International Journal of Linguistics, Literature and Translation
ISSN: 2617-0299
DOI: 10.32996/ijllt
Journal Homepage: al-kindipublisher.com/index.php/ijllt/index

IJLLT
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

RESEARCH ARTICLE

Transcreation of Short Marketing Texts from English into Arabic in the Age Of AI: Toward Redefining Creativity in Machine-Assisted Translation

Haifa Mohammad Nassar

Assistant Professor, Hajjah University, Faculty of Education, Sciences and Arts, Hajjah, Yemen

Corresponding Author: Haifa Mohammad Nassar, **E-mail:** haifaaama@gmail.com

ABSTRACT

The growing integration of artificial intelligence (AI) into translation is reshaping creative communication, particularly in marketing, where persuasive force and cultural resonance are essential. This study compares human, AI-generated, and human–AI collaborative transcreation of short marketing texts from English into Arabic, focusing on creative strategies and functional effectiveness. Drawing on Kussmaul's creativity model and Nord's functionalist approach, a comparative mixed-methods design was applied to 30 purposively selected English marketing texts, each represented by three Arabic versions. Creative strategies were qualitatively coded, while functional adequacy, cultural appropriateness, persuasive impact, and linguistic fluency were assessed by an expert evaluator and statistically compared across production modes. The findings reveal that AI-generated outputs were comparatively source-oriented, whereas human and especially human–AI outputs involved more frequent creative intervention. Human–AI collaboration received the highest overall functional rating (M = 4.84), followed by human (M = 4.66) and AI transcreation (M = 4.12), with significant differences across modes ($p < .001$). Persuasive impact showed the strongest differentiation. However, greater creative intervention did not necessarily entail greater functional effectiveness. The findings support a view of transcreation as functional creativity, with human–AI collaboration benefiting from selective cultural, rhetorical, and persuasive mediation rather than maximal modification.

KEYWORDS

Transcreation, Artificial Intelligence; Human–AI Collaboration; Creativity in Translation; Marketing Translation

ARTICLE INFORMATION

ACCEPTED: 10 August 2026 **PUBLISHED:** 10 October 2026 **DOI:** 10.32996/ijllt.2026.9.10.17

1. Introduction

The rapid expansion of global markets and digital communication has intensified the need for persuasive messages that can travel effectively across languages and cultures (Babić, 2023; Boiko, 2025). In this context, transcreation has emerged as a specialized practice that goes beyond literal translation to recreate the emotional tone, cultural resonance and persuasive impact of marketing texts (Wei-jia, 2024). While conventional translation and transcreation share a concern with meaning and communicative purpose, transcreation places particular emphasis on recreating the emotional appeal, cultural resonance, and persuasive function of the source message for the target audience (Díaz-Millón & Olvera-Lobo, 2023). This approach has become particularly significant in short marketing texts, such as slogans, social media posts and advertising copy, where every word carries strategic and emotional weight. In the Arab market, the transcreation of marketing content from English into Arabic has become increasingly significant, as brands seek to communicate persuasively with Arabic-speaking audiences across diverse cultural contexts.

At the same time, artificial intelligence has rapidly transformed translation workflows. Neural machine translation systems and large language models are increasingly capable of generating fluent and contextually appropriate outputs, including creative marketing content (Hadi, et. al, 2023; Chen et al., 2024). These tools are now widely used by companies, agencies and individual translators to accelerate production and reduce costs, particularly in English–Arabic digital marketing environments. However, the

AL-KINDI

Copyright: © 2026 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

integration of AI into creative translation tasks has raised questions about the nature of creativity, the boundaries between translation and content generation, and the evolving role of the human transcreator (Jiménez-Crespo, 2024; Giustini, et al., 2026). While AI systems can produce linguistically smooth and culturally adapted texts, concerns remain about their ability to capture nuanced cultural references, emotional subtleties and brand-specific voices, especially when adapting messages for Arabic audiences.

Within this changing landscape, short marketing texts present a particularly sensitive domain, as their effectiveness depends on creativity, cultural awareness and strategic language choices (Al-Badawi et al., 2024; Torresi, 2020). The increasing reliance on AI tools in English–Arabic marketing communication invites closer examination of how creativity is negotiated between human expertise and machine-generated suggestions. It also calls for a reassessment of traditional assumptions about transcreation, professional competencies and quality evaluation in creative translation tasks within the Arabic context.

The present study examines how AI influences transcreation practices and how creative decisions are shaped in machine-assisted environments. It focuses specifically on the transcreation of short marketing texts from English into Arabic, comparing human-produced transcreations, AI-generated outputs and collaborative human–AI versions. By analyzing differences in creativity, cultural adaptation and persuasive impact, the study aims to provide a clearer understanding of how machine-assisted processes reshape creative translation in the Arabic marketing context. The findings may contribute to redefining the role of the transcreator, informing training programs and guiding language service providers in integrating AI tools into English–Arabic creative workflows while preserving the essential human dimensions of transcreation.

2. Questions of the study

This study aims to answer the following questions:

1. How do human, AI-generated and human–AI collaborative transcreations from English into Arabic differ in terms of creativity, cultural adaptation and persuasive impact in short marketing texts?
2. What creative strategies are employed in human, AI and human–AI transcreation from English into Arabic in short marketing texts?
3. How are these creative strategies associated with the functional effectiveness of the Arabic target texts?
4. What do differences between AI-generated and human–AI collaborative outputs reveal about the changing role of the transcreator in producing culturally appropriate and persuasive Arabic marketing content?

3. Literature review

Recent research has extensively explored the intersection of artificial intelligence, translation, and transcreation, highlighting both the opportunities and the challenges posed by machine-assisted language production. Walter and Agnetta (2025) examine the broader ethical, creative, and professional implications of AI-based translation, emphasizing that automation reshapes not only technical workflows but also issues of agency, creativity, and linguistic diversity. Their work underscores the need for human-centered approaches to AI integration in translation practice. Similarly, Sun, Liu, and Moratto (2025) describe AI as a paradigm shift in Translation Studies, arguing that large language models are redefining research agendas, translation processes, and translator education.

From an industry perspective, Sophie (2025) highlights the growing demand for translation services and the shortage of human translators, positioning AI technologies as a necessary complement rather than a replacement for human expertise. The study advocates a hybrid model in which human judgment remains essential for cultural nuance and contextual accuracy. This emphasis on human–machine collaboration is echoed in Jiménez-Crespo (2024), who situates transcreation within the framework of human-centered AI and argues that professional creative competencies remain central even in AI-augmented workflows.

Several empirical studies have specifically examined AI-assisted transcreation in marketing and promotional contexts. Hassani, Malekshahi, and Davari (2025) compare the performance of translation students and professionals in AI-supported transcreation tasks, demonstrating that targeted AI training can significantly improve creative outcomes while still relying on human evaluative judgment. Navarro (2025) analyzes AI performance in tourism transcreation and finds that while large language models can provide creative inspiration, human-driven approaches produce more culturally effective and persuasive texts. Similarly, Tarawneh (2025) discusses the importance of emotional resonance and cultural adaptation in e-commerce transcreation, highlighting the role of multimodal elements such as visuals and interface design. Aksoy (2024) approaches transcreation from a narrative perspective, examining how advertising texts are recontextualized through cultural and creative strategies guided by functionalist principles. Spinzi (2024) shifts the focus to translator competence, demonstrating the importance of emotional intelligence and proactive behavior in producing creative tourism transcreations.

Beyond translation studies, Huang and Rust (2021) provide a strategic framework for the use of AI in marketing, distinguishing between mechanical, thinking, and feeling AI. Their model illustrates how AI can support customer understanding,

personalization, and emotional engagement, offering a conceptual foundation for understanding the role of AI in persuasive communication.

Although these studies provide valuable insights into artificial intelligence, creativity and transcreation, most of them focus on conceptual discussions, educational contexts, or single-case analyses within specific domains. Many emphasize the significance of human creativity, the need for hybrid workflows, or the pedagogical implications of AI integration. However, relatively few studies have adopted a systematic comparative design that directly contrasts human, AI-generated, and human–AI collaborative transcreation outputs within the same dataset and under the same evaluation criteria. This gap is particularly evident in the context of English–Arabic marketing communication, where issues of cultural adaptation, linguistic creativity and audience engagement are especially complex, yet remain underexplored in empirical AI-related research.

The present study addresses this gap by conducting a structured comparative analysis of short marketing texts transcreated from English into Arabic across three production modes: human transcreation, AI-generated transcreation, and human–AI collaborative transcreation. While earlier research often highlights either the benefits or the limitations of AI, this study focuses specifically on how creative strategies differ across these modes and how they affect functional effectiveness in Arabic target texts. By combining creativity-oriented analysis with functional evaluation, the study offers a more integrated perspective on how machine assistance shapes patterns of creativeintervention in English–Arabic transcreation. In doing so, it contributes empirical evidence to ongoing debates about the role of AI in creative translation, while also providing insights that are directly relevant to Arabic-language marketing practices and translator training in the digital era.

4. Research methodology

This section provides the methodology of the study as follows:

4.1 Study design

This study adopts a comparative mixed-methods design to examine how creativity is manifested in human, AI-generated, and human–AI collaborative transcreation of short marketing texts from English into Arabic. The design integrates qualitative analysis of creative strategies with quantitative evaluation of functional effectiveness, allowing for a systematic comparison across the three production modes. This approach is consistent with the theoretical framework, which combines Kussmaul's (1991) model of creativity in translation and Nord's (1997) functionalist approach. While Kussmaul's model enables the identification of creative processes and strategies, Nord's framework provides criteria for assessing the communicative success and audience orientation of the Arabic target texts. Therefore, the comparative structure makes it possible to analyze both how creativity occurs and how effective the resulting English–Arabic transcreations are in fulfilling their intended marketing function. The qualitative and quantitative components are integrated at the interpretive stage, where patterns of creative intervention are considered alongside the functional ratings of the three production modes.

4.2 Corpus and sampling

The study employs purposive sampling to select 30 authentic English marketing texts from commercial and digital contexts, including advertising slogans, social media promotional posts, and product taglines. Ranging from approximately two to twenty words, the selected texts represent five categories: technology, food/beverages, tourism/travel, fashion/sports, and lifestyle/services. Selection was guided by their emotional tone, figurative or culturally loaded language, and relevance to contemporary marketing practices, making them suitable for examining creativity, cultural adaptation, and persuasive effectiveness.

Each source text was transcreated into Modern Standard Arabic through three production modes: human-only, AI-generated, and human–AI collaborative. The AI-generated versions were produced using ChatGPT 5.6, with each text processed in a separate conversation using the same standardized prompt to preserve the intended promotional meaning, persuasive appeal, and cultural appropriateness of the source message. The exact prompt is provided in Appendix 3. Two professional translators with experience in marketing or advertising translation produced the human-mediated versions. One independently transcreated the source texts without using AI tools or accessing the AI-generated outputs, while the other post-edited and creatively refined those outputs to produce the collaborative versions. The resulting corpus comprised 90 Arabic target texts, with 30 versions per production mode, allowing direct comparison across the same English source texts.

4.3 Methods of data analysis

Data analysis combines qualitative and quantitative procedures guided by the adopted theoretical models. Kussmaul's (1991) creativity model is applied to identify and classify creative strategies in each English–Arabic transcreation. The analysis focuses on features such as reformulation, cultural substitution, metaphorical shifts, associative changes and alterations in tone or emotional appeal. Each Arabic target text is examined to detect instances of creative shifts, which are then coded and categorized. This allows for a comparative analysis of the types and frequency of creative strategies across human, AI and collaborative outputs.

The strategy categories are treated as analytical indicators of the nature and extent of creative intervention rather than as measures of translation quality; consequently, a higher frequency of creative shifts is not assumed to indicate greater functional effectiveness.

The Kussmaul-based coding is conducted by the researcher using predefined operational criteria. Reformulation is coded when the target text substantially re-expresses the source message while retaining its central communicative proposition; cultural substitution when a source-specific element is replaced by a target-culturally accessible alternative; metaphorical shift when source imagery is modified, replaced or newly introduced; associative change when the target text activates additional or different connotations compatible with the marketing purpose; and tone/emotional appeal change when the interpersonal, affective or persuasive orientation is noticeably modified. No substantial creative shift is assigned when the target text remains predominantly close to the source without a marked creative transformation. Because the categories are not mutually exclusive, more than one strategy may be assigned to the same target text when distinct transformations are present. Ambiguous cases are re-examined against the source text and the operational definitions before final coding. As the coding is conducted by a single researcher, no intercoder-agreement statistic is calculated.

Nord's (1997) functionalist model is used to evaluate the communicative effectiveness of the transcreated texts. Each version is assessed in terms of its alignment with the intended communicative purpose, audience orientation, cultural appropriateness and persuasive impact in the Arabic marketing context. The functional evaluation is conducted by one expert evaluator with professional expertise in Arabic–English translation and familiarity with marketing translation and functionalist approaches to translation assessment. The evaluator assesses all 90 Arabic target texts using the same predefined criteria and rating scale.The translations were presented to the evaluator without identifying their production modes to minimize potential assessment bias. The complete evaluation criteria, rating scale and individual scores are provided in Appendix 2.

The structured assessment comprises four criteria: (1) functional adequacy, referring to how effectively the text fulfills its intended marketing purpose; (2) cultural appropriateness, referring to the suitability of the message for Arabic-speaking audiences; (3) persuasive impact, referring to the emotional and promotional effectiveness of the text; and (4) linguistic fluency, referring to clarity, naturalness and stylistic coherence in Arabic. Each criterion is rated on a five-point scale, where 1 indicates that the performance is poor, 2 weak, 3 acceptable, 4 good and 5 excellent. Significantly, the assessment does not equate greater creative intervention with higher quality: a relatively close rendering may receive a high functional rating when it successfully preserves the intended marketing function, whereas a more creative rendering may receive a lower rating if the intervention weakens the original communicative or brand proposition.

Descriptive statistics, including means and standard deviations, are calculated for each functional criterion and for the overall functional score across the AI, human and human–AI production modes. Because the three Arabic versions are derived from the same 30 source texts and the ratings are measured on an ordinal five-point scale, differences among the three related production conditions are examined using the Friedman test. Kendall's W is calculated as an effect-size measure to indicate the magnitude of differences among the three production modes. Where statistically significant overall differences are identified, pairwise Wilcoxon signed-rank tests with Bonferroni adjustment are used to determine which production modes differ significantly from one another.

The integration of these two analytical perspectives enables the study to link creative strategies with functional outcomes, providing a comprehensive understanding of how AI influences transcreation practices and the evolving role of the human transcreator in English–Arabic marketing environments. More specifically, Kussmaul's (1991) framework identifies how the target texts are creatively transformed, whereas the Nord-based expert assessment (1997) evaluates how effectively those transformations serve their intended communicative function. The quantitative ratings are therefore interpreted in conjunction with, rather than independently of, the qualitative analysis of individual source–target relationships.

4.4 Theoretical framework

This study draws on two complementary models: Kussmaul's (1991) concept of creativity in translation and Nord's (1997) functionalist model, as they together address both the creative process and the communicative effectiveness of transcreated texts. Kussmaul's (1991) model conceptualizes translation as a creative problem-solving activity rather than a purely mechanical transfer of meaning. He argues that translators engage in associative thinking, flexible reformulation and imaginative restructuring in order to produce contextually appropriate and effective target texts. Creativity, in this sense, is not limited to literary translation but also applies to domains where linguistic innovation and audience impact are crucial, such as advertising and marketing. Kussmaul identifies various creative strategies, including shifts in perspective, metaphorical reformulation and contextual adaptation, which allow translators to achieve communicative effectiveness. In the present study, this model provides the analytical basis for identifying and classifying creative strategies in human, AI-generated, and human–AI collaborative transcreations of short marketing texts from English into Arabic. It supports the examination of how creativity manifests across

different production modes and how machine assistance is reflected in patterns of creative transformation in English–Arabic marketing transcreation.

Nord's (1997) functionalist model complements this perspective by focusing on the communicative purpose and audience orientation of the target text. Building on functionalist translation theory, Nord emphasizes that translation decisions should be guided by the intended function of the target text, the expectations of the target audience and the cultural context in which the text will be received. Her model introduces the concept of the translation brief and functional adequacy, highlighting the significance of producing texts that fulfill their intended communicative goals. In the context of transcreation, where emotional impact and persuasive effectiveness are central, Nord's (1997) framework provides criteria for evaluating whether the target texts achieve their intended marketing function. In this study, the model is used to assess the functional effectiveness, cultural appropriateness and persuasive strength of human, AI and human–AI transcreation outputs in Arabic target texts derived from English source materials. In conclusion, Kussmaul's (1991) creativity model and Nord's (1997) functionalist approach enable a comprehensive analysis that links creative processes with functional outcomes, thus providing a coherent theoretical foundation for examining English–Arabic transcreation in AI-assisted environments.

5. Findings

5.1 Overall descriptive statistics

The analysis comprised 90 Arabic target texts, representing three production modes: human translation, AI-generated translation, and human–AI collaborative translation, across the five marketing categories included in the corpus. As an initial overview, Table 1 presents the overall distribution of creative strategies identified through the coding framework adapted from Kussmaul. These results provide a descriptive baseline before differences among the three production modes are examined in subsequent sections.

Table 1: Frequency of Creative Strategies across All Production Modes

Percentage of 90 target texts	Frequency (n)	Creative strategy
Reformulation (REF)	52	57.8%
Cultural Substitution (CS)	8	8.9%
Metaphorical Shift (MS)	9	10.0%
Associative Change (AC)	35	38.9%
Tone/Emotional Appeal Change (TE)	27	30.0%
No Substantial Creative Shift (NS)	28	31.1%

As shown in Table 1, reformulation was the most frequently observed creative strategy, occurring in 52 of the 90 target texts (57.8%). This indicates that restructuring or re-expressing the source message was a prominent feature of the corpus. Associative change was the second most frequent strategy (38.9%), followed by changes in tone or emotional appeal (30.0%). These patterns suggest that creative intervention frequently involved not only changes in wording but also adjustments to the associations and persuasive force activated by the Arabic target text.

By comparison, metaphorical shifts (10.0%) and cultural substitutions (8.9%) were relatively infrequent. Their lower frequencies should not, however, be interpreted as evidence of lesser creativity. Within Kussmaul's (1991) framework, the categories identify different forms of creative transformation rather than different degrees of creativity. Moreover, 28 translations (31.1%) showed no substantial creative shift, reflecting cases in which close semantic transfer and necessary linguistic adjustment were sufficient without a more pronounced creative intervention.

5.2 Creative strategy use by mode (Kussmaul framework)

Following the overall distribution of creative strategies, the analysis then examined how these strategies were distributed across the three production modes: human translation, AI-generated translation, and human–AI collaborative translation. Table 2 presents the frequency and percentage of the five creative-shift categories identified through the Kussmaul-based coding, together with cases classified as showing no substantial creative shift (NS). Because a single target text could exhibit more than one creative strategy, the categories were not mutually exclusive; consequently, percentages within each production mode do not

sum to 100%.

Table 2: Distribution of Creative Strategies by Production Mode

Strategy	AI (n = 30)	Human (n = 30)	Human–AI (n = 30)
Reformulation (REF)	9 (30.0%)	17 (56.7%)	26 (86.7%)
Cultural Substitution (CS)	2 (6.7%)	3 (10.0%)	3 (10.0%)
Metaphorical Shift (MS)	0 (0.0%)	3 (10.0%)	6 (20.0%)
Associative Change (AC)	3 (10.0%)	9 (30.0%)	23 (76.7%)
Tone/Emotional Appeal Change (TE)	1 (3.3%)	7 (23.3%)	19 (63.3%)
No Substantial Creative Shift (NS)	19 (63.3%)	9 (30.0%)	0 (0.0%)

The distribution reveals a clear descriptive contrast among the three modes. AI-generated translations showed the highest frequency of NS cases, with 19 of the 30 translations (63.3%) involving no substantial creative shift. When creative intervention did occur in the AI condition, it was most commonly realized through reformulation (30.0%). Associative change (10.0%) and cultural substitution (6.7%) were considerably less frequent, while tone/emotional adjustment occurred in only one case (3.3%). No metaphorical shift was identified in the AI-generated translations. These frequencies show that the AI outputs were characterized primarily by relatively close rendering rather than extensive creative transformation. This does not necessarily indicate functional inadequacy, however, since some marketing expressions can retain their communicative force without substantial departure from the source formulation.

The human translations displayed a broader range of creative transformations. Reformulation remained the most frequent strategy, occurring in 56.7% of the texts, but it was accompanied more often by associative change (30.0%) and modification of tone or emotional appeal (23.3%). Metaphorical shifts and cultural substitutions each appeared in 10.0% of the human translations. At the same time, nine human translations (30.0%) were classified as NS. The coexistence of creative shifts and relatively close renderings indicates that human transcreation was selective rather than uniformly interventionist. In other words, substantial modification was employed where it served the Arabic marketing context, whereas closer rendering was retained where the source formulation could perform effectively in Arabic without extensive creative adaptation.

The highest frequencies of coded creative transformations were observed in the human–AI condition. Reformulation appeared in 26 texts (86.7%), associative change in 23 (76.7%), and tone/emotional adjustment in 19 (63.3%). Metaphorical shifts also occurred more frequently than in either of the other modes (20.0%). Notably, none of the human–AI outputs was classified as NS. The collaborative outputs therefore differed from the AI-generated versions not merely through linguistic correction but through substantial reworking of expression, association, and persuasive tone. The particularly large differences in associative change and tone/emotional appeal suggest that human post-editing frequently addressed dimensions of marketing discourse that extended beyond semantic accuracy or grammatical fluency.

From a Kussmaul-based perspective, these findings suggest that human intervention in the post-editing stage frequently moved beyond correction of AI-generated wording toward creative re-expression, associative enrichment, and adjustment of persuasive or emotional force. At the same time, frequency of intervention should be distinguished from the effectiveness of intervention. A target text containing several coded transformations is not necessarily more creative in a functionally meaningful sense than one containing few or none. In the present study, creativity is therefore understood as purposeful transformation in response to communicative and cultural demands rather than as deviation from the source text for its own sake.

This distinction is particularly significant when the Kussmaul findings are considered alongside the functional evaluation. The strategy analysis establishes that the three modes differed in the extent and types of creative transformation they employed; it does not by itself establish that one mode produced functionally superior translations. The relationship between these creative patterns and functional performance is therefore examined through the Nord-based evaluation in the following analysis.

5.3 Functional quality by mode (Nord criteria)

To complement the analysis of creative strategies, the three production modes were evaluated in terms of their functional quality using four criteria derived from Nord's (1997) functionalist approach: functional adequacy, cultural appropriateness, persuasive impact, and linguistic fluency. Whereas the Kussmaul-based analysis identifies the types of creative shifts occurring in the target texts, the Nord-based evaluation considers whether the resulting Arabic versions successfully perform their intended communicative and promotional function. All 90 target texts were assessed by the expert evaluator using the five-point scale described in the Methodology. Table 3 presents the mean scores and standard deviations for the AI, human, and human–AI conditions.

Table 3: Functional-Evaluation Scores by Production Mode

Production mode	Functional adequacy M (SD)	Cultural appropriateness M (SD)	Persuasive impact M (SD)	Linguistic fluency M (SD)	Overall M (SD)
AI	4.20 (0.92)	4.40 (0.86)	3.37 (0.89)	4.50 (0.68)	4.12 (0.79)
Human	4.77 (0.50)	4.83 (0.38)	4.13 (0.63)	4.90 (0.31)	4.66 (0.40)
Human–AI	4.73 (0.45)	5.00 (0.00)	4.63 (0.49)	5.00 (0.00)	4.84 (0.20)

The descriptive results show that the human–AI condition achieved the highest overall functional score (M = 4.84, SD = 0.20), followed by the human condition (M = 4.66, SD = 0.40) and the AI condition (M = 4.12, SD = 0.79). However, the pattern was not identical across all four criteria. Human-only transcreation achieved a marginally higher mean for functional adequacy (M = 4.77, SD = 0.50) than the human–AI condition (M = 4.73, SD = 0.45), whereas the collaborative condition received the highest ratings for cultural appropriateness, persuasive impact, and linguistic fluency. Thus, the descriptive results do not indicate uniform superiority of the collaborative mode across every functional dimension.

The most pronounced descriptive difference occurred in persuasive impact. The AI-generated versions received a mean of 3.37 (SD = 0.89), compared with 4.13 (SD = 0.63) for the human versions and 4.63 (SD = 0.49) for the human–AI versions. This pattern is particularly relevant to marketing transcreation, where functional success depends not only on semantic and linguistic acceptability but also on the ability of the target text to engage and persuade its intended audience. The relatively high linguistic-fluency score of the AI condition (M = 4.50, SD = 0.68), alongside its lower persuasive-impact score, indicates that fluent Arabic output did not necessarily reproduce the promotional force of the source message.

For cultural appropriateness, the mean increased from 4.40 (SD = 0.86) in the AI condition to 4.83 (SD = 0.38) in the human condition and 5.00 (SD = 0.00) in the human–AI condition. A similar pattern occurred for linguistic fluency, for which the human–AI versions received consistently high ratings (M = 5.00, SD = 0.00). The absence of variation in these two dimensions indicates that the evaluator assigned the maximum score to all human–AI outputs for cultural appropriateness and linguistic fluency. These ceiling-level distributions are interpreted here as consistency within this expert evaluation rather than as evidence of universally perfect performance.

To determine whether the observed differences among the three related production modes were statistically significant, Friedman tests were conducted for each functional criterion and for the overall functional score. Kendall's W was calculated as an effect-size measure to indicate the magnitude of the differences among the three conditions. Significant differences were found for functional adequacy, $\chi^2(2) = 19.54$, $p < .001$, $W = .326$; cultural appropriateness, $\chi^2(2) = 19.63$, $p < .001$, $W = .327$; persuasive impact, $\chi^2(2) = 42.09$, $p < .001$, $W = .702$; and linguistic fluency, $\chi^2(2) = 21.53$, $p < .001$, $W = .359$. The overall functional score also differed significantly across the three modes, $\chi^2(2) = 36.64$, $p < .001$, $W = .611$.

Table 4:. Friedman Tests and Effect Sizes for Functional Differences among Production Modes

Functional criterion	$\chi^2(2)$	p	Kendall's W
Functional adequacy	19.54	< .001	.326
Cultural appropriateness	19.63	< .001	.327
Persuasive impact	42.09	< .001	.702
Linguistic fluency	21.53	< .001	.359
Overall functional score	36.64	< .001	.611

The effect sizes indicate that the magnitude of the differences among production modes was moderate for functional adequacy, cultural appropriateness, and linguistic fluency, but large for persuasive impact and the overall functional score. Persuasive impact showed the strongest differentiation among the three modes (W = .702), suggesting that the principal functional distinction among AI, human, and human–AI transcreation lay in their capacity to reproduce or recreate the promotional force of the source texts.

Follow-up Wilcoxon signed-rank tests with Bonferroni adjustment were conducted for the overall functional score. The human condition received significantly higher overall ratings than the AI condition (W = 0.00, adjusted p < .001), and the human–AI condition also received significantly higher ratings than the AI condition (W = 6.00, adjusted p < .001). The human–AI condition was also rated significantly higher overall than the human condition (W = 18.00, adjusted p = .014), although the difference between their descriptive means was relatively small (4.84 vs. 4.66). Taken together, these comparisons indicate a statistically reliable ordering of the overall ratings within this expert evaluation: human–AI, followed by human-only, and then AI-generated transcreation.

These statistical differences should nevertheless be interpreted in relation to the nature of the evaluation. They characterize systematic differences across the 30 paired source-text sets within the ratings provided by the study's expert evaluator; they should not be interpreted as evidence of consensus across multiple evaluators. Within this evaluative framework, AI-generated texts were often linguistically acceptable but comparatively weaker in persuasive performance, whereas human intervention, particularly in the collaborative condition, was associated with stronger cultural and persuasive outcomes.

The functional findings complement, but should not be conflated with, the Kussmaul-based strategy analysis. The higher frequency of reformulation, associative change, and tone/emotional adjustment in the human–AI condition coincided with higher functional ratings, particularly for persuasive impact. This correspondence does not establish a causal relationship between the number of creative transformations and functional quality. Rather, it indicates that the collaborative outputs combined more frequent creative intervention with stronger functional ratings within the present dataset. The qualitative source–target analysis that follows therefore examines how particular creative decisions operated in context and whether they contributed to the intended communicative and persuasive functions of individual marketing texts.

5.4 Creative strategies and functional effectiveness

The third research question examines the relationship between the creative strategies identified through Kussmaul's framework and the functional effectiveness of the Arabic target texts as conceptualized through Nord's (1997) functionalist approach. Rather than treating creativity as an end in itself, the analysis examines how particular creative interventions functioned within individual source–target relationships and how they corresponded to the communicative, cultural, persuasive, and linguistic requirements of marketing transcreation. Because more than one creative strategy could occur within a single target text, the analysis does not attribute functional ratings to individual strategies as if their effects were independent. Instead, the quantitative patterns are interpreted alongside representative textual cases to examine how creative choices contributed to functional performance in context.

Across the corpus, the relationship between creative intervention and functional effectiveness was selective rather than linear. The

human–AI condition contained the highest frequencies of reformulation, associative change, and tone/emotional appeal change and also received the highest overall functional rating. Human-only transcreation similarly combined a broader range of creative transformations than the AI condition with higher overall functional ratings. The AI-generated condition, by contrast, contained the largest proportion of texts showing no substantial creative shift and received the lowest overall rating, with the clearest relative weakness occurring in persuasive impact. These parallel patterns suggest an association between purposeful creative intervention and stronger functional performance, particularly in the persuasive dimension. They do not, however, establish that a greater number of creative shifts necessarily produces a more effective target text.

Reformulation, the most frequent creative strategy in the corpus, illustrates this functional selectivity particularly clearly. Rather than representing creativity through departure from the source for its own sake, reformulation allowed the source message to be reorganized or re-expressed where a closer rendering was less compatible with natural or persuasive Arabic marketing discourse. Its functional value therefore depended on whether the reformulation preserved the central brand proposition while improving its communicative realization for the target audience.

More targeted strategies were particularly relevant where the source relied on culturally specific associations. Cultural substitution was comparatively infrequent but served an identifiable adaptive function in such cases. For example, Cadbury's "there's always a glass and a half in everyone!" was transformed into في داخل كل منا قدر من الكرم! in the human version. Rather than reproducing the source image literally, the Arabic rendering activates the culturally accessible value of generosity. The intervention illustrates how cultural substitution can redirect a source-bound association toward a concept that is more immediately interpretable in the target context while maintaining a positive promotional orientation. From a Nord's (1997) perspective, its significance lies in the relationship between the translation choice, the target audience, and the intended communicative function.

Similarly, metaphorical and associative shifts were used to reconstruct expressive force rather than merely reproduce lexical content. Under Armour's "Protect This House", for instance, became ادافع عن عرينكin the human translation. The shift from "house" to عرين("den/lair") introduces a stronger territorial association and gives the Arabic expression a more forceful rhetorical character. Associative changes operated in a related way by activating connotations that were not explicitly lexicalized in the source but remained compatible with its broader marketing purpose. Such interventions demonstrate that semantic departure can be functionally motivated when preserving the effect of the message requires more than lexical correspondence.

Changes in tone and emotional appeal were particularly relevant to the persuasive dimension, which showed the largest difference among production modes in the functional evaluation (Kendall's W = .702). Human–AI versions such as لا تتردد... انطلق وافعلهاfor Nike's "Just Do It" shifted the Arabic rendering toward a more explicitly motivational form of address by adding an interpersonal prompt before the imperative. The functional significance of this intervention lies not simply in the additional wording but in the attempt to recreate the directive and motivational force of the slogan for an Arabic-speaking audience. This pattern is consistent with the broader finding that the collaborative condition received the highest mean for persuasive impact (M = 4.63, SD = 0.49), compared with the human (M = 4.13, SD = 0.63) and AI conditions (M = 3.37, SD = 0.89).

Significantly, the analysis also identified the cases in which substantial creative transformation was unnecessary. Translations classified as NS could still demonstrate functional adequacy and linguistic fluency when the source formulation transferred effectively into Arabic. In "Scotland is Calling" → اسكتلندا تناديك, for example, a relatively close rendering preserves both the basic proposition and the personifying invitation embedded in the source. In such cases, introducing additional creative modification would not necessarily improve the target text and could potentially weaken the economy or recognizability of the original message.

The findings do not support a simple equation between the frequency of creative shifts and functional effectiveness. Instead, they point to what may be described as functional creativity: creative intervention is valuable insofar as it responds to a communicative, cultural, associative, or persuasive requirement of the target text. The higher frequency of creative transformations in the human–AI condition coincided with stronger functional ratings, especially for persuasive impact, but close rendering also remained effective where substantial adaptation was unnecessary. Thus, the relationship between Kussmaul's (1991) and Nord's (1997) frameworks is complementary: Kussmaul's categories identify how the target text is transformed, while Nord's functional perspective helps explain whether and why a particular transformation is appropriate for its intended marketing purpose.

5.5 Translational style differences across modes

The final stage of the analysis examined broader translational style differences across the three production modes, with particular attention to amplification and reduction. These two tendencies were treated as descriptive indicators of how each mode managed the amount and explicitness of information in the source text rather than as additional categories within Kussmaul's framework. Amplification refers to the addition or explicit development of semantic, rhetorical, or persuasive material that is not directly expressed in the source, whereas reduction refers to the compression, omission, or generalization of source-text material in the Arabic version. Neither tendency was treated as inherently positive or negative; its relevance depended on whether the resulting modification remained compatible with the communicative purpose of the source and the requirements of the Arabic marketing context. A translation could display neither tendency, and in complex cases the two could potentially coexist.

Table 5: Frequency of Amplification and Reduction by Production Mode

Translational tendency	AI (n = 30)	Human (n = 30)	Human–AI (n = 30)
Amplification	4 (13.3%)	6 (20.0%)	15 (50.0%)
Reduction	3 (10.0%)	5 (16.7%)	4 (13.3%)

As shown in Table 5, the most noticeable difference among the three modes concerned amplification. This tendency occurred in half of the human–AI translations (50.0%), compared with 20.0% of the human translations and 13.3% of the AI-generated translations. The collaborative versions therefore displayed a substantially greater tendency to expand the source message through additional rhetorical, persuasive, or associative material. Rather than indicating greater quality in itself, this pattern reflects a more interventionist translational style in which the compactness of the source was sometimes traded for greater explicitness or audience engagement in Arabic.

For example, "Creativity for All" was rendered by both the AI and human conditions as الإبداع للجميع, whereas the human–AI version expanded it to الإبداع للجميع... بلا استثناء. Similarly, "Scotland is Calling" became اسكتلندا تناديك in both the AI and human versions, while the collaborative version added the rhetorical question فهل تلبي النداء؟. In these cases, amplification did not fundamentally replace the source proposition; instead, it increased its rhetorical explicitness and audience engagement. A comparable tendency can be observed in "Just Do It", where the human–AI rendering لا تتردد... انطلق وافعلها develops the highly compressed English imperative into a more explicitly motivational Arabic appeal. These examples illustrate that amplification in the collaborative condition frequently operated at the interpersonal and persuasive levels rather than through the addition of new propositional content.

Reduction was considerably less prominent and showed a narrower difference across the three modes. It occurred in 10.0% of the AI translations, 16.7% of the human translations, and 13.3% of the human–AI versions. Where reduction occurred, it generally reflected selective compression of source material in favor of concise and rhetorically manageable Arabic advertising language rather than straightforward omission. A clear example is the human rendering of Mastercard's longer slogan as أشياء لا تشترى بالمال، وما عداها... ماستركارد, where elements of the source formulation are compressed while its central contrast and brand-oriented rhetorical structure are retained.

The amplification and reduction patterns further distinguish the translational styles of the three modes. AI tended toward comparatively restrained intervention, whereas human translation showed greater willingness to restructure or selectively elaborate the source. The human–AI condition was particularly characterized by amplification, suggesting that collaborative post-editing often extended beyond linguistic correction to include rhetorical elaboration, audience engagement, and persuasive refinement.

5.6 Discussion of the findings

The findings indicate that creativity in English–Arabic marketing transcreation is shaped not simply by whether AI is involved, but by how human judgment interacts with machine-generated language. AI-generated texts showed the highest proportion of cases

without substantial creative shifts (63.3%), whereas the human–AI outputs displayed considerably higher frequencies of reformulation (86.7%), associative change (76.7%), and modification of tone or emotional appeal (63.3%). This pattern supports Navarro's (2025) observation that large language models can provide useful solutions and creative inspiration, while human involvement remains important for culturally and persuasively effective transcreation. It also aligns with Hassani et al. (2025), who emphasize the potential of AI-supported transcreation when machine assistance is combined with human evaluative judgment.

The functional evaluation provides further evidence of differences among the three modes. The human–AI condition received the highest overall functional rating (M = 4.84), followed by human-only (M = 4.66) and AI-generated transcreation (M = 4.12), with a large overall effect (Kendall's W = .611). However, collaboration did not produce uniform gains across all dimensions. Human-only transcreation achieved a marginally higher mean for functional adequacy, whereas the collaborative condition received higher ratings for cultural appropriateness, persuasive impact, and linguistic fluency. These results therefore suggest complementary strengths rather than straightforward superiority of one mode across all functional dimensions.

Persuasive impact produced the strongest differentiation among the three modes (W = .702). AI-generated versions received a considerably lower mean (M = 3.37) than the human (M = 4.13) and human–AI versions (M = 4.63), despite achieving a relatively high linguistic-fluency score (M = 4.50). This contrast suggests that producing fluent Arabic does not necessarily entail recreating the rhetorical and affective force required by marketing discourse. The challenge for AI in short promotional texts may therefore lie less in linguistic well-formedness than in calibrating persuasive force, audience engagement, and culturally resonant associations.

The strategy analysis helps explain this pattern. Human and particularly human–AI outputs made greater use of associative and tone-related transformations, while amplification occurred in 50.0% of collaborative outputs, compared with 20.0% of human and 13.3% of AI versions. This suggests that collaborative post-editing frequently extended beyond linguistic correction to include rhetorical elaboration, audience orientation, and persuasive refinement. Such findings support Jiménez-Crespo's (2024) human-centered view of AI-assisted transcreation and Sophie's (2025) argument that AI is better understood as complementary to professional expertise than as its replacement.

Greater intervention, however, did not automatically result in greater functional effectiveness. Some relatively close renderings successfully preserved both the source message and its rhetorical effect without substantial modification. The findings therefore point to functional creativity rather than maximal creativity: creative intervention is valuable when it responds to an identifiable linguistic, cultural, associative, or persuasive need. This interpretation reinforces Nord's (1997) functionalist emphasis on communicative purpose and target-audience requirements while complementing Kussmaul's (1991) conception of creativity as purposeful problem-solving. Kussmaul's framework thus identifies how creative transformation occurs, whereas Nord's perspective helps explain whether such transformation serves its intended function.

More broadly, the findings suggest a reconfiguration of the transcreator's role under AI-assisted conditions. The differences between AI-generated and collaborative outputs suggest a human role centered on evaluating and selectively reshaping machine-generated solutions through reformulation, expansion, cultural adjustment, and rhetorical redirection. This interpretation is consistent with Walter and Agnetta (2025) and Sun et al. (2025), who argue that AI is reshaping professional agency and translation processes. The transcreator may therefore increasingly function as a creative decision-maker and functional mediator, determining when AI-generated language can be retained and when it requires adaptation. The value of human–AI collaboration consequently lies not in maximizing intervention, but in combining generative assistance with selective human judgment to produce culturally responsive, persuasive, and functionally appropriate marketing texts.

6. Conclusions and recommendations

This study examined creativity and functional effectiveness in English–Arabic marketing transcreation by comparing human, AI-generated, and human–AI collaborative outputs. Drawing on Kussmaul's (1991) account of translational creativity and Nord's (1997) functionalist approach, the findings reveal distinct patterns across the three production modes. AI-generated translations tended to remain closer to the source, while human translation involved more selective restructuring and adaptation. Human–AI collaboration showed the highest frequency of creative interventions and received the highest overall functional ratings, particularly in cultural appropriateness and persuasive impact. However, its advantage was not uniform across all dimensions, as human-only transcreation achieved a marginally higher mean for functional adequacy.

A central conclusion of the study is that creativity in marketing transcreation is better understood as functional rather than maximal. Greater departure from the source did not necessarily produce a more effective target text. Close renderings could perform successfully when the source message transferred naturally into Arabic, whereas more substantial reformulation was valuable when required to address cultural, associative, rhetorical, or persuasive challenges. Kussmaul's framework thus explains how creative transformation occurs, while Nord's functionalist perspective helps determine whether such transformation is appropriate to the communicative purpose and target audience.

The findings also highlight an important distinction between linguistic fluency and persuasive effectiveness. Although the AI-generated outputs were generally fluent, they were comparatively weaker in persuasive impact. This suggests that producing linguistically acceptable marketing language is not equivalent to recreating its promotional force. Human judgment remains particularly important in managing cultural associations, emotional appeal, brand-oriented rhetoric, and audience engagement.

Human–AI collaboration should therefore be understood not as routine post-editing of machine output, but as selective creative mediation. Human expertise becomes important in determining which AI-generated solutions can be retained and which require reformulation, expansion, cultural adjustment, or rhetorical redirection. For professional practice, AI can consequently serve as a useful generative resource, but final marketing content should remain subject to informed human evaluation. Translator-training programs should similarly develop both AI literacy and the critical and creative skills required to assess, reject, adapt, and refine machine-generated solutions.

Several limitations should be considered. The study uses a purposive corpus of 30 short marketing texts, one translation direction (English–Arabic), and one AI system (ChatGPT 5.6), which limits generalizability. The analysis also relies on researcher coding and a single expert evaluator. Because the human-only and human–AI collaborative outputs were produced by different professional translators, individual differences in translator expertise and style may also have contributed to the observed differences between these conditions.Moreover, functional effectiveness was assessed through expert judgment rather than Arabic consumer responses or actual marketing outcomes; the findings therefore reflect textual and expert-assessed performance rather than demonstrated market effectiveness.

Consequently, future research should examine larger and more diverse corpora, additional language pairs, marketing genres, AI systems, and multiple independent evaluators. Audience-based studies would be particularly valuable for determining whether differences identified through expert evaluation translate into measurable differences in consumer response and persuasive effectiveness. Finally, the study suggests that the value of AI in marketing transcreation lies not in replacing human creativity, but in creating a collaborative environment in which human cultural, rhetorical, and functional judgment can guide and refine machine-generated translations.

Funding: This research received grant no. (816) from the Arab Observatory for Translation (an affiliate of ALECSO), which is supported by the Literature, Publishing & Translation Commission in Saudi Arabia.

Conflicts of Interest: The author declares no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the author and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

Aksoy, R. (2024). Transcreation of advertisements as narratives. Journal of Narrative and Language Studies, 12(26), 415-425.

Al-Badawi, M., Al-Tarawneh, A., Murshed, A. A., alrahamneh, A., & Alhalalmeh, A. H. (2024). Investigating the impact of language choices and strategies on international business negotiations, marketing campaigns, and cross-cultural collaborations. In Frontiers of Human Centricity in the Artificial Intelligence-Driven Society 5.0 (pp. 443-449). Cham: Springer Nature Switzerland.

Babić, V. (2023). Translator's Role in Advertising: Transcreation as a Localization Strategy (Doctoral dissertation, Sveučilište u Zagrebu, Sveučilište u Zagrebu, Filozofski fakultet, Odsjek za anglistiku).

Boiko, Y. V. (2025). Intercultural business communication: strategies for translating marketing texts. Науковий вісник Дрогобицького державного педагогічного університету імені Івана Франка.

Chen, J., Liu, Z., Huang, X., Wu, C., Liu, Q., Jiang, G., ... & Chen, E. (2024). When large language models meet personalization: Perspectives of challenges and opportunities. World wide web, 27(4), 42.

Díaz-Millón, M., & Olvera-Lobo, M. D. (2023). Towards a definition of transcreation: a systematic literature review. Perspectives, 31(2), 347-364.

Giustini, D., Muszyński, K., & Pulignano, V. (2026). You sneak the human back in: Automatic translation technologies and the pursuit of meaningful creative work in professional translation. Work and Occupations, 53(3), 661-706.

Hadi, M. U., Qureshi, R., Shah, A., Irfan, M., Zafar, A., Shaikh, M. B., ... & Mirjalili, S. (2023). Large language models: a comprehensive survey of its applications, challenges, limitations, and future prospects. Authorea preprints, 1(3), 1-26.

Hassani, G., Malekshahi, M., & Davari, H. (2025). AI-Powered transcreation in global marketing: Insights from Iran. ELOPE: English Language Overseas Perspectives and Enquiries, 22(1), 203-221.

Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. Journal of the academy of marketing science, 49(1), 30-50.

Jiménez-Crespo, M. A. (2024). Transcreation in Translation and the Age of Human-Centred AI: Focusing on "Human" Creative Touch. In New Perspectives in Media Translation: Transcreation in the Digital Age (pp. 309-320). Cham: Springer International Publishing.

Kussmaul, P. (1991). Creativity in the Translation Process: Empirical. In Translation Studies: The State of the Art: Proceedings of the First James S Holmes Symposium on Translation Studies (No. 9, p. 91). Rodopi.

Navarro, S. (2025). Transcreation in the Tourism Domain: Is Artificial Intelligence Up to the Task?. In Applying Artificial Intelligence in Translation (pp. 117-131). Routledge.

Nord, C. (1997). Translating as a Purposeful Activity: Functionalist Approaches Explained. Manchester: St. Jerome.

Sophie, E. R. (2025). The Role of Technology in Addressing the Shortage of Human Translators.

Spinzi, C. (2024). Exploring Emotional Skills for Transcreation: Proactivity as Fostering Creativity in Digital Promotional Tourism Transcreations. In New Perspectives in Media Translation: Transcreation in the Digital Age (pp. 229-257). Cham: Springer International Publishing.

Sun, S., Liu, K., & Moratto, R. (2025). Introduction: Navigating the Paradigm Shift–Translation Studies in the Age of AI. In Translation studies in the age of artificial intelligence (pp. 1-17). Routledge.

Tarawneh, A. (2025). Transcreation in E-commerce Marketing: Adapting Brand Messages for Different Cultural Contexts. In Artificial Intelligence, Sustainable Technologies, and Business Innovation: Opportunities and Challenges of Digital Transformation (pp. 553-562). Cham: Springer Nature Switzerland.

Torresi, I. (2020). Translating promotional and advertising texts. Routledge.

Walter, K., & Agnetta, M. (2025). Automated Translation, Creativity and Ethics: General Considerations. Yearbook of Translational Hermeneutics, 5(1), 11-31.

Wei-jia, Z. H. U. (2024). Transcreation in Advertisement Slogans from the Perspective of Communicative Translation Theory. Journal of Literature and Art Studies, 14(5), 349-354.

Appendix 1 (Data of the study)

Text ID	Category	Brand	English marketing texts	AI Translation Chat GPT 5.6	Human Translation	AI-Human collaboration
T01	Technology	Apple	"Think different."	فكّر بشكل مختلف	فكّر خارج المألوف	فكّر خارج المألوف.
T02		Samsung	"Do What You Can't"	افعل ما لا تستطيع	تحدَّ المستحيل	تجاوز حدود المستحيل
T03		Lenovo	"Smarter Technology for All"	تقنية أذكى للجميع	تقنية أذكى للجميع	تقنيةٌ أذكى... لحياةٍ أسهل للجميع
T04		IBM	"Let's create"	لنُبدِع	لنُبدِع	لنُطلق العنان لإبداعنا.
T05		Adobe	"Creativity for All"	الإبداع للجميع	الإبداع للجميع	الإبداع للجميع... بلا استثناء

Text ID	Category	Brand	English marketing texts	AI Translation Chat GPT 5.6	Human Translation	AI-Human collaboration
T06		Microsoft	"Microsoft Copilot, your everyday AI companion"	مايكروسوفت كوبايلوت، رفيقك الذكي في حياتك اليومية	مايكروسوفت كوبايلوت، رفيقك الذكي كل يوم	مايكروسوفت كوبايلوت... ذكاءٌ يساندك في كل خطوة
F01	Food & Beverages	Coca-Cola	"Real Magic"	سحرٌ حقيقي.	سحرٌ حقيقي	سحرٌ ينبض بالحياة
F02		Pepsi	"If you love it, it's never a waste."	إذا كنت تحبّه، فلن يكون هدرًا أبدًا	ما دمت تحبّه، فلا شيء يضيع	ما أحبّه القلب، لا يذهب هدرًا
F03		McDonald's	"I'mlovin' it"	أنا أحبّه	أنا أعشقها	مذاقٌ أحبّه
F04		KFC	"It's Finger Lickin' Good"	لذيذٌ حتى آخر لعقةٍ لأصابعك.	لذيذٌ لدرجة أنك ستلعق أصابعك	مذاقٌ لا يُضاهى
F05		Lay's	"No Lay's, No Game"	لا ليز، لا متعة	لا ليز، لا متعة	مع ليز، تكتمل المتعة
F06		Cadbury	"there's always a glass and a half in everyone!"	في داخل كلٍّ منا كأسٌ ونصف!	في داخل كلٍّ منا قدرٌ من الكرم!	في داخل كلٍّ منا روحٌ من الكرم
S01	Fashion/Sports	Nike	"Just Do It"	فقط افعلها	انطلق وافعلها	لا تتردد... أنطلق وافعلها
S02		adidas	"You Got This"	أنتَ لها	أنتَ لها	أنتَ لها
S03		PUMA	"Forever Faster"	أسرع دائمًا	أسرع دائمًا.	دائمًا... أسرع
S04		Levi's	"Live in Levi's®"	عِش مع ليفايز®	عِش يومك بليفايز®	عِش يومك ® بليفايز
S05		Under Armour	"PROTECT THIS HOUSE"	احمِ هذا البيت	دافع عن عرينك	بيتك... مسؤوليتك
S06		New Balance	"We Got Now"	الحاضر لنا	وقتنا الآن	اللحظة لنا... فلنصنعها
R01	Tourism/Travel	Visit Britain	"whatever your cup of tea, we've got it."	مهما كان ذوقك، لدينا ما يناسبك	لكل ذوقٍ ما يرضيه، ولدينا ما يرضيك.	ذوقك له حكاية... وعندنا ما يُكملها
R02		Tourism Australia	"Come and say G'day"	تعالَ وقل: مرحبًا على الطريقة الأسترالية	تعالَ وقلها بالأسترالية: أهلًا!	تعالَ وقلها بروح أستراليا: أهلًا!
R03		Tourism New Zealand	"100% Pure New Zealand"	نيوزيلندا نقية.100%	نيوزيلندا... طبيعةٌ خالصة 100%	نيوزيلندا... طبيعةٌ خالصة% 100
R04		Tourism Ireland	"Fill your heart with Ireland"	املأ قلبك بحبّ أيرلندا	دع أيرلندا تملأ قلبك	أيرلندا... رحلةٌ إلى القلب
R05		Emirates	"Fly Better"	حلّق بأفضل تجربة	حلّق نحو الأفضل	حلّق نحو الأفضل
R06		Visit Scotland	"Scotland is Calling"	اسكتلندا تناديك	اسكتلندا تناديك	اسكتلندا تناديك... فهل تلبي النداء؟
L01	Lifestyle/Services	Airbnb	"a world where anyone can belong anywhere"	عالمٌ يستطيع فيه الجميع أن يشعروا بالانتماء أينما كانوا	عالمٌ يجد فيه كلُّ شخصٍ مكانه أينما كان	أينما ذهبت... ستجد مكانًا تنتمي إليه
L02		Spotify	"LISTENING IS EVERYTHING"	الإنصات هو كل شيء	كلُّ الحكاية في الإنصات.	الاستماع... هو كل الحكاية

Text ID	Category	Brand	English marketing texts	AI Translation Chat GPT 5.6	Human Translation	AI-Human collaboration
L03		Mastercard	"There are some things money can't buy. For everything else, there's Mastercard."	هناك أشياء لا يمكن للمال شراؤها. ولكل ما عدا ذلك، هناك ماستركارد	أشياءٌ لا تُشترى بالمال، وما عداها... ماستركارد	ثمة أشياء لا تقدر بثمن... وما عداها، ماستركارد
L04		IKEA	"Show off your savvy. IKEA. The Wonderful Everyday."	أبرِز براعتك. إيكيا. روعة كل يوم	أظهر لمستك الذكية. إيكيا... روعةٌ في كل يوم	عبّر عن ذوقك بذكاء. إيكيا... روعةٌ ترافقك كل يوم
L05		Uber	"Move What Matters"	حرّك ما يهمّك.	انقل ما يهمّك	ما يهمّ... يستحقّ أن يمضي
L06		American Express	"Don't Live Life Without It"	لا تعِش الحياة من دونها	لا تعِش حياتك من دونها	اجعلها جزءًا من كل لحظة

Appendix 2: Translation assessment

The functional evaluation was based on four criteria informed by Nord's (1997) functionalist approach. Each Arabic translation was assessed on a five-point scale (1 = Poor, 2 = Weak, 3 = Acceptable, 4 = Good, 5 = Excellent).

The four assessment criteria were defined as follows:

Functional Adequacy (FA): The extent to which the Arabic translation preserves the intended communicative purpose and central marketing message of the English source text.

Cultural Appropriateness (CA): The suitability of the translation's expressions, cultural references, and associations for Arabic-speaking audiences.

Persuasive Impact (PI): The extent to which the translation conveys an engaging, emotionally appealing, and persuasive promotional message.

Linguistic Fluency (LF): The grammatical accuracy, naturalness, clarity, and stylistic coherence of the Arabic translation.

ID	Mode	FA	CA	PI	LF	Mean
T01	AI	4	5	3	5	4.25
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
T02	AI	4	4	3	4	3.75
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
T03	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
T04	AI	5	5	5	5	5.00
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
T05	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
T06	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75

ID	Mode	FA	CA	PI	LF	Mean
	Human–AI	5	5	5	5	5.00
F01	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	4	5	5	5	4.75
F02	AI	5	5	3	5	4.50
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
F03	AI	3	4	2	3	3.00
	Human	4	4	3	4	3.75
	Human–AI	4	5	4	5	4.50
F04	AI	3	3	2	3	2.75
	Human	4	4	4	5	4.25
	Human–AI	4	5	5	5	4.75
F05	AI	3	4	3	4	3.50
	Human	3	4	3	4	3.50
	Human–AI	4	5	4	5	4.50
F06	AI	2	2	2	4	2.50
	Human	5	5	4	5	4.75
	Human–AI	5	5	4	5	4.75
S01	AI	5	5	4	5	4.75
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
S02	AI	5	5	5	5	5.00
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
S03	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
S04	AI	4	4	3	4	3.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	4	5	4.75
S05	AI	3	3	3	4	3.25
	Human	5	5	5	5	5.00
	Human–AI	4	5	4	5	4.50
S06	AI	4	5	4	5	4.50
	Human	4	5	4	5	4.50

ID	Mode	FA	CA	PI	LF	Mean
	Human–AI	5	5	5	5	5.00
R01	AI	5	5	4	5	4.75
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
R02	AI	3	3	2	3	2.75
	Human	4	4	3	4	3.75
	Human–AI	4	5	4	5	4.50
R03	AI	3	3	2	4	3.00
	Human	5	5	4	5	4.75
	Human–AI	5	5	4	5	4.75
R04	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
R05	AI	4	4	3	4	3.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	4	5	4.75
R06	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
L01	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
L02	AI	4	5	3	5	4.25
	Human	5	5	4	5	4.75
	Human–AI	5	5	4	5	4.75
L03	AI	5	5	4	5	4.75
	Human	5	5	5	5	5.00
	Human–AI	5	5	5	5	5.00
L04	AI	4	4	3	4	3.75
	Human	5	5	4	5	4.75
	Human–AI	5	5	5	5	5.00
L05	AI	5	5	4	5	4.75
	Human	5	5	4	5	4.75
	Human–AI	4	5	4	5	4.50
L06	AI	3	4	2	4	3.25
	Human	4	4	3	5	4.00

ID	Mode	FA	CA	PI	LF	Mean
	Human–AI	4	5	4	5	4.50

Appendix 3: AI translation prompt and generation protocol

You are a professional English–Arabic translator specializing in marketing and advertising translation. Translate the following English marketing text into Modern Standard Arabic for an Arabic-speaking audience. Your translation should function naturally and persuasively as marketing copy in Arabic rather than read like a literal translation. Preserve the intended meaning, communicative purpose, persuasive effect, emotional tone, and brand voice of the English source text. Where a literal rendering would sound unnatural or fail to achieve the intended marketing effect in Arabic, use an appropriate creative solution while maintaining the core message of the source. Produce only one final Arabic translation. Do not provide explanations, alternatives, transliteration, back-translation or commentary.

English source text: