

Human-AI Collaboration in Visual Communication and Creative Strategy: A Generative Artificial Intelligence Framework for Saudi Organizations

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Abstract: Generative artificial intelligence is causing visual communication to take on an interactive character in which both people and computational systems jointly define, develop, test, and enhance creative possibilities. This development is significant for Saudi organisations since visual communication plays a key role in expressing brand identity, narrating service stories, influencing the customer experience, and gaining institutional legitimacy, even though relevant evidence is still dispersed across various fields such as management, marketing, information systems, advertising, and design research. This review gathers thirty peer-reviewed journal studies that were published between 2020 and 2025 and offers an integrative framework for human-AI collaboration in the areas of visual communication and creative strategy. By means of a structured integrative review and thematic synthesis, the study examines the roles of collaboration, the creative outcomes, the organisational capabilities, the governance requirements, and the implications within the Saudi context. The synthesis identifies five recurring mechanisms: humans providing strategic framing, AI carrying out generative expansion, humans taking the lead in curation, validation being based on organisational and cultural criteria, and learning through documented feedback. Even though generative systems can widen the range of ideas, accelerate visualisation, and boost productivity, these advantages do not automatically lead to communication that is distinctive or strategically coherent. Over-reliance on machine suggestions can reduce diversity, while poor delegation, low AI literacy, and insufficient validation can cause errors to be amplified or the brand message to be diluted. The proposed Generative Human-AI Visual Strategy framework regards human judgment as the final authority and views generative AI as a collaborative partner with well-defined boundaries. For Saudi organisations, effective implementation therefore demands involvement from leadership, the capacity to carry out bilingual and cultural interpretation, the introduction of clear review stages, controls over provenance, the development of the necessary capabilities, and feedback loops that transform experimentation into organisational learning.

Keywords: Generative Artificial Intelligence; Human-AI Collaboration; Visual Communication; Creative Strategy; Generative AI; Brand Identity; Organisational Capabilities.

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1 INTRODUCTION

Visual communication has now become a strategic ability of organisations rather than a design activity that is carried out after the main work has been completed. The corporate identities, marketing campaigns, interfaces, content for social media, the narratives presented to investors, and the various transformation programmes all depend on visual choices that convert complex intentions into forms which can be readily understood. However, generative artificial intelligence has altered both the economic aspects and the speed at which these forms are created. Today, text-to-image systems, multimodal assistants, and generative editing tools can produce variations, layouts, combinations of text and images, and prototypes at speeds that previously required a great deal of production time. The challenge for managers is therefore how organisations should distribute creative control in such a way that speed and scale do not compromise strategic judgement, originality, accountability, or cultural meaning.

Before the current generative stage, it had been demonstrated that AI changes the process of innovation by causing human activity to shift from coming up with repeated solutions to one that includes sensemaking, the selection of problems, and the coordination [1]. Moreover, marketing research had also warned that while machine learning may generate value it at the same time leads to opacity, errors in the objective function, biased outputs, and issues concerning the transfer of knowledge [2]. Additionally, research that involved humans in the loop showed that augmentation is not a fixed division of labor; instead, the various configurations change as the workers reinterpret the advice given by the algorithms and reorganise their work around this [3]. These findings are significant for visual strategy since a well-polished final product can conceal flawed reasoning: an attractive image might still be strategically irrelevant, culturally inappropriate, legally risky, or similar to that of the competitors.

This latest research supports the concern in question. When organisations are studied, the introduction of AI is seen as a matter relating to data, skills, coordination, and managerial resources and this is linked to organisational creativity and performance [6-9]. Experiments with both humans and AI reveal both complementary effects and cognitive limitations: while AI advice can improve individual accuracy it also leads to a reduction in individual knowledge and people often fail to decide correctly whether or not to delegate [10-16]. In creative areas, AI can increase productivity and help in the generation of ideas, but there is also evidence of convergence, anchoring, identity conflicts, and the risk that gains in efficiency will be mistaken for signs

of creative quality [13-23]. The issue that arises is how to connect generative capacity with purposeful framing, informed selection, critical validation, and organisational accountability.

This applies in particular to Saudi Arabia. Evidence from public-sector organisations in Saudi Arabia shows that the process of integrating AI depends not only on technical resources but also on the way in which leaders direct attention, interpret priorities, set in motion the communication channels, and deal with institutional constraints [15,30]. Because visual communication requires a higher level of contextual sensitivity, organisations often send messages to both Arabic- and English-speaking audiences, to local and international audiences, using traditional and modern cultural references and dealing with both public and commercial situations. Even though generative AI can increase the variety of possible options, the meaning of these options still has to be interpreted by humans in terms of language, symbolism, audience expectations, brand positioning, and reputational risk.

1.1 Research Problem and Gap

The number of works dealing with human-AI creativity is rising rapidly, but they are dispersed across various types of discussion. Research in the fields of innovation and information systems examines augmentation, the development of capabilities, trust, delegation, and the process by which organisations adopt these systems [3-16]. Studies in marketing and advertising concentrate on content generation, customer relationships, creative systems, and the tensions between professionals [2-28]. The research carried out in the areas of design and human-computer interaction looks at text-to-image idea generation, prompt-mediated exploration, aesthetic co-creation, and conceptual design workflows [18-29].

There are three gaps. The first is that a great deal of the existing discussion treats creativity as something that belongs to the output, whereas in fact organizational visual communication involves a sequence of decisions ranging from the way the problem is formulated to its final implementation. The second is that many of the studies either focus on individual creative performance or on technology adoption, and as a result the connection between co-creation at the micro level and governance at the organizational level remains unclear. The third is that the Saudi context is usually mentioned in connection with general AI adoption rather than in relation to the particular demands of visual strategy, bilingual communication, cultural stewardship, and brand legitimacy. It follows that a useful framework should include consideration of who frames the tasks, who evaluates the alternatives, who applies the controls,

who judges the cultural meaning, and who retains the learning after each project.

1.2 Aim, Objectives, and Review Questions

The review gathers the most recent evidence on human-AI collaboration in the field of visual communication and creative strategy with the aim of developing a framework suitable for the context of organisations in Saudi Arabia. It is based on five objectives. The first of these is to identify the different roles that generative AI can play at various stages of the visual strategy process. The second objective is to examine the mechanisms which determine whether collaboration results in an expansion or a narrowing of creativity. The third objective is to consider trust, delegation, literacy, validation and governance as the conditions needed for reliable co-creation. The fourth objective consists of interpreting these mechanisms in the context of Saudi organisations, with a particular focus on leadership, cultural meaning, bilingual communication and institutional accountability. The fifth objective is to combine the findings into a practical framework that preserves human strategic authority while taking advantage of the speed and variety that generative AI offers.

The review therefore raises four questions: the first being, 'How should the roles of humans and generative-AI be distributed across the different stages of visual communication and creative strategy?' The second is, 'When does collaboration between humans and AI promote creative exploration without resulting in convergence, dependency, or a loss of strategic distinctiveness?' The third is, 'What organizational capabilities and governance controls are required in order to verify and extend generative visual work?' and the fourth is, 'In what way should these principles be adapted so as to apply to Saudi organisations working in communication environments that are both culturally and linguistically diverse?'

2 CONCEPTUAL BACKGROUND

2.1 From Automation to Collaborative Creative Agency

AI is generally described in terms of automation and augmentation, but this distinction becomes vague when it comes to creative tasks. Raisch and Krakowski argue that automation and augmentation form an interdependent paradox since the tasks can change between machine and human control over time, and placing too much emphasis on one of these aspects may have negative consequences [9]. Grønsund and Aanestad make the same observation, stating that human-in-the-loop working arrangements emerge as a result of practice rather than being established from the start [3]. In the case of visual communication, assigning AI to idea generation and people to final approval is too simple.

Generation can alter the problem definition, uncover unforeseen possibilities, correct the creators and change the way feasibility is seen; human judgement is required at all stages of the process.

The notion of sharing creative control is a valuable one. The generative systems offer computational variation, recombination, rapid visualization, and responsive iteration, while it is the humans who provide purpose, give a situational interpretation, take on ethical responsibility, possess taste, ensure narrative continuity, and are able to judge consequences beyond those specified in the prompt. This arrangement of roles is consistent with the evidence that AI can enhance information processing and innovation [7], and also with the fact that organizational creativity depends on complementary resources [8]. It also explains the findings that people using AI may become more accurate yet at the same time less differentiated since they tend to converge on similar advice [10]. The goal is to achieve complementarity without falling into homogenization.

2.2 Visual Communication as Strategy, Not Decoration

Visual outputs become strategic in that they affect the way in which stakeholders perceive, interpret, and are able to tell the different things apart. For a long time, advertising research has seen creativity as a sort of structured search problem in which novelty must be combined with relevance and then assessed according to certain criteria [13]. Since users can now produce a large number of alternative options quickly, generative AI has expanded the range of creative possibilities; but the value of this wider range of options is only achieved if the criteria employed in selecting them are strategically important. Marketing research backs this up by showing that AI can be of assistance in personalization, content creation, and customer engagement, while at the same time causing concerns about bias, transparency, and inappropriate automation [2-22].

The same difference can be seen at the design stage in research into text-to-image systems. Paananen and his co-workers found that image generators can help to enable serendipitous discoveries and the generation of imaginative ideas, but their usefulness depends on the presence of constraints and on the user's level of skill [26]. Barros and Ai show that text-to-image systems can aid in the exploration of ambiguity and in the development of sketches, although they are still limited when it comes to producing coherent solutions for later design phases [25]. It is essential not to regard high-fidelity imagery as equivalent to high-fidelity reasoning. Organizations need criteria that allow

them to distinguish between visual plausibility and strategic fitness since refined artefacts can occur before a clear message, audience logic, or brand architecture.

2.3 Human Judgment, Trust, and AI Literacy

It is not generally in people's interest to place trust in AI, and this trust cannot be based simply on confidence in its technical performance. Glikson and Woolley point out that both cognitive and emotional trust are affected by various factors, for example by the type of AI representation and by one's perception of its intelligence [4]. Shin has shown that explainability and causability have an impact on trust and acceptance, which means that people need clear reasons for relying on the output of algorithms [14]. In creative situations, complete technical explainability may be unrealistic, but process explainability can still be obtained: teams can keep records of the prompts, the source materials, the reasons for their selections, the revisions, and the approval decisions. This kind of traceability shifts trust away from a general belief in the model and towards an accountable explanation of how a result was produced and evaluated.

AI literacy is just as important. Pinski and Benlian define AI literacy broadly as the kind of proficiency which enables the purposeful, efficient, critical, and ethical use of AI rather than merely becoming familiar with its interfaces [24]. In the case of visual teams, this kind of literacy includes understanding the limitations of the models, seeing prompting as an iterative method of specification, being aware of the risks linked to reference images, recognising cultural bias, identifying any hallucinated text or symbols, dealing with inconsistent continuity, and knowing the difference between exploration and production readiness. It should be combined with domain expertise since people might misjudge their own comparative advantage in relation to AI [16]. Visual communicators therefore need to adopt a metacognitive approach when it comes to determining what AI can accelerate, what must be verified, and where human judgment is still necessary.

3 REVIEW METHODOLOGY

A thematic synthesis carried out in an integrative review manner was employed. This approach is suitable for a problem which involves conceptual, qualitative, experimental, review, and design-oriented evidence, whereas a narrow meta-analysis would have been inappropriate because the different studies lack common outcome measures, tasks, or units of analysis.

The review boundary covered peer-reviewed journal studies which had been published

between January 2020 and December 2025. The search concepts were split into four intersecting areas: human-AI collaboration and augmentation; generative AI and creativity; visual communication, advertising, marketing and design; and organizational adoption with a special emphasis on the Saudi context. The Boolean combinations appropriate for use with databases included such terms as "generative AI", "artificial intelligence", "human-AI collaboration", "augmentation", "co-creation", "text-to-image", "visual communication", "advertising creativity", "creative strategy", "design", "AI capability", "AI literacy", "Saudi Arabia" and "AI assimilation". Citation checking was performed in order to locate work that was conceptually central and connected these areas.

Only a study was included if it met four conditions: it had to have been published between 2020 and 2025; it had to have appeared in a peer-reviewed journal; it had to have a resolvable DOI; and it had to be substantially relevant to at least one of the mechanisms specified in the proposed model, such as creative generation, collaboration, delegation, trust, literacy, organizational capability, advertising practice, design ideation, or Saudi AI assimilation. Those papers which contained only technical work on the model and no element relating to humans or organizations were excluded, as were non-peer-reviewed commentaries, conference proceedings, books, and all sources outside the defined date range. The final analytical corpus comprised thirty studies, and before the studies were included the DOI strings together with the bibliographic metadata were checked against the records of the publisher or the indexing organisation.

The evaluation of the quality took into account conceptual clarity, methodological transparency, the extent to which the findings addressed the review questions, and the extent to which they could be applied to organizational creative work. The corpus was subjected to two rounds of coding. In the first round, the role given to AI, the role kept with humans, the task stage, the reported benefit, the reported risk, and the enabling condition were all recorded. In the second round, these codes were combined into broader themes: framing, generative expansion, curation, validation, governance, capability development, and learning. Findings that were in conflict were kept rather than being averaged out; for instance, the evidence that generative AI can enhance individual creativity [23], was considered together with the evidence that shared AI assistance can lead to a reduction in collective diversity [10-23]. The studies from Saudi Arabia were then used as a contextual perspective to look at how leadership attention and communication

influence organizational assimilation [15-30]. Table 1 provides a summary of the review design.

The review has some methodological limitations; it focuses on journal articles in English that have resolvable DOIs and as a result does not include every professional practice report or case study from a particular region. Since the body of

evidence relating to generative visual communication is more recent than that available in the wider field of organizational AI, research specifically concerning Saudi Arabia is still scarce. Accordingly, the framework is a conceptual synthesis based on evidence rather than a model that has been causally validated, and the propositions are meant to be tested in Saudi organizations.

Table 1: Structured integrative review design

Element	Specification
Review scope	Peer-reviewed journal evidence on human-AI collaboration, creativity, visual communication, design, marketing/advertising, organizational AI capability, and Saudi AI assimilation.
Time boundary	2020-2025 inclusive.
Search concepts	Generative AI; artificial intelligence; human-AI collaboration; augmentation; co-creation; text-to-image; visual communication; advertising creativity; creative strategy; design; AI capability; AI literacy; Saudi Arabia; AI assimilation.
Inclusion criteria	Journal article; DOI-resolvable; within date range; substantive relevance to collaboration, creative process, governance, capability, or Saudi context.
Exclusion criteria	Purely technical model papers without human/organizational relevance; books; conferences; non-peer-reviewed commentary; sources outside the date range.
Synthesis procedure	Two-cycle coding: roles, stages, benefits, risks and enabling conditions; then higher-order synthesis into framing, expansion, curation, validation, governance, capability and learning.

4 THEMATIC SYNTHESIS OF EVIDENCE

4.1 Strategic Framing Remains a Human Responsibility

The most prominent example across different fields is the fact that AI generates value whenever the problem has been clearly defined from a strategic point of view. Verganti and his colleagues claim that as algorithms take on more work that is oriented towards finding solutions, human designers tend to move on to tasks involving sensemaking and deciding which problems are worth addressing [1]. Borges and his colleagues do the same, treating the strategic use of AI as a question of aligning technological capability with business objectives [6]. This difference is important since prompts can take the place of briefs. A prompt tells you what needs to be produced; a strategic brief, on the other hand, explains the reason for the communication, specifies who needs to change their interpretation, states what brand meaning must be kept, and defines what success looks like.

Generative AI should therefore come in at the stage following the initial framing gate, not before. The human teams should determine the intended message, the audience, the hierarchy of the message, any cultural sensitivities, the brand restrictions, the factual requirements, the conditions relating to the channel, and the non-negotiable exclusions. The AI can then respond to the brief by suggesting alternative metaphors, different visual areas, other ways of interpreting the audience, or different scenarios. This results in a productive asymmetry since people retain ownership of the

strategic issue while the AI broadens the range of possible representations, thus lowering the risk that a particularly convincing machine suggestion will quietly alter the objective.

4.2 Generative Expansion Accelerates Divergent Exploration

The most obvious advantage of generative systems is their ability to cause rapid divergence. Studies in the fields of advertising and design have shown that AI can extend the process of idea generation, provide surprising stimuli, speed up early visualization, and reduce the cost of iteration [13-29]. Experimental evidence from professional writing also shows significant improvements in productivity when generative assistance is used, suggesting that the technology is able to cut down on production time and enhance the quality of the output for tasks involving a limited amount of knowledge [21]. With regard to visual work, productivity can be shifted from focusing on producing the first acceptable asset more quickly to exploring a wider variety of different areas before making a commitment.

The difference is important since quantity by itself does not imply creativity. A group which requests fifty different versions based on the same stylistic approach might end up with a great deal without any real diversity. If expansion is to be effective then it must involve intentional variation in terms of audience tensions, narrative frames, cultural metaphors, information hierarchies, abstraction, and channel context. It is up to human creators to design the search space while the AI carries out the

accelerated recombination within it. Visual exploration is enhanced when each generation round responds to a question rather than simply generating more images.

The literature also warns that the same mechanism may have the effect of reducing diversity. Doshi and Hauser discovered that access to generative AI can improve individual creative results at the same time as it decreases the collective diversity of the content produced [23]. Fügner and his colleagues similarly demonstrate that when people are given AI advice their responses tend to converge even though their individual accuracy improves [10]. For organisations, this leads to a portfolio risk in that teams might become locally efficient while the brand ecosystem ends up being similar to that of competitors or becomes internally repetitive. Diversity should thus be managed deliberately by means of comparisons that involve only humans, using independent prompting before any group exposure, employing a variety of references, and carrying out similarity checks at the portfolio level.

4.3 Curation is the Central Human Creative Act

As generation becomes cheap, selection then becomes a strategically costly process. Human value is then directed towards deciding which options merit development, which combinations give rise to meaning, and which attractive courses of action should be rejected. This is in agreement with advertising models which define creativity in terms of both novelty and appropriateness [13], and with research demonstrating that human intervention can enhance aesthetic outcomes in AI-assisted creative production [18]. Curation is thus not merely a final quality-control stage; it is a form of active creative authorship.

Since generative systems are not able to reliably bring together a number of different criteria on their own, strong curation involves taking into account fit with the organization's purpose, relevance to the audience, originality in comparison to competitors, semantic accuracy, visual hierarchy, emotional tone, cultural appropriateness, accessibility, feasibility, and long-term brand consistency. Curators have to tell the difference between productive surprise and distortion: a surprising metaphor might open up a worthwhile avenue, while a made-up cultural symbol or wrong Arabic typography could result in reputational damage. That is the reason why visual teams should keep domain specialists, brand owners, and cultural reviewers even as routine production becomes more and more automated.

Structured comparison, rather than relying just on intuitive preference, also proves beneficial for curation. Teams can assess the concepts that have been shortlisted according to criteria that are specific to the brief, record the reasons why certain concepts are rejected, and keep the rejected alternatives since they may indicate useful strategic boundaries. The records thus created act as organizational memory and turn isolated prompt crafting into a reusable creative ability.

4.4 Validation Must Separate Aesthetic Quality from Organizational Acceptability

The evidence clearly indicates that AI-generated output needs to be validated in a number of areas beyond just surface quality. De Bruyn and his co-authors point out issues of opacity, bias, and problems relating to the objective function in the context of AI-driven marketing [2]. Dwivedi and his colleagues highlight the risks concerning bias, transparency, credibility, privacy, and misuse [19, 20]. Kshetri and his colleagues do the same by describing the obstacles to the use of generative AI in marketing together with the content and personalization opportunities it offers [22]. In the field of advertising, Osadchaya and his colleagues point to operational and identity paradoxes that arise with the adoption of generative technologies [27], while Cui and his colleagues see validation as a separate stage occurring between co-creativity and execution [28].

In order to achieve effective visual communication, validation must go through a number of stages. A strategic gate should verify that the concept is still aligned with the original objective. A factual gate must examine the claims, labels, figures, locations, product features, and all other text that has been generated. A brand gate is responsible for ensuring consistency and distinctiveness of the brand identity. A cultural-linguistic gate should assess the meanings in Arabic and English, the symbolism, the social context, and sensitivity to the audience. A legal-ethical gate has to look at issues relating to rights, privacy, representation, disclosure, and provenance. A production gate must check the technical quality, accessibility, format, continuity, and suitability for the channel. It is not necessary for any one reviewer to be in charge of all the gates, but there must be clear assignment of organizational responsibility for each one.

The model's use of multiple gates also leads to better trust calibration. Rather than inquiring if its employees 'trust AI', the organisation looks at which output dimensions have been independently verified and which are still uncertain. Explainability in this case becomes a procedure whereby the team can demonstrate the brief, the model's role, the input

references, the prompt iterations, the human modifications, the review decisions, and the final approval. This approach is more useful for creative governance than attempting to reconstruct the model's internal reasoning.

4.5 Capability, Leadership, and Communication Determine Whether Experimentation Scales

Although generative tools are easy to access they are hard to assimilate consistently. Mikalef and Gupta state that AI capability consists of a range of complementary organizational resources and is linked to both creativity and performance [8]. Similarly, Haefner and his colleagues maintain that AI transforms the way in which organizations carry out innovation rather than acting as a separate technical addition [7]. Pinski and Benlian apply this line of reasoning to the users as well: AI literacy involves critical, purposeful, and ethical competence, not just familiarity with the interface [24]. Visual teams therefore need an operating system for generative work rather than a number of separate individual subscriptions.

The evidence from Saudi Arabia makes leadership particularly important. Alshahrani and his colleagues demonstrate that attention from decision makers helps them deal with the challenges of integrating AI into public-sector organisations [15]. Further case evidence shows that leadership attention and direct communication affect priorities, the allocation of resources, the management of resistance, and the integration of both AI and generative AI initiatives [30]. When it comes to visual communication, leaders decide whether AI is presented mainly as a tool for reducing costs, as an innovation capability, or as a controlled experimentation platform. This way of framing has an impact on behaviour: incentives that focus only on speed lead to superficial outputs, while rewards given for distinctive and validated communication can reinvest efficiency into exploration and evaluation.

Leadership should therefore support the establishment of common standards while at the same time allowing space for creative experimentation. Useful infrastructure would involve approved categories of tools, rules for handling data, documentation of prompts and assets, the assignment of review duties, training routes, pilot

budgets, and procedures for escalating cases that are uncertain. Just as important is communication, since a creative identity may be undermined when expertise is seen as merely consisting of prompting [27, 28]. AI adoption should rather be presented as involving less low-value repetition and more responsibility for framing, interpretation, curation, and accountability.

4.6 Saudi Context: Localization Needs More Than Just Translation.

For Saudi organizations localization is not merely the last stage of translation; it is a design requirement which should affect framing, generation, and evaluation right from the start. There are differences between Arabic and English in terms of typography, direction of reading, rhetorical emphasis, density, symbolism and audience expectations. Moreover, the various sectors of Saudi society have different legitimacy needs. A visual concept that is suitable for use in a presentation to international investors cannot simply be applied to communication directed at citizens or to culturally based consumer campaigns.

Generative AI can assist with localization by rapidly generating alternatives, investigating visual metaphors, adapting layouts, and testing bilingual combinations. The problem is that the models learn from unbalanced datasets and are therefore likely to produce stereotyped or generic representations. It is for this reason that human cultural stewardship must be a core capability. Reviewers need to determine whether an output treats Saudi identity as a lived experience rather than merely as a set of decorative motifs and they should also be able to tell the difference between intentional cultural references and superficial localization.

5 GENERATIVE HUMAN-AI VISUAL STRATEGY FRAMEWORK

A five-stage Generative Human-AI Visual Strategy framework, known as GHAVS, is proposed by the synthesis. This framework views collaboration as a governed learning cycle consisting of the stages Frame, Expand, Curate, Validate, and Learn. Humans have overall strategic authority throughout all the stages while the AI carries out specific, defined roles. Figure 1 illustrates the collaboration loop and Figure 2 depicts the organisational structure needed to support it.

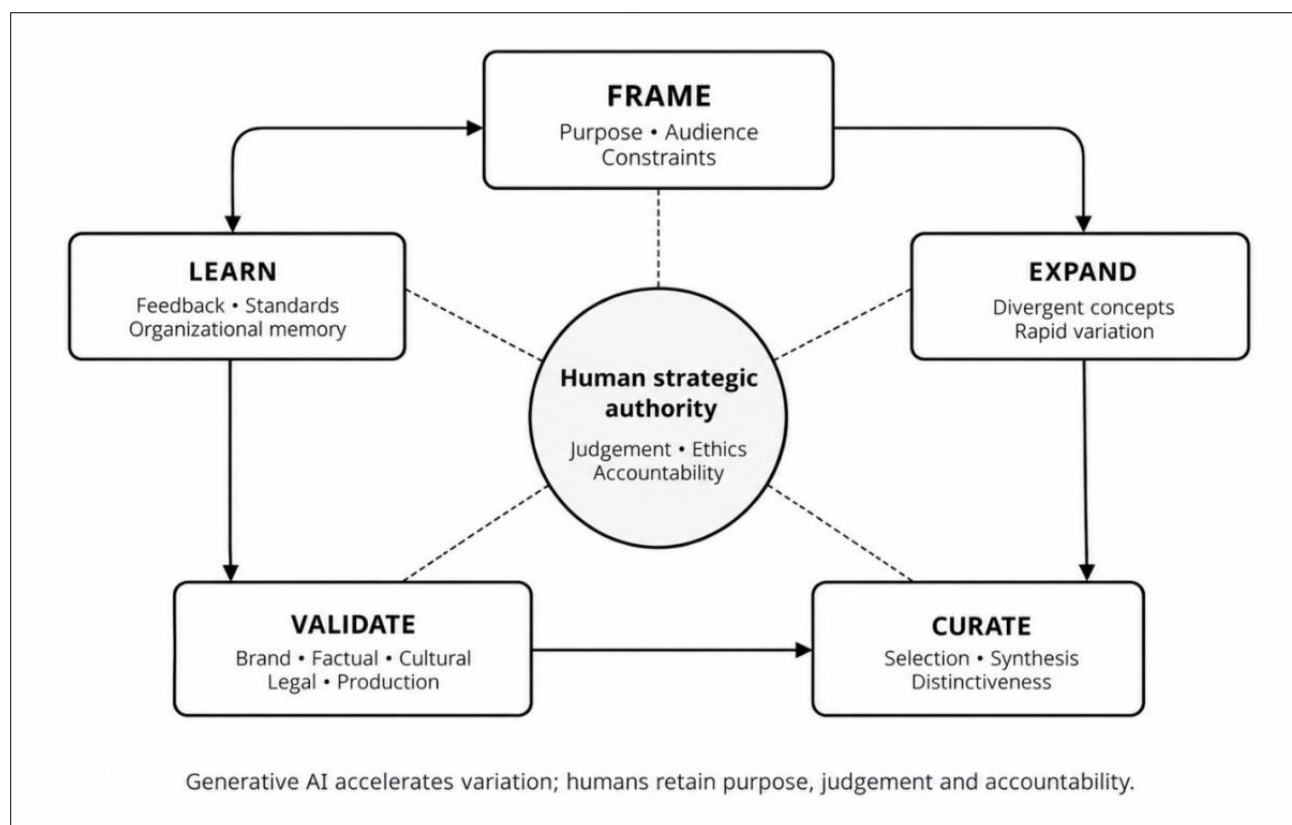


Figure 1: Human-AI visual strategy collaboration loop: human strategic authority governs iterative generative expansion, curation, validation and learning.

Stage 1, Frame, sets the goal before starting. People define the communication problem, stakeholder, what they want others to think or do, main message, brand rules, cultural factors, needed proof, and limits. AI can help organize research, suggest different problem statements, or offer challenge questions. However, it does not set the goal.

In Stage 2, Expand, generative AI functions as a tool to increase diversity. The teams look at a number of different conceptual areas rather than sticking to one aesthetic approach. The prompts should vary the narrative assumptions, the metaphor families, the compositional logic, the levels of abstraction, the audience contexts, and the channel formats. The human creators then examine the surprising results, combine partial ideas, and intentionally produce outputs that go in the opposite direction in order to prevent becoming fixed on a single idea. The result is a structured set of possibilities together with a documented explanation, not a final product.

In Stage 3, the Curate phase reasserts human authorship by means of selection and synthesis. The teams evaluate the various options using clear strategic and creative criteria. While AI may assist by grouping the options, highlighting the differences, or producing controlled improvements, it is the responsible human decision makers who carry out

the final prioritisation. The concepts that are shortlisted should be strategically explainable, meaning that their intended meaning, the way they differ from others, and the unresolved risks should all be clear.

In the fourth stage, Validation, creative potential is turned into communication that is acceptable within an organizational context. The concepts go through checks relating to strategy, facts, brand, cultural-linguistic aspects, legal and ethical considerations, and production. Where there are high-risk uses, specialist review and more robust provenance records are required. In the case of uncertain claims, symbols, or language, independent verification is necessary. Moreover, during the validation stage it is determined whether or not AI involvement should be disclosed in accordance with organizational policy or the specific requirements of the channel.

In Stage 5, Learn, evidence gathered during deployment is fed back into future briefs. The teams keep records of which prompts or references led to useful divergence, which failure modes reoccurred, which review criteria picked up problems, and how the audiences reacted. This stops generative practice from staying as isolated tacit knowledge. At the same time, it helps to build dynamic capability in that the organization improves not since the model

automatically learns from each campaign, but because people turn project experience into shared routines, standards, and judgment.

Around the cycle there are three overlapping areas of governance. The first of these is capability, which includes AI literacy, visual expertise, cultural and linguistic competence, awareness of data, and the ability to provide strategic briefings. The second is

accountability, involving designated owners for briefs, approvals, rights, factual verification, and the process of escalating risks. The third is distinctiveness, meaning that there should be active monitoring for visual convergence, imitation, excessive use of generic styles, and a loss of the brand's specific grammar. Table 2 shows how the evidence themes correspond to these operational requirements.

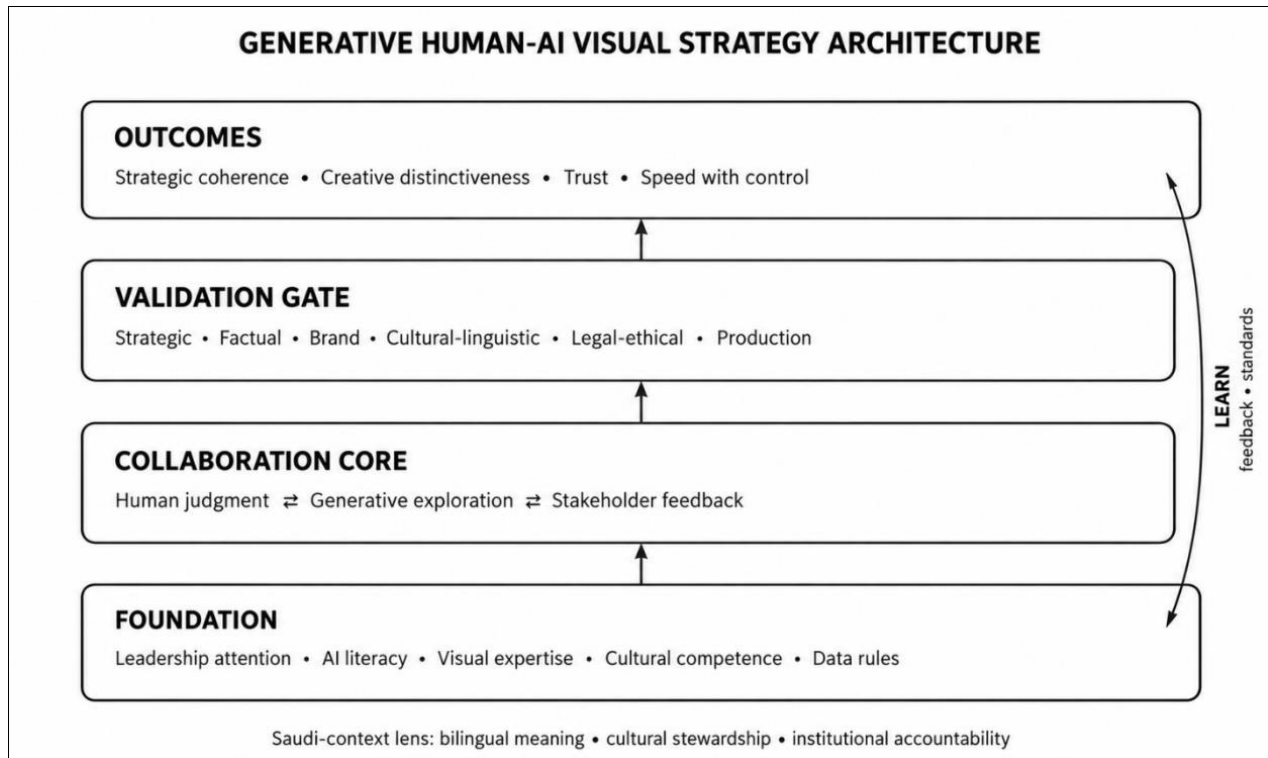


Figure 2: GHAVS organizational architecture for Saudi organizations, linking capability foundations, human-AI collaboration, validation gates and strategic outcomes.

Table 2: Evidence-to-framework operating matrix

Stage	Human role	AI role	Primary control	Evidence
Frame	Define purpose, audience, message, brand and cultural constraints.	Challenge assumptions; organize research; propose alternative framings.	Brief ownership; evidence requirements; cultural and stakeholder constraints.	[1-30]
Expand	Direct divergent search and protect conceptual variety.	Generate rapid alternatives, visual territories and controlled variations.	Independent ideation; counter-prompts; varied references; portfolio diversity checks.	[10-29]
Curate	Select, combine and reject based on strategic meaning and taste.	Cluster, compare and refine shortlisted alternatives.	Explicit evaluation criteria; documented rationale; domain/cultural review.	[13-28]
Validate	Own approvals and risk decisions.	Assist checks but never serve as sole verifier.	Strategic, factual, brand, cultural-linguistic, legal-ethical and production gates.	[2-28]
Learn	Convert project experience into shared routines and judgment.	Support retrieval, comparison and pattern discovery from approved records.	Prompt/asset logs; error taxonomy; post-campaign review; leadership communication.	[8-30]

6 IMPLICATIONS FOR SAUDI ORGANIZATIONS

The way the framework is structured alters the business case for generative AI. The appropriate criterion is not just the cost per visual or production time. Instead, organisations should take into account exploration breadth, approval efficiency, the amount of rework needed, factual error rates, brand consistency, the results of cultural reviews, audience effectiveness, and portfolio distinctiveness. Gains in productivity are strategically worthwhile to the extent that they provide time for improved framing and evaluation; they are of less value when they only result in a greater volume of average content.

The implementation process should start with bounded use cases since low-risk activities such as internal concept exploration, mood development, considering different storyboards, and identifying early campaign territories offer the chance to develop literacy and governance before progressing to high-visibility public outputs. Every pilot must have a named human responsible for it, a written brief, an approved tool environment, and a clear method for validation. The organization should compare human-only and human-AI workflows in terms of speed, novelty, strategic fit, errors, and the amount of effort required by reviewers, thereby ensuring that adoption is based on evidence rather than on trends.

Saudi organisations should likewise establish bilingual creative governance; Arabic should not be seen as a translation added on to an English-based visual system. When preparing briefing templates, it is possible to indicate the main language, the effects of reading direction, the relevant terminology, cultural references, the level of formality appropriate to the audience, and the need for a native-language review. In the case of international campaigns, teams should create parallel rather than mechanically mirrored visual systems where audience expectations vary. While generative AI can speed up the process of producing alternatives, it is still necessary for qualified human reviewers to make the decisions regarding semantics and culture.

Above all, it is the responsibility of leaders to safeguard the professional identity of creative teams. The most viable emerging approach is not one of 'AI replacing designers' or 'designers ignoring AI', but rather a redefinition of what it means to have expertise. As raw generation becomes more available, qualities such as strategic framing, taste, critical selection, cultural interpretation, negotiations with stakeholders, and accountability become increasingly important. Training should include not only proficiency with the tools but also briefing, evaluation, awareness of rights, and reflective practice. In this way, the leadership and communication conditions highlighted in the Saudi AI

assimilation research [15-30] are supported, without treating creativity as merely a matter of having access to software but instead retaining it as an organizational capability.

7 RESEARCH AGENDA AND LIMITATIONS

The following six priorities apply to empirical research. Firstly, it should be investigated whether having a structured way of allocating roles among the stages of Frame, Expand, Curate, Validate, and Learn leads to better strategic results than using the tools in an unstructured manner. Second, creative diversity should be measured at both the team and portfolio levels, not just at the individual level, since generative assistance might enhance local quality while at the same time increasing global similarity [10-23]. Third, bilingual and Arabic-first visual communication needs to be studied directly, with attention given to typography, semantic fidelity, culturally specific prompting, and how the audience interprets the material. Fourth, experiments should be carried out to compare different methods of validation in order to find out which combinations of human expertise and procedural traceability are most effective in building trust. Fifth, long-term research should look into whether repeated use of AI enhances creative ability or instead slowly reduces people's exploratory habits. Sixth, research within the Saudi sector should examine how governance varies across public services, tourism, retail, finance, education, industrial firms, and major development programmes.

The framework also produces testable propositions. Proposition 1: human-AI teams that use explicit strategic framing will generate outputs which have greater organizational relevance than teams that start off by generating content directly. Proposition 2: deliberate diversity techniques, for example independent ideation and counter-prompting, will lessen AI-caused convergence. Proposition 3: Multi-gate validation will enhance trust calibration and decrease serious communication errors as compared to a single final approval. Proposition 4: AI literacy will only improve collaboration when it is combined with knowledge of the relevant domain and cultural expertise. Proposition 5: attention from leadership will help promote the assimilation of generative AI provided that it is expressed in clear communication, proper allocation of resources, and defined role responsibilities. Proposition 6: organizational learning routines will act as a mediator between repeated use of generative AI and the maintenance of sustained creative capability.

There are several limitations associated with these propositions. The corpus includes a wide variety of tasks, ranging from managerial decision

support and professional writing to advertising, poetry, industrial design, and architectural ideation. It therefore necessitates some degree of theoretical integration in order to apply the findings to organizational visual strategy. Since generative models develop more quickly than the cycles of journal publication, tool-specific results may become outdated quickly even if the basic collaboration mechanisms remain relevant. Moreover, the body of evidence from Saudi Arabia is still relatively small and is mainly focused on the adoption of AI in the public sector rather than on visual communication in particular.

8 CONCLUSION

The involvement of humans and AI in the field of visual communication constitutes a strategic design issue, not simply a matter of adopting software. While generative AI can speed up the processes of ideation, visualization, personalization, and production, the fact that more content is generated does not mean that there will be greater creativity or improved communication. Human judgment is still essential since aspects such as meaning, accountability, distinctiveness, cultural interpretation, and strategic consequences cannot safely be handed over to generative systems.

The GHAVS framework puts this conclusion into practice by establishing the following operational process: humans are responsible for Framing, the AI assists with Expanding, humans carry out Curating, organisations perform Validation, and teams are in charge of Learning. This approach maintains generative speed at the same time as making strategic authority and governance clear. For organisations in Saudi Arabia, the framework places special emphasis on leadership involvement, the practice of using two languages, cultural stewardship, attention to provenance, and review that takes account of the context. The key idea behind it is complementarity, which means that AI should enhance possibilities without reducing human responsibility for what is meaningful, appropriate, distinctive and trustworthy.

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