AI-Generated Content, Creative Freelance Work and Hospitality and Tourism Marketing

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Abstract. Powerful new AI models such as OpenAI's DALL-E 2 or GPT-3 afford creative freelancers as well as hospitality and tourism SMEs new ways of generating and using creative content for marketing purposes. However, given AI's rapid development, little is known about the current and potential future applications and implications of AI-generated content on the key stakeholders involved in hospitality and tourism marketing management. This conceptual research note presents preliminary ideas from an ongoing research project. Examples of AI models used for marketing content generation are reviewed and potential implications for hospitality and tourism marketing management are discussed from an e-tourism research point of view.

Keywords: Platform economy · Freelance · Marketing · DALL-E 2 · GPT-3

1 Introduction

Recent years have seen significant progress in artificial intelligence (AI) designed to generate seemingly realistic-looking marketing content, e.g. still images, video or text. The increase in technological capability sees society, including hospitality and tourism industries, enter what some scholars are calling the 'era of falsity' [1]. Academic and media discourse has vocally explored e.g. the concept of deepfakes, i.e. content that is generated through machine learning systems with the aim of closely mimicking content created by humans [2]. Popular examples include the website ThisPersonDoesNotExist.com and its many derivatives, e.g. WhichFaceIsReal.com, building on StyleGAN by Nvidia researchers Karras et al. (2018) [3]. Other examples of AI-generated content include e.g. work by OpenAI's researchers: Codex generates lines of code based on natural language prompts (e.g. JavaScript used for creating interactive websites), DALL-E 2 generates high-resolution images on par with human graphic designers and other creatives, and GPT-3 generates coherent, context-specific sentences that could potentially replace e.g. copywriters, translators, or employees responsible for replying to routine queries and consumer reviews [4, 5]. The underlying argument seems to be that as AI gets more 'intelligent', tasks that used to require human input are increasingly delegated to machines [6].

Novel AI models like StyleGAN, DALL-E 2 or GPT-3 offer powerful affordances for traditional creative work, including in the context of hospitality and tourism marketing management. The advent of generative AI tools for automatically creating high

quality lines of code, artistic images or accurate instant translation across languages brings pressing considerations for the future of hospitality and tourism marketing management generally and freelance creative work, a key service provider for hospitality and tourism SMEs, specifically [7, 8]. On one hand, new tools are posed to further boost the 'freelancer' or 'creator' economy [7], underlined by a shift from traditional full-time employment contracts to new types of work, e.g., freelancing on digital labor platforms such as Upwork. New tools also afford hospitality and tourism SMEs themselves more control over their creative endeavors. On the other hand, the increasing capability of AI models to generate high quality and useful content poses existential threats to human creatives, as well as considerations for the perceived authenticity of hospitality and tourism marketing content. Conceptually exploring the use of AI-generated creative content in the context of hospitality and tourism is important and timely due to labor economic shifts caused by technological progress and COVID-19 [9], whereby the hospitality and tourism sector is experiencing a severe labor crisis [10] and simultaneously the creator economy has seen an uptick in creative freelancing in the wake of the 'great resignation' [11–13].

2   Creative Freelance Work

Freelance work or on-line web-based cloudwork, often mediated by digital labor platforms (e.g. Upwork, MTurk) [14], refers to self-employment sustained by short- or long-term projects commissioned by external task requesters [12]. As defined by ILO (2021) [15], digital labor platform is a company that uses digital resources to "mediate labor exchange between different users, such as businesses, workers and consumers". According to Upwork (2021) [13], a digital labor platform which calls itself the world's largest marketplace for freelance work, 35% of the US workforce has tried or actively engages in freelance or gig work. In 2019, the value created through gig work represented 5% of the US' GDP [16]. On Upwork's platform, the company reports around 12 million active freelancer accounts globally [13]. Of these, the biggest segment of freelance work offered through the platform is 'arts and design', the second biggest 'marketing' and the third biggest 'coding'. A recent report commissioned by Fiverr (2022) [17], one of Upwork's biggest global competitors, finds that COVID-19 has boosted the gig economy particularly in the skilled professional category, with a significant increase in new account registrations related to creative freelancing.

While the creator economy seems to be experiencing a boom, the hospitality and tourism industries are struggling with labor shortages [10]. Prior research has identified labor shortage as a key driver for automation of tasks in hospitality and tourism organizations [18], whereby businesses employ novel technological innovations to find creative new ways for increasing productivity and serving customers [19]. Overall, the bulk of hospitality and tourism companies in many countries tends to consist of small- and medium-sized enterprises (SMEs) which are de facto characterized by tight resources, including human resources. In order to carry out many supportive business functions, hospitality and tourism SMEs often elicit the services of others, e.g. freelancers, to outsource labor needs [8]. One such area is producing various forms of marketing material, from graphic design and social media content creation and management to copyediting

and translation services. The rise of social media has exacerbated this, whereby research has identified hospitality and tourism as key beneficiaries of social media marketing [20], leading to the pursuit of ever-greater "instragrammability" [21].

3   AI-Generated Content and the Era of 'Falsity'

The advent of new digital tools for content-creation, from AI-generated deepfakes to the metaverse, has prompted academics to put forward conceptualizations for marketing and managing in the era of 'falsity' [1, 22]. As discussed by Brower (1998) [23], the concept of falsification is however nothing new, whereby in the past, as soon as technologists have created new digital tools to allow for the manipulation of images (e.g. Photoshop, launched in 1990), photographers, journalists, and marketers alike have tried to make the most of them. In this line of reasoning, AI models capable of generating high quality, human-like marketing content represent a continuation to a pre-existing trend. However, the degree of falsification seems to be rapidly increasing, whereby content generated by AI models passes as or surpasses similar content generated by humans in terms of believability. For example Tuomi (2021) [4] explored the use of AI to generate human-like restaurant reviews, demonstrating that several AI-generated reviews passed as human-written when their credibility was evaluated by human judges. Besides OpenAI's Codex, GPT-3 or DALL-E 2, several other free examples of AI tools for creative content generation already exist. Craiyon is a text-to-image AI tool that has spun out of the development of DALL-E; Rytr is an AI writer-assistant based on OpenAI's GPT-3; Autodraw is the "autocorrect" for digital drawing; Fontjoy generates aesthetically pleasant font pairings for use in e.g., brochures; and Namelix allows users to generate simple business names and logos from key words. Simply describing a business or a project makes the contextually trained neural network generate hundreds of high-quality logos, business names and marketing material automatically.

4   Implications for Hospitality and Tourism Marketing

Novel AI models bring new affordances to stakeholders involved in hospitality and tourism marketing, from the creative freelancers often commissioned by hospitality and tourism SMEs, to the hospitality and tourism businesses, to the end consumer. The e-tourism research community plays a pivotal role in guiding and steering the socially sustainable development and deployment of AI in the sector [24]. For the creative freelancer, new AI models offer new tools to the already extensive toolkit, whereby systems like DALL-E 2 may enable new forms of creativity to emerge in human-AI teams. The automation of creative tasks changes workflows, whereby the importance of assessing when the human should be kept in-, on-, or off-the-loop [9] becomes imperative. Further, according to Huws (2010) [25], central to the concept of creative work is the feeling of ownership of one's work, even after it is sold to a commissioner (e.g. hospitality or tourism SME). New ways of creativity change the perception of ownership as well as considerations for intellectual property. Whose property should content generated by AI tools be [9]? Finally, the proliferation of AI tools for creative content generation

lowers the bar to enter the freelancer economy, meaning increased competition for visibility for existing creators, whereby research topics related to personal branding and differentiation become important.

For the hospitality and tourism SMEs, new AI models offer more control over creative endeavors and the possibility to do more in-house, should the company wish to do so. As often is the case in ICT, technology adoption becomes the likely bottleneck, whereby entrepreneurs will consider e.g. the ease-of-use and usefulness of creative AI tools. Which tools to commit to, and which to ignore? What features benefit marketers in the hospitality and tourism sector the most? Besides technology adoption, training and education of hospitality and tourism workforce, including e.g. changes to curricula or micro-credentials, become important research topics to consider. Finally for the end consumer, the indistinguishability of AI-generated content from human-generated marketing material presents a double-edged sword. On the one hand, new tools mean an abundance of higher quality content, but on the other, an authenticity crisis might follow. In part complementing existing debates over finding the right balance between high-touch and high-tech in hospitality and tourism service contexts [19], using AI-generated marketing content might offer a point of differentiation as well as influence purchase decisions in unforeseen ways.

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