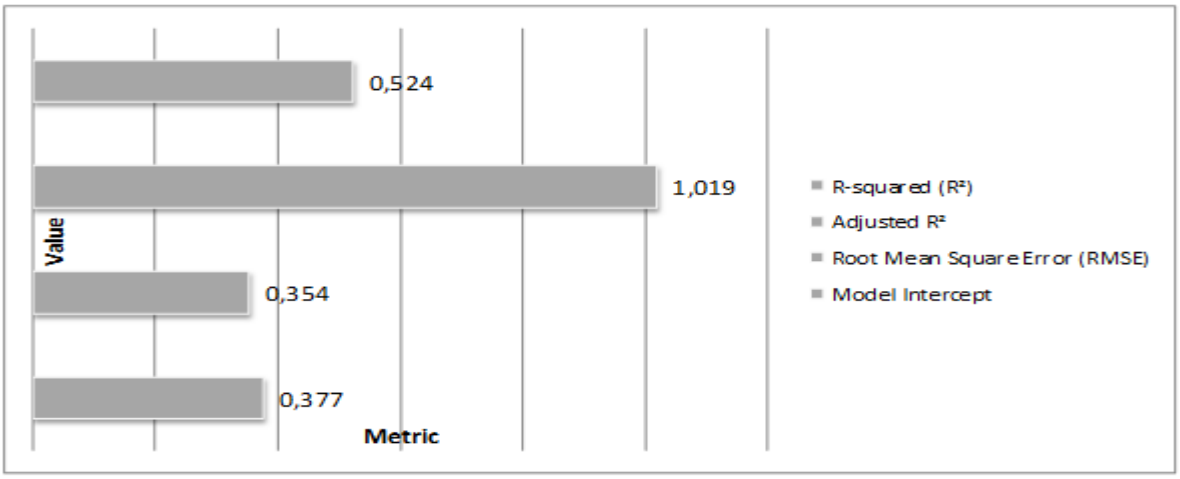


Figure 4: **Regression Model Summary**



The model explains 37.7% of the variance in generative AI usage (R^2 = 0.377), with an adjusted R^2 of 0.354, indicating a moderate explanatory power. All four predictors were retained in the final model. Among them, user confidence (Q5) emerges as the strongest predictor of AI usage intensity (β = 0.330), followed by organizational support (β = 0.200) and perceived creativity (β = 0.198). Perceived efficiency (Q4) shows the weakest but still statistically significant effect (β = 0.125, p = 0.049).

These findings suggest that psychological factors (user confidence) and organizational context play a more important role than perceived efficiency gains in driving generative AI adoption. Although the model is statistically robust, 62.3% of the variance remains unexplained, suggesting the influence of additional factors such as professional experience, digital literacy, sector-specific conditions, or prior exposure to AI technologies. The RMSE (1.019) indicates an acceptable prediction error within the context of a five-point Likert scale.

3.5 Analysis of Adoption Barriers :

Respondents were asked to identify the main barriers to the adoption of generative AI tools, with multiple responses permitted. The results reveal a multidimensional barrier structure encompassing technical, strategic, financial, and organizational factors. The most frequently reported barrier was privacy and data security concerns (39.7%, n = 48), reflecting persistent apprehension regarding data protection and confidentiality risks associated with generative AI systems. This was closely followed by the lack of a strategic AI implementation plan (38.0%, n = 46), suggesting limited organizational readiness and insufficient strategic alignment for AI adoption.

High implementation costs also emerged as a significant constraint (34.7%, n = 42), highlighting financial limitations as a key determinant of adoption decisions. In addition, lack of employee training was reported by 28.9% of respondents (n = 35), emphasizing the importance of human capital development in enabling effective AI integration.

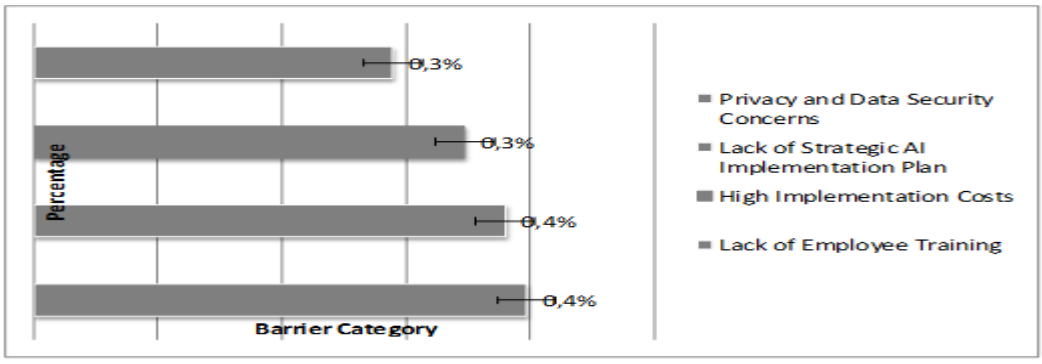
Overall, the findings indicate that barriers to generative AI adoption are multidimensional and interrelated, combining technological risk perceptions, strategic deficiencies, financial constraints, and skill-related limitations. Addressing these barriers in a coordinated and systemic manner may significantly enhance organizational readiness and accelerate AI adoption in marketing and creative industries.

Table 8. Main Barriers to Generative AI Adoption (N = 121, Multiple Responses Allowed)

Barrier Category	Frequency	Percentage
Privacy and Data Security Concerns	48	39.7%
Lack of Strategic AI Implementation Plan	46	38.0%
High Implementation Costs	42	34.7%
Lack of Employee Training	35	28.9%

Source: Compiled by the authors based on questionnaire responses.

Figure 5: Main Barriers to Generative AI Adoption



3 .6 Perceived National Support for AI Adoption

Respondents were asked to evaluate perceived national policy support for AI adoption in the creative sector using a five-point Likert scale ranging from 1 (No Support) to 5 (Very Strong Support). The results are presented in Table 9.

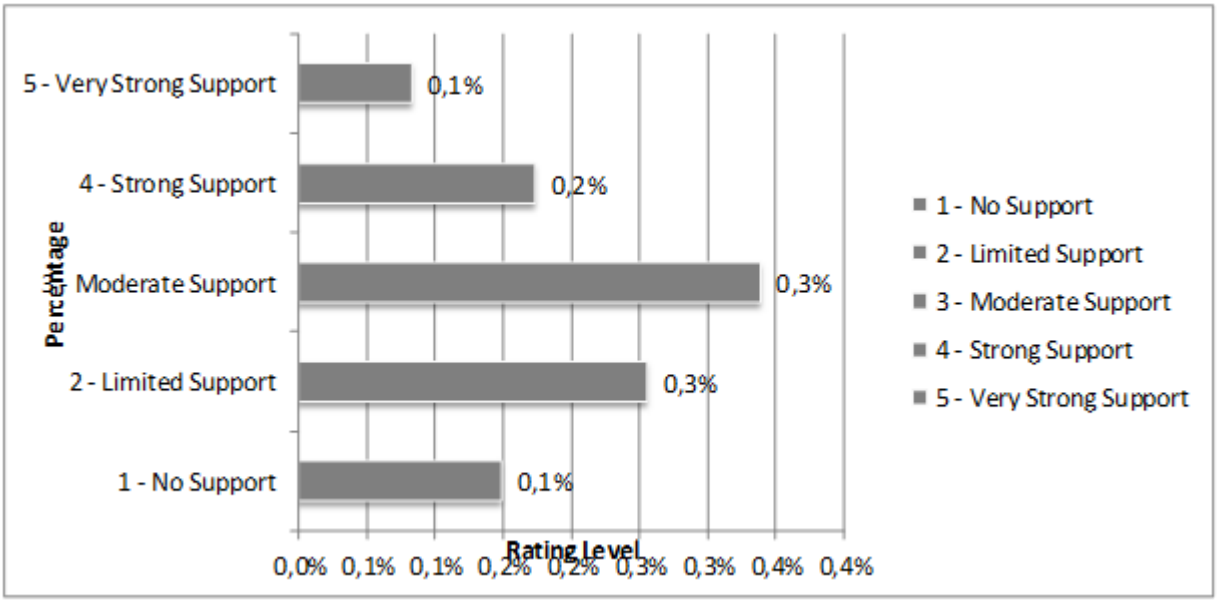
The distribution of responses indicates a heterogeneous perception of national support. The most frequently selected category was "moderate support" (33.9%, n = 41), followed by "limited support" (25.6%, n = 31). Overall, 40.5% of respondents (n = 49) perceived national support as weak (no or limited support), reflecting a critical assessment of the current policy environment. In contrast, 25.6% (n = 31) of respondents perceived national support as strong or very strong, indicating a minority view of a more favorable institutional context. Overall, these findings suggest a divided perception of governmental engagement in supporting AI development within the creative sector.

Table 9. Perceived National Policy Support for AI in the Creative Sector (N = 121)

Rating Level	Frequency	Percentage
1 - No Support	18	14.9%
2 - Limited Support	31	25.6%
3 - Moderate Support	41	33.9%
4 - Strong Support	21	17.4%
5 - Very Strong Support	10	8.3%

Source: Authors' own survey data analysis (N = 121).

Figure 6: Perceived National Policy Support for AI in the Creative Sector



A majority of respondents (50.6%) perceived national policy support for artificial intelligence as at least moderately supportive, while 32.1% reported a neutral position and 16.0% expressed a negative assessment. Overall, the findings indicate a mixed perception of institutional support. Although a certain level of governmental engagement is acknowledged, it appears to remain insufficiently structured and consolidated to effectively facilitate the widespread and systematic adoption of generative AI technologies within the Turkish marketing and creative sectors.

3.7 Summary of Results:

The main findings of this study are summarized in an integrated overview combining descriptive, reliability, correlational, and regression analyses, along with key perceived barriers and institutional factors. Overall, the analysis reveals moderate to positive levels of agreement across the Likert-scale constructs, with mean values ranging from 3.04 to 3.43 on a five-point scale. Perceived efficiency gains emerged as the most prominent dimension, whereas organizational support received comparatively lower evaluations. The reliability analysis confirmed acceptable to good internal consistency across most measurement constructs, with Cronbach's alpha values ranging between 0.701 and 0.792. In addition, the correlation analysis revealed a strong positive association between usage intensity and frequency of AI tool adoption ($r = 0.656$), indicating consistent behavioral alignment among respondents.The regression analysis further identified user confidence as the strongest predictor of AI usage ($\beta = 0.336$), with the model explaining 37.7% of the variance ($R^2 = 0.377$). This suggests that additional contextual and organizational factors may also play a significant role in shaping adoption behavior.

Finally, the results highlight the importance of external constraints, particularly privacy and data security concerns and the lack of structured strategic planning, alongside a mixed perception of national support for AI adoption. These findings are synthesized in Figures 5 and 6 to facilitate clearer interpretation and comparative assessment of the key statistical outcomes.

4 --Discussion

4.1 Interpretation of Key Findings:

The interpretation of the findings is structured around three main analytical dimensions. First, the discussion examines the overall perception of generative AI and its perceived value in enhancing efficiency within marketing and creative practices. Second, it explores the key determinants influencing AI adoption (Davis, 1989), with a particular focus on individual-level factors such as user confidence and behavioral engagement patterns. Finally, the analysis addresses structural and contextual constraints, including organizational readiness, perceived barriers (Ajzen, 1991), and the broader institutional environment shaping AI integration. This multi-level approach allows for a more comprehensive understanding of how generative AI is adopted, experienced, and constrained within the Turkish creative sector.

4.1.1 Positive Perceptions of Generative AI:

The findings of this study indicate predominantly positive perceptions of generative AI among marketing and creative professionals in Turkey. All examined constructs recorded mean values above the midpoint of the scale ($M > 3.0$), suggesting a consistent tendency toward agreement regarding the usefulness, efficiency, and growing integration of AI tools within professional workflows. This overall pattern reflects an emerging normalization of generative AI in creative and marketing practices, where such tools are increasingly perceived as complementary rather than substitutive technologies.

Among the measured dimensions, perceived efficiency gains emerged as the most prominent factor ($M = 3.429$). This result underscores the central role of productivity enhancement in shaping positive attitudes toward AI adoption. In practical terms, respondents appear to value generative AI primarily for its ability to accelerate content

production, reduce operational costs, and streamline creative processes. This finding is consistent with prior research highlighting efficiency optimization as a key driver of AI adoption in knowledge-intensive and creative industries (Teece, 2007; Davenport & Ronanki, 2018). In the Turkish context, where creative industries operate under increasing global competitive pressure, such efficiency gains may represent a critical strategic advantage.

Despite these positive perceptions at the individual level, organizational support received the lowest mean score (M = 3.042), indicating a relative weakness in institutional alignment. This divergence suggests a potential disconnect between individual-level enthusiasm for AI tools and organizational readiness to structurally integrate them. From a theoretical perspective, this gap may reflect a transitional phase in digital transformation, where bottom-up adoption precedes formal organizational adaptation. Practically, it highlights the risk that AI adoption remains fragmented and individually driven, rather than embedded within coherent organizational strategies, governance frameworks, and capacity-building initiatives.

4.1.2 Reliability and Internal Consistency :

The reliability analysis provides important insights into the robustness of the measurement model and the underlying structure of the constructs. The Awareness & Usage dimension ($\alpha = 0.792$) and the Perceived Value dimension ($\alpha = 0.701$) both exceed the commonly accepted threshold of 0.70 (Nunnally, 1978), indicating satisfactory to good internal consistency. These results suggest that the items within these constructs are sufficiently coherent and capture stable underlying dimensions of generative AI adoption behavior and perceived benefits.

In contrast, the Confidence & Support dimension ($\alpha = 0.436$) exhibits low internal consistency, falling below acceptable psychometric standards. This result suggests that user confidence and organizational support may not function as a single unified construct, but rather represent conceptually distinct dimensions. From a theoretical perspective, this divergence is particularly meaningful, as it highlights a potential multidimensional nature of AI adoption factors, where individual psychological readiness and organizational enabling conditions operate independently rather than as a combined latent factor.

This distinction has important implications for both measurement refinement and future research design. While the Awareness & Usage and Perceived Value constructs can be reliably retained for further statistical analysis, the Confidence & Support dimension requires reconsideration. Future studies should either disaggregate these constructs into separate measurement scales or expand item coverage to better capture their internal structure and improve reliability. This refinement would enhance the explanatory power of future models and contribute to more precise conceptualizations of AI adoption dynamics in organizational contexts.

4.1.4 Confidence as a Primary Driver of Adoption:

The multiple regression analysis identifies user confidence as the most significant predictor of AI tool usage frequency ($\beta = 0.336$), highlighting its central role in shaping adoption behavior among marketing and creative professionals. This result suggests that beyond technical or organizational determinants, individual psychological readiness constitutes a decisive factor in explaining variations in generative AI usage intensity.

From a theoretical standpoint, this finding extends the Technology Acceptance Model (Davis, Perceived usefulness, perceived ease of use, and user acceptance of information technology. , 1989) by emphasizing the role of self-efficacy-like perceptions in shaping technology adoption behavior. While TAM traditionally emphasizes perceived usefulness and perceived ease of use, the present results indicate that user confidence understood as an individual's perceived ability to effectively interact with and leverage AI tools may function as a more proximal and behaviorally predictive construct in the context of generative AI. In this sense, confidence operates as a cognitive bridge between perceived value and actual usage behavior, potentially mediating the transition from intention to sustained adoption.

T his result also suggests that in emerging AI environments, psychological factors may outweigh structural determinants such as organizational support or even perceived efficiency gains. In other words, even when tools are available and perceived as useful, actual adoption intensity appears to depend primarily on whether individuals feel competent and secure in using them.

These findings carry important managerial implications. Organizations aiming to accelerate generative AI adoption should move beyond a purely technology-centric or efficiency-driven discourse and instead invest in strategies that actively strengthen user confidence. This includes structured training programs, experiential learning opportunities, peer mentoring, and continuous support mechanisms designed to reduce cognitive uncertainty and increase perceived behavioral control. Such interventions may be particularly effective in bridging the gap between AI availability and meaningful integration into daily professional practices.

4.2 Theoretical Implications : Dynamic Capabilities Framework

The findings of this study are strongly consistent with, and extend, (Teece, 2007) Dynamic Capabilities Framework, which conceptualizes organizational success as the ability to continuously sense, seize, and reconfigure internal and external competencies in response to rapidly evolving environments. In this context, generative AI represents a disruptive technological shift within creative industries, fundamentally altering production processes, skill requirements, and value creation mechanisms. Consequently, organizations are required to develop new and adaptive capabilities in areas such as AI literacy, data-driven decision-making, and human–AI collaboration.

The empirical results of this study suggest that AI adoption in Turkish marketing and creative firms cannot be explained solely through access to technology or perceived usefulness. Instead, successful integration appears to depend more critically on the development of internal organizational capabilities that enable effective utilization of these tools. This interpretation is supported by the regression model, which explains 37.7% of the variance in usage behavior, leaving a substantial proportion (62.3%) unexplained. This unexplained variance indicates the presence of deeper structural and capability-based determinants that are not captured by traditional adoption variables, such as training systems, organizational learning processes, and workflow redesign mechanisms.

Within this perspective, the identification of user confidence as the strongest predictor of AI usage further refines the dynamic capabilities argument. Confidence can be interpreted as a micro-foundational element of capability development, reflecting the extent

to which individuals are empowered to experiment, learn, and effectively integrate new technologies into their routines. This aligns with Teece's emphasis on the importance of organizational processes, managerial cognition, and governance structures in enabling capability development.

Therefore, building sustainable AI adoption capabilities requires more than technological investment; it necessitates deliberate organizational efforts aimed at strengthening human capital through structured training programs, continuous upskilling, mentoring systems, and the cultivation of an organizational culture that encourages experimentation, adaptability, and learning from failure. These elements collectively constitute the micro-foundations of dynamic capabilities necessary for effective AI integration in creative industries.

4.3 Understanding Adoption Barriers:

The analysis of adoption barriers reveals a multidimensional set of structural, strategic, and resource-based constraints that hinder the effective integration of generative AI within Turkish marketing and creative organizations. Privacy and data security concerns emerge as the most frequently cited barrier (39.7%), reflecting apprehensions related to proprietary information, client confidentiality, and compliance with data protection regulations. These concerns are particularly salient in contexts involving international collaborations, especially under GDPR requirements and evolving national data protection frameworks in Turkey, thereby necessitating the implementation of robust data governance systems, including secure cloud infrastructures, encryption mechanisms, and clearly defined contractual agreements with AI providers.

Closely following this is the lack of a strategic AI implementation plan (38.0%), indicating that AI adoption is often approached in a fragmented and reactive manner rather than as part of a coherent organizational transformation strategy. This suggests a misalignment between the recognized value of AI at the individual level and the absence of structured executive-level planning for its integration. Addressing this issue requires strong leadership engagement, the development of long-term AI strategies aligned with organizational objectives, and the establishment of clear implementation roadmaps that define priorities, resource allocation, and performance indicators.

In addition, financial constraints (34.7%) and insufficient employee training (28.9%) represent significant limitations, particularly for small and medium-sized enterprises (SMEs) that dominate the Turkish creative sector. These constraints highlight the dual challenge of economic accessibility and human capital development in enabling AI adoption. Potential solutions include the promotion of subsidized training programs, public–private partnerships, and industry-level initiatives aimed at capacity building. Moreover, the increasing availability of cloud-based and subscription-based AI services may reduce entry barriers by replacing high upfront investment costs with more flexible and scalable adoption models.

4.4 Implications for Turkey's Creative Sector:

The findings of this study generate a set of interconnected implications for the development of Turkey's creative sector, spanning policy-level interventions, organizational strategies, and broader ecosystem development. At the policy level, there is a clear need to strengthen AI literacy across the workforce through structured programs

delivered by vocational institutions and universities, with the aim of enhancing user confidence and reducing psychological barriers to adoption. In parallel, establishing robust data protection frameworks and industry standards is essential to address persistent privacy and security concerns, particularly in relation to international clients and compliance with global regulations such as GDPR. Furthermore, government-led initiatives such as subsidies, tax incentives, and funding schemes could play a critical role in reducing financial barriers, especially for SMEs that constitute a large proportion of the creative sector. The development of public–private partnerships would further facilitate knowledge transfer, innovation diffusion, and the dissemination of best practices across the industry.

At the organizational level, firms are encouraged to move beyond ad hoc adoption toward the development of structured AI implementation roadmaps aligned with strategic objectives and market positioning. This requires investment in targeted training programs designed to strengthen both technical skills and user confidence, alongside the establishment of cross-functional teams dedicated to coordinating AI integration across departments. In addition, effective change management processes are necessary to mitigate resistance, foster employee engagement, and ensure sustainable adoption. Finally, organizations must implement clear data governance and privacy policies that not only ensure compliance but also build internal and external trust in AI-enabled workflows.

4.5 Study Limitations:

Despite the valuable insights provided by this study, several limitations should be acknowledged when interpreting the findings. First, the sample size (N = 121), while adequate for exploratory and regression analyses, remains relatively moderate. Future research should rely on larger and more diverse samples (e.g., $N \geq 300$) to improve statistical power and enhance the generalizability of results.

Second, the use of purposive sampling through professional networks may introduce selection bias, as respondents are likely to be more digitally engaged or more familiar with generative AI than the broader population of creative professionals. This limits the representativeness of the sample and suggests the need for probability-based sampling in future studies.

Third, the cross-sectional design restricts the ability to infer causal relationships and does not capture temporal changes in adoption behavior. Longitudinal designs would be more appropriate for examining how perceptions and usage evolve over time as AI technologies mature and organizational capabilities develop.

Fourth, the reliance on self-reported data may introduce response bias, including social desirability effects, particularly in a context where AI adoption is increasingly viewed as a positive professional attribute.

Fifth, the low internal consistency observed in the Confidence & Support dimension ($\alpha = 0.436$) limits the robustness of this construct and suggests the need for refinement, potentially by separating psychological confidence from organizational support in future measurement models.

Finally, although missing data were relatively limited (1.7%–3.3%) and handled using listwise deletion, this approach may reduce statistical efficiency. Future research could consider multiple imputation techniques for more robust handling of missing values.

Moreover, the focus on marketing and creative professionals in Turkey limits external validity, highlighting the need for cross-sectoral and cross-country comparative studies.

4.6 Recommendations for Future Research :

Future research should build on the findings of this study by adopting more robust and diversified methodological approaches to better capture the complexity of generative AI adoption in creative industries. First, longitudinal designs are recommended to track AI adoption trajectories over time, allowing researchers to assess the stability, evolution, and long-term sustainability of usage patterns over periods of 2–3 years. Such designs would provide stronger causal insights compared to the cross-sectional approach used in this study.

Second, qualitative methods such as in-depth interviews and case studies could complement quantitative findings by offering richer insights into organizational barriers, decision-making processes, and contextual enablers of AI integration. This mixed-method approach would help uncover mechanisms that are not easily captured through survey-based models.

Third, future studies should expand sample size and adopt stratified random sampling techniques to improve representativeness across different segments of the Turkish creative industries. In addition, incorporating control variables such as firm size, industry sub-sector, and prior technological experience would enable more refined and explanatory predictive models.

Moreover, future research should explore macro-level determinants of AI adoption, including government support policies, technological infrastructure, and talent availability, in order to better understand sector-wide dynamics. At the measurement level, there is also a need to further develop and validate more robust instruments for constructs such as user confidence and organizational support, which showed limitations in internal consistency in this study.

Finally, comparative cross-country studies are strongly encouraged to identify contextual and cultural factors that shape generative AI adoption in creative industries, thereby contributing to a more globale and nuanced understanding of this emerging phenomenon.

5 -Conclusion

This study investigated generative AI adoption among marketing and creative professionals in Turkey (N = 121), focusing on perceptions, adoption patterns, key barriers, and predictive determinants. The findings provide a comprehensive understanding of how generative AI is being integrated into creative workflows and the factors shaping its adoption at both individual and organizational levels.

Overall, the results indicate that professionals in the Turkish creative sector hold moderately to strongly positive perceptions of generative AI, particularly in terms of its ability to enhance efficiency and productivity. However, despite these favorable attitudes, adoption remains shaped by a complex interplay of psychological, organizational, and structural factors.

Among all examined variables, user confidence emerges as the most significant predictor of adoption frequency, highlighting the central role of individual-level psychological readiness in driving technology integration. In contrast, organizational

constraints such as privacy concerns, lack of strategic planning, high implementation costs, and insufficient training continue to represent major barriers to effective adoption. In addition, the mixed perception of national-level support suggests that the broader institutional environment has yet to fully align with the rapid diffusion of generative AI technologies.

From a theoretical perspective, the findings support the relevance of the Dynamic Capabilities Framework in explaining AI adoption as a process of organizational capability development rather than simple technology acquisition. This perspective emphasizes the importance of developing adaptive competencies, particularly in relation to human–AI collaboration, training systems, and strategic alignment.

In conclusion, this study highlights that successful generative AI adoption in the Turkish creative sector requires a dual focus on human and organizational dimensions. Beyond technological access, organizations must prioritize the development of user confidence, structured training programs, and coherent strategic frameworks for AI integration. Addressing these challenges will enable Turkish creative industries to better position themselves within the global digital economy and fully leverage the transformative potential of generative AI.

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Survey Questionnaire

Generative AI in Visual Marketing Academic Survey (Turkey, 2025)

Dear Participant,

This anonymous survey is part of an academic study on the integration of generative artificial intelligence (AI) tools in visual marketing, conducted in the context of Turkey's digital marketing ecosystem. Your responses will contribute to original scientific research and will remain strictly confidential. No personally identifiable information will be collected or disclosed.

Estimated completion time: 5 minutes. Thank you for your valuable contribution.

SECTION 1 — Awareness & Usage of Generative AI Tools

Please rate each statement (1 to 5):	**1 Strongly Disagree**	**2 Disagree**	**3 Neutral**	**4 Agree**	**5 Strongly Agree**
1. I am aware of generative AI tools used for visual content creation (e.g., DALL·E, Midjourney, Runway ML).	☐ **1**	☐ 2	☐ 3	☐ 4	☐ **5**
2. I use generative AI tools regularly in my professional marketing or design activities.	☐ **1**	☐ 2	☐ 3	☐ 4	☐ **5**
3. I believe generative AI improves the quality and creativity of visual marketing content.	☐ **1**	☐ 2	☐ 3	☐ 4	☐ **5**
4. Generative AI tools save time and resources in marketing content production.	☐ **1**	☐ 2	☐ 3	☐ 4	☐ **5**
5. I feel confident in my ability to use generative AI tools effectively.	☐ **1**	☐ 2	☐ 3	☐ 4	☐ **5**
6. My organization encourages the adoption of generative AI tools in creative work.	☐ **1**	☐ 2	☐ 3	☐ 4	☐ **5**

SECTION 2 — Barriers & Institutional Support

Q7. What are the main barriers to adopting generative AI tools in your organization or practice?
(Select all that apply)

☐ Lack of training / specialized skills

☐ High cost of generative AI tools

☐ Data privacy concerns

☐ Low awareness among management

☐ Lack of strategic vision

☐ Limited internet or technology infrastructure

☐ Ethical or regulatory uncertainty

☐ Other (please specify):

Q8. How would you rate the level of national policy support for AI adoption in the creative sector in Turkey?
(Select one answer)

☐ Very supportive

☐ Somewhat supportive

☐ Neutral

☐ Not very supportive

☐ Not supportive at all

SECTION 3 — Open Questions (Qualitative Insights)

Q9. In your opinion, what role should generative AI play in the future of marketing in Turkey?

Q10. What specific actions or support would you expect from government, universities, or professional associations to promote the use of generative AI in your field?