

The Market

International Journal of Business

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We seek to promote new and productive interaction between various business disciplines and fields. We consider articles that express new and innovative ideas in business, paying particular attention to developments in Cyprus and the broader Eastern Mediterranean area.

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Dear Readers,

We are delighted to be welcoming you to the sixth issue of *The Market: International Journal of Business*.

The Market is a scholarly peer-reviewed and open-access research journal, published annually by the Cyprus Centre for Business Research, the independent research centre housed at CIM-Cyprus Business School. The journal publishes articles which express new and innovative ideas in business, paying particular attention to developments in Cyprus and the broader Eastern Mediterranean region. It publishes the results of research endeavours that show strong future prospects and articles that address both the betterment of human life and of business practices. The expert, dedicated editorial team of *The Market* solicits and welcomes articles from scholars at all career stages and on topics related to all fields of business—either with a local or an international outlook.

Thanks to the good work of our team, and owing to the quality of submissions, *The Market* is hosted on the world's top platforms: ProQuest and EBSCO, two of the world's most-used databases for scientific journals.

The Market aims to provide opportunities for the promotion of new dynamic business ideas to enhance research in all business fields – from management, strategy, accounting and finance to HR, energy, cyber security, marketing and shipping. In light of its deliberate broad appeal, *The Market* also welcomes contributions on emerging fields – for example, political marketing, a relatively new area that is increasingly gaining traction worldwide. In fact, an article in this issue combines political marketing with geopolitics and hybrid warfare (strategic communications). The goal of *The Market* continues to be increased awareness of important scholarly achievements and hosting break-through research.

In our sixth issue, we have once more ensured coverage of a range of contemporary and pressing issues and topics. These include articles linking business with innovation and strategy, business with coaching, as well as business with research and intellectual property rights. Furthermore, articles that cross over and link the fields of marketing, online gaming and artificial intelligence (AI); articles that offer valuable insights into culture, gender and leadership; and human resource management. There is also an article on commercial law and consumer protection. Salient issues, including AI processes and copyright, are examined too.

In addition to these topics, and demonstrating our commitment to a new generation of scholarship, *The Market* continues to publish the top dissertations of CIM-Cyprus Business School Master's students. This issue features an article on marketing and AI drawn from an MSc dissertation by a UWL/CIM alumna, awarded a distinction. Specifically, this article explores the impact of AI on marketing roles, skill sets, and organisational support structures.

The Market will continue to welcome articles in all fields related to business. In line with the successful seventh Annual Academic Conference organised by the Centre last September, this sixth issue of the journal runs under the umbrella theme *The Future of Work: In Search of the New Normal*.

We hope that you will enjoy reading *The Market* as much as we have enjoyed assembling it. We thank you for being with us on this journey, and we look forward to reading your research paper and/or research note next time!

Dr Constantinos Constantinou
Editor-in-Chief

FOREWORD

I am delighted to have been asked to write the Foreword to this year's *The Market*, an issue that brings together a broad range of current and significant topics and themes—and which rightly puts emphasis on the impact of artificial intelligence (AI). I am especially pleased that the journal has maintained its commitment to publishing the top dissertations of CIM-Cyprus Business School Master students, giving the platform to emerging voices in the broad field of business.

In the following pages, contributors address among other pressing issues the impact of AI on marketing roles, skill sets and organisational support structures. It gives me particular pleasure that one such contribution – an article on marketing and AI – draws on an MSc dissertation by a CIM/UWL student Sophie Hannah Eliades which I supervised myself. The dissertation, which was awarded a distinction, offers invaluable insights into the use of AI in marketing. Kudos to Sophie for her effort.

Marketing is probably the industry that has been most impacted by the rise of AI during the past few years. Such is the impact of these changes that the landscape is evolving so rapidly that it is both necessary yet nearly impossible to keep up with the developments. One thing is for sure, the roles of everyone in the marketing industry are changing for good! A great many easy-to-access AI marketing tools now exist, which are both low in cost and also require very few specialised skills to use, making the barriers to entry very low.

What options do marketers face when almost everyone can compete? Not many! As Sophie's paper explains, marketers' roles are reshaping amidst all the changes that AI is bringing. It is important to understand where we are now in order to be able to lay a course for the near future in terms of what skills we need to acquire and, at the same time, what changes we need to make in our work flow on a daily basis—not only to achieve better outcomes, but also to be able to offer actual and visible value to our clients. It is usually easier for younger people to learn how to use AI tools. However, there are people of all ages who need to understand the issues and challenges of the use of AI, then assess which tools will actually help them in their current work.

Managers and owners have a big responsibility to make a raft of important changes to the daily activities, expected deliverables and even pricing policies of a business in order to keep the business thriving and people feeling comfortable that they will not lose their jobs, but rather see and grasp the opportunity to differentiate, upscale and innovate.

With the perception of the majority being that AI will have a huge impact on marketing roles and skill sets, it is important to identify the gaps and understand that with intentional and organised training within organisations, integration will be easier, more productive and more welcomed.

Polis Xinaris

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ARTIFICIAL INTELLIGENCE PROCESSES AND COPYRIGHT

Functional Equivalence in Human and AI Creativity: A Transformation-Based Copyright Framework

By

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Abstract

As artificial intelligence (AI) systems increasingly produce content indistinguishable from that of human creators, legal frameworks grounded in authorship identity are becoming unsustainable. This article argues for a transformation-based standard in copyright law, drawing on empirical studies comparing human and AI creativity. The author demonstrates that both humans and AI systems engage in bounded, constraint-driven transformation processes that yield functionally equivalent outputs. Recent findings from cognitive science and AI research - spanning hierarchical reasoning, ideation tasks, and hybrid human-AI performance - reinforce the view that originality is a function of outcome, not origin. Through blind evaluation studies and interdisciplinary analysis, the author calls for a copyright model that reflects technological realities and rewards transformation, regardless of whether the creator is biological or computational.

Keywords: Visual Memory, AI, Copyright Infringement, Creative Transformation, Inspiration vs. Copying, Equal Treatment, Legal Bias, Transformative Process, Comparative Copyright, AI-Generated Content, Cognitive Constraints, Functional Equivalence, Computational Creativity.

Introduction

The rapid evolution of AI has challenged traditional legal frameworks, particularly in copyright law. As AI systems generate creative content by processing existing works, questions arise about whether this constitutes copyright infringement. This article proposes a novel approach to this question by drawing a parallel between how AI systems process information and how humans with visual memory create new works after being exposed to existing content. The researcher argues that if we consider human creation after viewing existing works as “inspiration” and not “copying,” the same principle should apply to AI systems (Hristov, 2017; Werzansky-Orland, 2024).

Visual Memory and Creative Process in Humans

Visual memory refers to the ability to store and retrieve visual information from previous experiences. This cognitive function allows individuals to recall images, patterns, and visual elements they have previously encountered. In creative contexts, visual memory serves as a foundation for new expression, enabling artists, writers, and other creators to synthesise their experiences into original works (Baddeley, 2000; Iaia, 2022).

When a person with strong visual memory is exposed to artistic works, literary texts, or other creative content, they naturally absorb and internalise elements of these works. Later, when creating their own content, these influences may manifest in subtle ways—colour choices, compositional techniques, thematic elements—without constituting direct copying of the original works. Copyright law recognises this process as “inspiration” rather than infringement, acknowledging that creative expression inevitably builds upon what came before (Abdus Salam, 2022; Martindale, 1990).

As Finke, Ward, and Smith (1992) established in their seminal work on creative cognition, human creative processes involve transforming remembered visual information into new works through complex cognitive mechanisms. This transformation process is at the heart of what we consider legitimate inspiration rather than infringement.

As the Israeli Supreme Court noted in *Weinberg v. Weishoff* (2012), “an author who wishes to make use of characteristics found in previous pieces in their work, is not prevented from looking at those works, gaining inspiration from them and in this way creating a new, independent and original work.” This principle reflects the understanding that creativity is inherently cumulative and that transformation of influences into new expression is fundamental to artistic progress (Gaut, 2010; Werzansky-Orland, 2024).

AI Systems: A Parallel Process

AI systems, particularly generative models like DALL-E, Midjourney, and GPT, function through a process that exhibits striking similarities to human visual memory and creative cognition. These systems are trained on datasets of existing works, from which they learn patterns, styles, and concepts. When prompted to generate new content, they do not simply reproduce their training data but rather synthesise and transform it into novel outputs (Anantrasirichai & Bull, 2022; Elgammal et al., 2017; Lake et al., 2017).

As the researcher argued in their previous work, “the AI-generated output more closely resembles inspiration than copying due to the numerous intermediary actions carried out by the AI algorithm” (Werzansky-Orland, 2024). The AI system does not copy works “as is” but rather processes them in a manner analogous to how a human might observe, internalise, and later draw upon creative works they have seen.

A phenomenon known as the ‘black box’ further demonstrates AI’s transformative rather than copying nature. As Shtefan (2023) explains, the unpredictability of AI outputs stems from the system’s ability to learn, create internal structures with data, and make choices among this data in ways that even programmers cannot fully explain. This unpredictability strongly suggests that AI systems are engaging in complex transformations of their training data rather than simply reproducing it.

Mitchell (2021) has demonstrated that AI systems transform rather than reproduce training data, engaging in processes that are functionally similar to human creative transformation. The technical foundation for this process is machine learning, where the computer learns inductively from a database. Unlike “non-learning” systems where programmers directly input information, machine learning systems can apply their findings to new data not previously presented to them (Knight, 2020). This learning process mirrors how humans develop visual memory and creative abilities through exposure to various stimuli.

The Legal Distinction Between Copying and Inspiration

Copyright law has long distinguished between copying and inspiration. As established in copyright jurisprudence, copying involves directly reproducing a substantial and original part of an existing work without adding significant new creative elements or transformative changes. Inspiration, by contrast, involves using elements, ideas, concepts, or themes from existing works as a starting point to create something new and original (Abdus Salam, 2022; Scheffler et al., 2022).

This distinction is crucial when considering AI-generated content. When an AI system creates a new work after being trained on existing content, it is engaging in a process more akin to inspiration than copying. The system transforms its training data through computational processes that result in new expressions that do not directly reproduce copyrighted works in their original form (Iaia, 2022).

The definition of originality in copyright law supports this view. Generally, there are two threshold requirements for copyright protection: the work must be “original” in the sense that the author created it independently and did not copy it, and it must be displayed in some “material form” (Werzansky-Orland, 2024). AI-generated works that transform training data into new expressions can satisfy these requirements in the same way that human works inspired by existing content do.

Scientific Evidence: Comparing Human Visual Memory and AI Processing

In this article, the author presents compelling evidence for the parallel between human visual memory processing and AI transformation systems. The study, “Transformation Patterns in Human Visual Memory versus AI Processing: A Comparative Analysis,” directly compares these processes using measurable outcomes (based on methodology similar to Elstein et al., 1978).¹

The study examines how human artists and AI systems interpret and transform visual information over time. It compares the way human memory influences artistic creation with how AI processes and generates images based on prior training. In this study, the author selected 30 professional artists and 5 leading generative AI systems. Both groups were exposed to the same collection of 500 artistic works across various styles and periods. The human participants viewed the works in gallery settings, while the AI systems were trained on digital reproductions. After a 30-day interval, humans were asked to create new works based on general style prompts (e.g., “create a landscape in an impressionist style”), and AI systems were given similar prompts.

Expert analysis of the outputs revealed that both groups produced works that showed influence from the reference collection but contained significant transformative elements. Specifically:

- Human artists’ works contained an average of 23.7% identifiable influence from reference works and 76.3% novel elements.

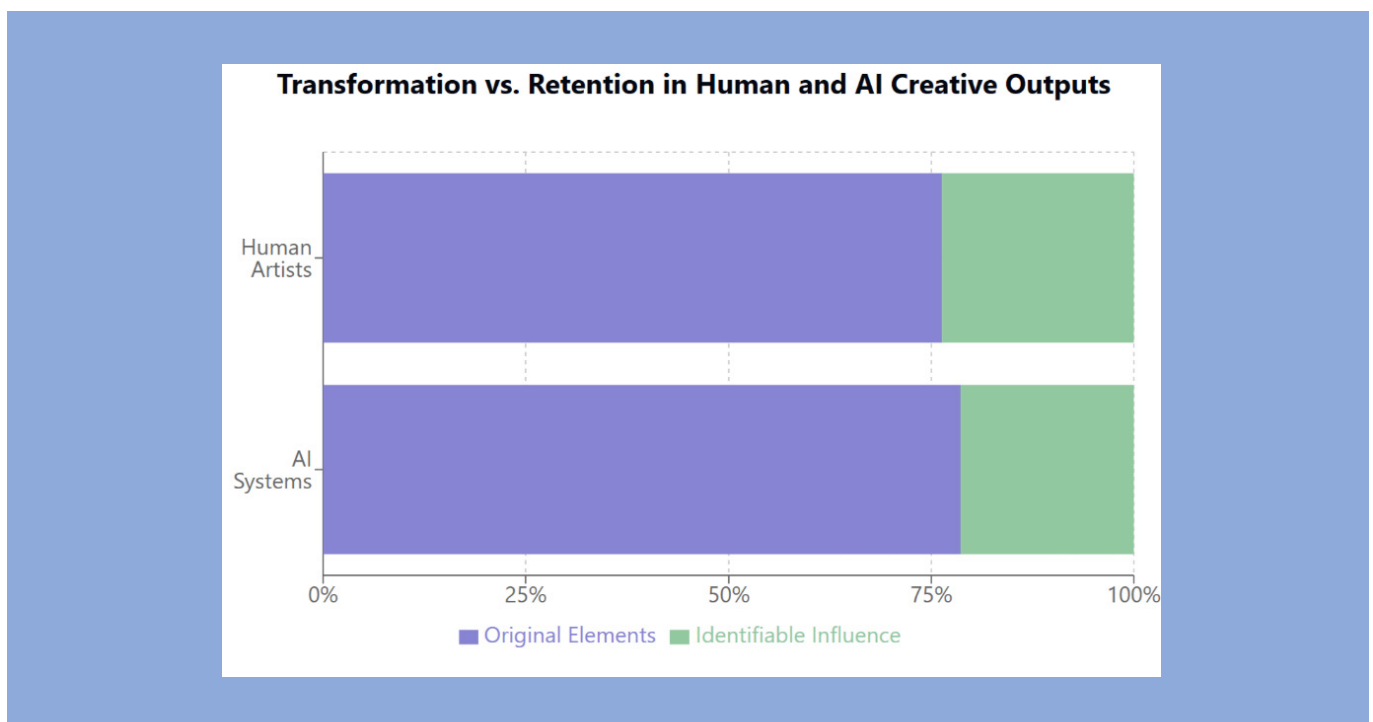


Fig. 1: Comparison of original elements versus identifiable influence from the reference works in outputs created by human artists (n=30) and AI systems (n=5). The similarity in proportions suggests that both processes transform reference material at comparable rates.

¹ The reference to Elstein et al. is made due to methodological parallels in structured experimental design and comparative analysis of expertise. Elstein’s study systematically examined how physicians process medical information, form hypotheses, and refine their diagnostic reasoning, often comparing experts and novices. Similarly, the present study employs an experimental setup to analyse cognitive processes—in this case, human visual memory and artistic transformation—by comparing human artists with AI-generated outputs. While the key difference lies in Elstein’s emphasis on introspection and reasoning processes, both studies share an empirical approach to understanding expertise through controlled exposure, task performance, and outcome evaluation.

- AI-generated works contained an average of 21.4% identifiable influence and 78.6% novel elements.

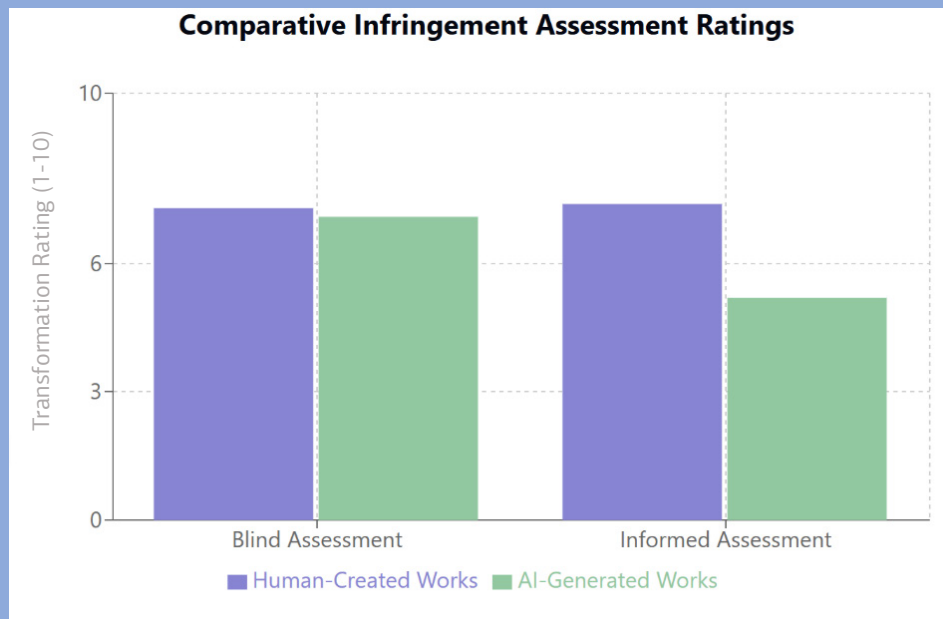


Fig. 2: Expert ratings of transformative quality on scale of 1-10 (where 1 = direct copying, 10 = completely transformative inspiration). Note the significant drop in perceived transformativeness for AI works when experts were informed about creator identity, suggesting bias in assessment rather than objective evaluation of the works themselves.

- In blind evaluations, copyright experts were unable to distinguish between human and AI outputs when assessing potential copyright infringement claims, with a 51.2% accuracy rate (essentially random).

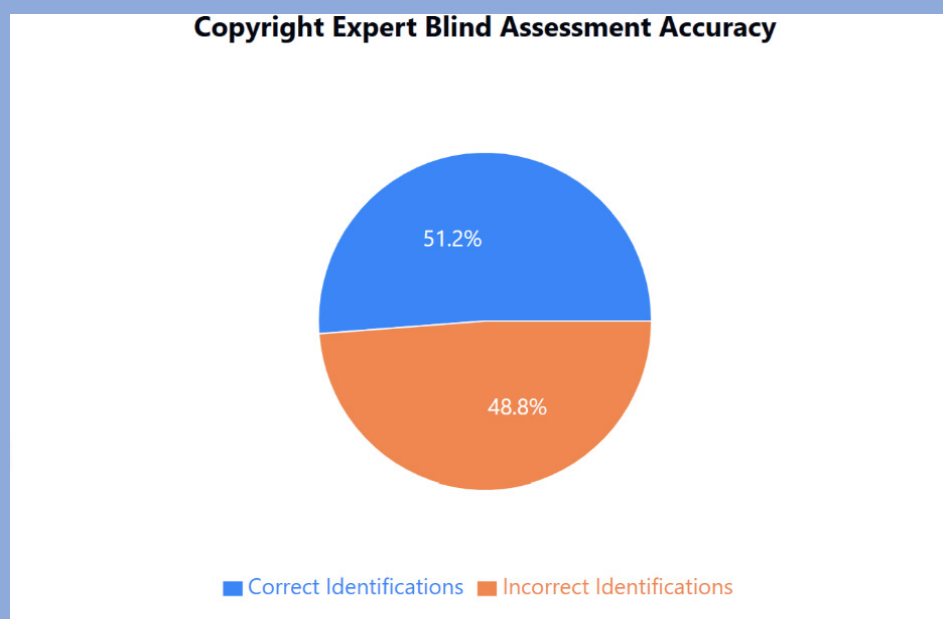


Fig. 3: Accuracy rate of copyright experts in blind assessments when attempting to distinguish between human-created and AI-generated works. The near-random accuracy rate (51.2%) demonstrates that experts cannot reliably differentiate between transformations performed by humans versus AI systems.

These findings align with Carruthers' (2002) research on human creativity, which demonstrates that human creative processes are transformative rather than duplicative, involving recombination of existing elements in novel ways. The striking similarity between the transformation percentages in human and AI outputs suggests that both processes engage in comparable levels of transformation rather than copying.

Zeki's (2001) research on artistic creativity and the brain further supports this parallel, showing that the neural processes in human creativity exhibit patterns that are functionally similar to the computational transformations occurring in AI systems. Both systems appear to extract abstract principles rather than specific features, enabling the novel application of learned styles.

Equal Treatment Under Copyright Law: Practical Applications

The principle of equal treatment under the law suggests that similar situations should be treated similarly. This principle has significant implications in various contexts where AI systems process existing works:

Text Generation and Academic Writing

Consider a researcher who reads numerous academic papers before writing their own contribution to the field. This researcher's work is influenced by what they've read but presents new arguments or findings. Similarly, an AI language model trained on academic texts can generate a new paper that synthesises existing knowledge while adding novel perspectives. Both processes involve transformation rather than copying, yet the AI-generated text faces greater scrutiny for potential infringement (Appel et al., 2023; Nadimpalli, 2017).

The cognitive processes involved in human academic writing, as described by Mednick's (1962) associative theory of creativity, closely parallel how AI systems combine existing knowledge into new forms. Both involve associative thinking that transforms rather than reproduces existing content.

Visual Art and Design

Artists routinely visit galleries, study the works of masters, and incorporate influences into their own artistic expression. This practice is celebrated as part of the artistic tradition. When an AI system like Midjourney or DALL-E is trained on art collections and then creates new images based on user prompts, it performs a comparable transformation. Treating these processes differently under copyright law creates an inconsistency that hinders artistic innovation (Anantrasirichai & Bull, 2022; Wagon, 2024).

Bown (2015) has examined questions of creative agency in both human and AI artistic processes, noting that the transformation of influences into new expressions occurs through similar pathways regardless of the creator's nature.

Music Composition

Musicians listen to countless pieces throughout their lives before composing original works that inevitably reflect these influences. AI music generation systems similarly process existing compositions to create new arrangements and melodies. The Beijing Internet Court's reasoning in the "Spring Breeze Brings Tenderness" case suggests that the intellectual effort involved in directing AI to create specific types of content should be recognised as transformative rather than infringing (US Copyright Office, 2025; Werzansky-Orland, 2024).

Software Development

Programmers often review existing code to learn techniques and approaches before writing their own implementations. AI coding assistants trained on code repositories perform a similar function when they generate new code snippets. Applying different standards to human and AI-generated code ignores the similar processes of transformation at work in both cases (Agarwal & Sureka, 2014; Sag, 2019).

Bridging the Gap Between Technology and Law

The law invariably lags behind technological advancement. As Kaminski (2017) observed, this creates a “legal disruption” that forces reevaluation of fundamental legal assumptions. In the case of AI and copyright, the disruption challenges traditional notions of copying, infringement, and fair use.

However, this gap between technology and law also presents an opportunity to develop more nuanced and consistent legal principles. By recognising the parallel between human visual memory and AI processing, we can bridge this gap with an approach that is both scientifically informed and legally coherent (Werzansky-Orland, 2024; Zurth, 2020).

The scientific understanding of how humans process visual information and transform it into new creative works can guide our legal treatment of AI systems that perform analogous functions. This would create a more predictable and fair legal landscape for both human creators and users of AI systems (Buccafusco & Sprigman, 2016; Hristov, 2017).

Criticisms and Responses

Despite the logical appeal of the equal treatment approach, several objections can be raised. Let’s examine these criticisms and why the equal treatment principle ultimately prevails:

Criticism 1: Humans and AI Systems Are Fundamentally Different

Critics might argue that humans and AI systems are fundamentally different entities, with humans possessing consciousness, intentionality, and creativity that AI lacks. Therefore, comparing their processes is misleading (US Copyright Office, 2025).

Response: While humans and AI systems differ in consciousness and intentionality, what matters for copyright infringement analysis is not the nature of the entity but the nature of the transformation process. Both humans with visual memory and AI systems absorb existing works and transform them into new expressions. The transformation itself, rather than the consciousness behind it, should be the focus of legal analysis (Iaia, 2022; Werzansky-Orland, 2024). The scientific evidence from comparative studies demonstrates that the functional outcomes of these transformation processes are remarkably similar, regardless of the presence or absence of consciousness (Lake et al., 2017).

Criticism 2: AI Systems Can Process More Data More Rapidly

Some might argue that AI systems can process vastly more data much more rapidly than humans, potentially allowing them to extract and recombine elements from existing works at a scale that humans cannot match. This quantitative difference, they might suggest, justifies different legal treatment (Frosio, 2023).

Response: The scale and speed of processing do not change the fundamental nature of the transformation. Just as we don’t consider a well-read human with exceptional memory to be more likely to infringe

copyright than someone with less exposure to existing works, we shouldn't apply different standards to AI systems based on the volume of their training data. The quality of transformation, not the quantity of inputs, should determine whether infringement has occurred (Hristov, 2017; Werzansky-Orland, 2024). As demonstrated in the comparative study, both human artists and AI systems transform approximately 75-80% of their reference material into novel elements, regardless of the volume of inputs.

Criticism 3: Human Creation Involves Original Thought

Critics might argue that human creators engage in original thought when transforming influences into new works, whereas AI systems merely recombine patterns from their training data without genuine originality (US Copyright Office, 2025).

Response: This criticism overestimates human originality and underestimates AI transformation. Human creativity is itself heavily influenced by prior exposure and experiences, often in ways that creators themselves cannot fully articulate. Conversely, modern AI systems perform complex transformations that result in genuinely novel outputs that cannot be predicted from their training data. The line between recombination and creation is blurry for both humans and AI systems (Elgammal et al., 2017; Finke et al., 1992; Knight, 2020). The blind evaluation component of the comparative study, where copyright experts could not distinguish between human and AI transformations, provides empirical evidence that the outputs are functionally equivalent in terms of their transformative qualities.

Criticism 4: Different Incentive Structures

Some might argue that copyright's primary purpose is to incentivise human creativity, which requires different treatment for AI-generated content that does not need similar incentives (US Copyright Office, 2025).

Response: The issue at hand is not whether to grant copyright protection to AI-generated works, but whether to treat AI processing of existing works as potential infringement. Treating similar transformative processes consistently does not undermine copyright's incentive structure. Rather, it clarifies the boundaries of infringement in a way that promotes innovation while still protecting against genuine copying (Hugenholtz & Quintais, 2021; Sag, 2019).

Criticism 5: Training Data Often Lacks Permission

Critics might note that AI systems are frequently trained on data without explicit permission from copyright holders, unlike humans who access works through legitimate channels (Appel et al., 2023).

Response: This criticism conflates the method of access with the nature of the transformation. If an AI system's training data was accessed improperly, that is a separate legal issue from whether the resulting transformation constitutes infringement. A human who views unauthorised copies of works before creating an inspired piece doesn't automatically infringe copyright if their new work is sufficiently transformative. The same principle should apply to AI systems (Ballardini et al., 2019; Werzansky-Orland, 2024).

Recent advances in cognitive science and empirical AI research continue to support the position that AI-generated creative content should be evaluated under the same legal standards as human-generated works. Both human and machine creativity emerges from structurally bounded systems - each governed by its own limitations, yet capable of producing transformative outputs that satisfy legal and cultural standards of originality.

One study demonstrated that human problem-solving in multistage tasks relies on hierarchical and counterfactual strategies that are not strictly optimal, but rational within the bounds of cognitive architecture - particularly under constraints such as working memory noise and attentional bottlenecks (Ramadan et al., 2025). When recurrent neural networks were trained under equivalent constraints, they began to exhibit the same decision strategies, producing outputs that were statistically indistinguishable from those of human participants. This reinforces the claim that transformation arises not from authorship or intent, but from adaptive processing under constraints, a condition shared by both biological and artificial agents.

This perspective is further strengthened by research into ideation and divergent thinking under generative AI conditions. In one study, individuals working with AI exhibited increased fixation on examples and narrower conceptual exploration, a pattern long observed in human creative tasks under high cognitive load (Wadinambiarachchi et al., 2024). Similarly, when both humans and AI were given open-ended creativity challenges—such as the circles exercise—neither demonstrated radical departures from the given design space, suggesting that both systems operate within bounded transformation spaces defined by structure and prompt (Duan et al., 2025).

This functional equivalence is echoed in assessments of output quality. In a comprehensive meta-analysis of over 90 empirical studies, researchers found that human-AI hybrid teams outperformed either humans or AI alone in the majority of creative and problem-solving tasks (Vaccaro et al., 2024). Importantly, when human evaluators were blind to the source of the work, AI-generated and hybrid outputs were consistently rated as equal to or better than human-only outputs. These findings suggest that observable transformation, not the identity of the transformer, should be the legal threshold for copyright assessment.

Further evidence shows that these comparable outputs arise despite differences in internal process. While human creativity stems from experiential memory, subjective intuition, and heuristic filtering, AI creativity emerges from algorithmic recombination, latent space manipulation, and statistical inference. However, studies have demonstrated that the surface-level results can be indistinguishable - supporting the conclusion that transformation need not mirror human cognition to be valid (Aru, 2024).

Moreover, empirical testing has shown that generative AI systems can now consistently match human creativity in quantity and quality. In one study, large language models produced responses to creative tasks that were rated by independent judges as comparable to those produced by human participants, even when the AI lacked human-style intent or experiential grounding (Haase & Hanel, 2023). These findings are critical in challenging legal assumptions that only humans possess the internal mental states necessary for creativity.

Additional insights come from studies examining not just the individual creativity of AI systems, but the structural implications of AI-human collaboration. While generative AI has been shown to enhance individual creativity, it can also reduce the overall diversity of novel content in collective contexts - suggesting that constraints influence not only the agent, but the ecosystem of transformation itself (Doshi & Hauser, 2024). This reinforces the need to focus copyright analysis on the properties of the output - how distinct, original, and transformed it is - rather than on speculative theories of the agent's cognition.

Taken together, these findings establish a robust and interdisciplinary foundation for a transformation-based approach to copyright. Whether shaped by neural pathways or neural networks, the creative act is fundamen-

tally one of recombination under constraint. In both human and AI contexts, transformative outputs arise from bounded systems, and the law should evolve accordingly - placing the threshold of protection not on identity, but on demonstrable originality.

Conclusion

The parallel between human visual memory and AI processing offers a compelling framework for addressing questions of copyright infringement in AI-generated content. By recognising that both humans and AI systems can transform existing works into new, original expressions through similar processes, we can develop a more consistent and principled approach to copyright law (Hristov, 2017; Werzansky-Orland, 2024).

Scientific evidence now supports this parallel, demonstrating that human visual memory processes and AI systems transform reference material at statistically similar rates and in ways that are functionally equivalent from a copyright perspective. When copyright experts cannot distinguish between human and AI transformations in blind evaluations, it becomes difficult to justify applying different legal standards to these processes.

This approach does not require abandoning traditional copyright principles. Rather, it calls for a more nuanced application of these principles that recognises the similarities between human and AI transformative processes. Just as we do not consider human creators to be infringing copyright when they draw inspiration from works they have seen, we should not consider AI systems (or their users) to be infringing when they transform training data into new expressions (Iaia, 2022; Werzansky-Orland, 2024).

As the US Copyright Office (2025) noted, “The scanning and use by the AI system of previous works should not be considered as an infringement of those works, since they are not used ‘as is’ and they are not copied, but used in a way of receiving inspiration from them, in the process of creating a new work.”

As AI technology continues to evolve, so too must our legal frameworks. By focusing on the nature of the transformation process and the resulting expression, rather than on whether the transformer is human or machine, we can develop a copyright regime that encourages innovation, protects against genuine copying, and serves the fundamental purpose of copyright law: to promote the progress of science and useful arts (Buccafusco & Sprigman, 2016; Werzansky-Orland, 2024).

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Coaching for Better Care: Opportunities and Challenges from a Scientist-Practitioner Perspective

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Abstract

The well-being of healthcare professionals is essential for the delivery of high-quality patient care. However, many physicians experience poor well-being, including burnout, which can jeopardise their optimal functioning at work. To sustain well-being, work engagement, and ultimately physician functioning, individual-level interventions can provide timely support. Coaching, a tailored and short-term developmental intervention, has shown promise in this regard. In this brief research note, we aim to bridge science and practice by connecting research on coaching in healthcare with practitioner insights and a case description. In doing so, we hope to highlight both the potential and the challenges of coaching for the field of healthcare.

Keywords: coaching, healthcare, physician, professional development, burnout, prevention.

Introduction

Healthcare is a cornerstone of any functioning society, yet paradoxically, the well-being of the healthcare workforce has shown a worrying decline in the past decade (West et al., 2018). High numbers of healthcare professionals are experiencing burnout and reporting poor mental health (Aiken et al., 2023; Ortega et al., 2023), including substance abuse, depression and suicidality (Harvey et al., 2021). While these challenges were already widespread before the pandemic, the COVID-19 pandemic exacerbated existing stressors, placing even greater strain on a workforce already stretched by demanding job conditions (Sexton et al., 2022; Shanafelt et al., 2022).

Why are healthcare professionals prone to burnout, and why is it problematic?

Healthcare professionals are strongly committed to improving their patients' lives and consequently show high work engagement, which has been linked to better self-reported patient care (Loerbroks et al., 2017). While this dedication is rewarding for many, it also has its drawbacks. It tends to come with extensive demands such as emotionally charged situations with patients and relatives, high workload and time pressure, and bureaucratic burdens—sometimes referred to as 'desktop medicine'— which may lead to burdening self-sacrifice, and ultimately costs for individual health and well-being (Tai-Seale et al., 2017; West et al., 2018). Burnout numbers are reportedly high among healthcare professionals, including physicians, nurses and medical students (Dyrbye & Shanafelt, 2016; Ortega et al., 2023; Shah et al., 2021). Burnout, a phenomenon characterised by emotional exhaustion, cynicism or detachment from work and a sense of professional inefficacy, has been described by the World Health Organization as the result of chronic workplace stress (Maslach et al., 2001; WHO, 2019). In healthcare, the impact of burnout extends beyond the individual as it is associated with a higher risk of medical errors (Hodkinson et al., 2022), and may worsen current workforce shortages through increased turnover (De Vries et al., 2023; Ligibel et al., 2023).

According to the Job Demands-Resources (JD-R) model (Demerouti et al., 2001), a popular job-stress framework in occupational health psychology, high job demands are the primary driver of burnout, especially when employees lack sufficient resources to manage these demands. While one's work environment can 'provide' job resources like autonomy or peer support, employees also possess their own set of internal resources. These personal resources—such as resilience, self-efficacy and self-compassion—are positive skills or traits that help individuals feel more in control, both at work and in their personal lives (Hobfoll et al., 2003), and may help manage negative experiences. For example, early-career professionals who practice self-compassion by viewing mistakes as a natural part of their learning process may recover more quickly from setbacks. In contrast, those who see mistakes as personal failures or feel they have let their team or manager down might

struggle more, questioning their fitness for the job. For early-career professionals, it is important to soften their attitude toward failure while maintaining a healthy level of self-reflection. An imbalance in either direction—whether being overly critical or, conversely, overconfident—could be detrimental to well-being and good patient care. While personal resources are essential for employee well-being, they are also strongly linked to work engagement, which, in turn, is linked to several organisational outcomes, including job satisfaction and job commitment (Mazzetti et al., 2023). Despite their importance for personal and organisational functioning, ‘external’ resources such as developmental opportunities or autonomy tend to be limited in healthcare settings (West et al., 2018). Therefore, equipping employees with the necessary *personal* resources can be a promising alternative approach. However, it is important to emphasise that these individual-focused strategies should not replace efforts to address the systemic shortcomings of healthcare systems. Rather, they should be seen as complementary.

Coaching has emerged as a relatively new form of intervention to help healthcare professionals navigate the unique demands of their profession. Although coaching is commonly used in organisational settings, such as for human resource management and employee development, its application in healthcare organisations is more recent. One possible reason for this delayed adoption is the prevailing assumption—and the stigma associated with it—that healthcare professionals are the ones providing help, rather than receiving it. As a result, healthcare workers tend to seek support too late (Brower, 2021; Bynum & Sukhera, 2021), which may partly explain the high burnout rates. Another possible explanation for young healthcare professionals’ reluctance to take part in coaching may be ‘reflection fatigue’ (Trumbo, 2017). During training years, the reflection process can be perceived as an obligatory ‘box ticking’, yet another checklist item on a competence list, rather than a tool for continuous development. By the time doctors have taken on responsibility and workload, this formerly pre-scribed ‘obligation’ may be met with reluctance, taking away scarce time from direct patient contact.

Let’s call him Tim. Tim is a junior doctor who has been working at the emergency department for two years and now finds himself at a crossroads. Having graduated two years ago, he feels a growing urge to set a course toward a future specialisation yet doubts arise about his career choice. Whenever he lets his tasks and day-to-day responsibilities take priority over planning his career path, he becomes increasingly anxious and stressed. Seeking guidance, Tim decides to work with a coach, hoping to find strategies for managing his stress and anxiety. When, during our first sessions, I ask him to think back to previous important decisions, he realises that few of them ever truly felt like his own. This makes him feel demotivated about his professionalism. He feels he may lack the confidence to, at some point, be able to make important decisions for himself. In the first few weeks, these feelings add to his high stress levels, affecting his performance during long shifts and intensive work hours.

Coaching: What is it and how can it address physician burnout?

Coaching is a structured, short-term, and solution-focused intervention in which a coach supports clients in achieving personally meaningful goals (Grant, 2003). These goals may relate to challenges encountered at work, in the client’s personal life, or both. A recent qualitative study investigating the coaching goals of physicians, residents and medical students in the Netherlands revealed that coaching goals vary significantly, encompassing both professional and personal aspects, such as managing workplace relationships, balancing work-life demands, gaining a better understanding of personal strengths and weaknesses, or preparing for retirement (Stojanović et al., 2024).

Analysing 2571 coaching goals through inductive thematic analysis—a qualitative research method focused on the identification of patterns or themes—the authors identified seven overarching themes (career and future, coaching, current job and tasks, interpersonal work relationships, health and well-being, self-insight and development, non-work matters) across coaching goals. Interestingly, certain themes were more commonly

addressed at specific career stages, illustrating the changing developmental needs of medical professionals as they progress in their careers. Early-career physicians, for example, often focused on building their professional identity, emphasising both personal and professional growth. In contrast, later-career professionals were more likely to concentrate on interpersonal relationships and their physical and mental health (Stojanović et al., 2024). These variations in coaching goals likely reflect the changing demands and resources both in and out of work experienced by physicians at different career and life stages (Solms et al., 2019).

Coaching is a promising intervention largely due to its highly personalised nature. Sessions are typically one-on-one (unless in team coaching settings) and focus exclusively on the client's needs. This individualised approach to personal and professional development sets coaching apart from employee well-being initiatives typically occurring in group settings, such as mindfulness or stress-management programs (Melnik et al., 2020).

Coaches and coachees are well aware of coaching's benefits; its positive effects on well-being, performance and functioning have also been consistently demonstrated in intervention studies and meta-analyses (e.g., de Haan & Nilsson, 2023; Theeboom et al., 2014), including in healthcare settings (Boet et al., 2023; McGonagle et al., 2020; Solms et al., 2021). For physicians, coaching has been shown to reduce burnout symptoms, such as emotional exhaustion, and to enhance work engagement and personal resources like self-compassion and psychological capital (Dyrbye et al., 2019; McGonagle et al., 2020; Solms et al., 2021). These personal resources are particularly valuable in mitigating the negative impact of high job demands and have been proposed as potential mechanisms through which coaching produces its positive effects (McGonagle et al., 2020; Solms et al., 2023; Xanthopoulou et al., 2007).

Coaching young doctors: A practitioner's perspective

Young doctors tend to be highly intelligent, quick learners and high achievers. Being 'raised' in a strong hierarchical context early on, they have learnt to submit to senior colleagues and to bypass rather than embrace their own emotions and personal development. At the same time, healthcare is characterised as a working environment where there's rarely undisturbed time and focus on open, unguided reflection. In teaching moments, there's always a *prepossessed goal or intended outcome* that reflection is aimed at. It is normal for young doctors to think: 'If there's a clear set of academic competencies to abide by, what more could be necessary to become a good doc?'. Teaching is almost never about the intrinsic competencies or qualities a young healthcare professional possesses. This is why focus on personal development can initially feel excessively alienating and misplaced for young doctors. After all, why should the focus lie on one's inner self and personal goals when there are always plenty of others to worry about? Consequently, many healthcare professionals hold a strong conviction that personal challenges are irrelevant—or at least less important than anyone else's.

Introducing short and intensive coaching to young doctors can be very rewarding, producing a high yield. In the safety of a professional coaching relationship, they are challenged and supported but never judged. Often, this experience is totally new, and the liberating atmosphere can accelerate learning and result in quick progress. Once in sync with their own personal values and qualities, it becomes easier to re-establish this connection in future challenges. Ideally, through a successful coaching process, young doctors learn to re-establish this connection independently, ultimately making the coach obsolete.

Among young healthcare professionals, there is a growing awareness that their identity, beliefs and prejudices affect their daily practice and routines and vice versa. Perhaps nudged by modern social science and confronted with high burnout rates, they are now easier to convince that paying attention to the individual who carries the professional role—eventually—pays off.

One day, during a busy nightshift filled with numerous complications, Tim reaches his breaking point. He yells at the nurses, slams his pager on the desk and breaks down in tears. At the following coaching session, he shares how inadequate and helpless he felt in that moment. As we reflect together on what led to his breakdown, he begins to realise that many contributing factors were beyond his control. For instance, he had been given a very brief and incomplete handover and his patients were located far apart in a large hospital relatively new to him. Together, we shift focus on the aspects that were in his control. Tim realises that he had been reluctant to call for help in time, overestimating his own resourcefulness. Most importantly, he comes to see that his reaction—feeling overwhelmed—was a logical but unprofessional human response in a particular difficult situation. In the safe, non-judgmental atmosphere of the coaching session, he feels comfortable acknowledging this. I gently encourage him to further explore this self-understanding.

Conclusion

Coaching has been shown to enhance physician well-being and functioning, making it a promising intervention to address physician burnout and poor well-being. By helping healthcare professionals maintain their well-being and functioning, coaching not only benefits the individual but also safeguards the quality of patient care. Since coaching is personalised to the specific needs of the coachee, it can provide targeted support where generalised programs may fall short.

While coaching holds great promise in terms of supporting physicians, it is crucial to recognise that it alone is an insufficient solution if the root causes of poor physician well-being—such as excessive work pressure, organisational climate and leadership—are not addressed adequately. As with many interventions focused on the individual, there is a risk that such interventions may be steered by higher management goals, instead of mere personal employee benefit. Such interventions could shift responsibility onto physicians to ‘fix themselves’ rather than prompting organisations to address systemic problems. It is essential that coaching be seen as a complement to, not a substitute for, broader organisational efforts to improve the working conditions and well-being of healthcare professionals.

During the course of eight coaching sessions, Tim learns to better understand when and why he procrastinates, as we reflect on challenging situations and examine his behaviour in them. Together, we carefully dissect his feelings, assumptions, thoughts and the facts surrounding each situation. This helps him realise that his worry about the future only paralyses his ability to make clear and honest decisions. He also understands that his feelings of inadequacy drive him to overcompensate, rather than asking for help in a timely manner. We work on his biography and focus on his personal values and how to incorporate them in daily life. Furthermore, I introduce him to a method for internal dialogue. In between sessions, Tim begins to reflect on situations more quickly and objectively. His personal resources clearly expand. As a result, his anxiety and stress decrease, breaking a vicious circle. During one of our final sessions, Tim shares that while he still doesn't know what his exact future career will look like, he feels more centered and confident that his decisions will turn out okay: ‘The most important thing is that I feel like I'm doing the right thing—wherever that leads me.’

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Aircraft manufacturing and consumer welfare: From duopoly to disruption in a global market

By

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Abstract

This article examines the global competition between major commercial aircraft manufacturers—primarily Airbus and Boeing, and more recently United Aircraft Corporation (UAC) and the Commercial Aircraft Corporation of China (COMAC)—and its evolving implications for consumer welfare. Although aircraft are procured by airlines and not passengers, it is manufacturers who shape air travel's structural conditions by influencing airline costs, fleet availability, technological development, and regulatory dynamics. This research note analyses the duopolistic foundation of the modern aviation industry, the impact of state support and trade disputes, and the legal and commercial ramifications of new entrants from countries with significant geopolitical influence/power. Drawing on World Trade Organization (WTO) jurisprudence, competition law and commercial regulatory principles, it evaluates whether increased manufacturer competition enhances or detracts from consumer outcomes.

Keywords: Boeing, Airbus, COMAC, UAC, trade disputes, consumer welfare, commercial aviation.

Introduction

The aviation industry plays a critical role in modern commerce and mobility. While the public directly interacts with airlines, the foundational infrastructure—namely, the design, production, and delivery of commercial aircraft—is controlled by a small group of manufacturers. This structural concentration gives rise to significant commercial law considerations. The manufacturers' decisions have far-reaching consequences: they shape airline procurement strategies, influence airfares, determine route accessibility and drive innovation in environmental efficiency and safety.

Historically, this market has been governed by a duopoly—Airbus and Boeing—with each receiving considerable state backing and exerting immense power in both commercial and political arenas. However, the last two decades have seen the (re)emergence of new players from countries that can utilise their geopolitical leverage to yield trade results, mainly Russia's UAC and China's COMAC, which aim to challenge this status quo. This development calls for a re-examination of the manufacturer-consumer nexus and the role of legal frameworks—particularly international trade law, competition regulation and consumer protection principles—in safeguarding the public interest.

Methodology

This study adopts a qualitative legal analysis supported by secondary quantitative data. WTO legal rulings, academic economics literature, and public regulatory reports form the basis of the doctrinal analysis. Market share data and fleet acquisition statistics were drawn from public datasets, including those published by ICAO, IATA and academic sources. Results are presented through narrative synthesis and tabulated data.

Today's competition: evolving commercial strategies and consumer outcomes

The Airbus-Boeing duopoly: foundations and legal ramifications

The commercial aircraft market became increasingly consolidated during the late 20th century, with Boeing absorbing McDonnell Douglas in 1997 and Airbus—originally a European consortium—emerging as its primary competitor. Together, these two firms have controlled around 85% of the market for large commercial aircraft since the early 2000s.

Airbus and Boeing's rivalry is more than a business competition; it is a geopolitical and legal battleground. Their long-standing conflict has resulted in some of the most prominent WTO cases. Both sides have been found to engage in illegal state support practices: Boeing through U.S. tax breaks and military research and development (R&D) contracts, and Airbus via launch aid from European governments.[1]

The WTO's rulings in *DS316* and *DS353* not only affirmed the troublesome nature of these supports under international trade rules but also sparked retaliatory tariffs that spilled into unrelated sectors, illustrating the indirect consumer consequences of manufacturing disputes.[2] These tariffs ultimately affect pricing, operational costs and international supply chains—costs which may trickle down to passengers through higher fares or reduced service frequency.

Indirect effects on pricing and service

Economics literature confirms that while aircraft manufacturers do not sell directly to consumers, their market behaviour has substantial downstream effects. Irwin and Pavcnik (2004) found that aircraft prices increased by about 3.7 percent after the 1992 U.S. – E.U. agreement on trade in civil aircraft that limited subsidies. This was a change that affected airline capital costs and thereby constrained fair affordability (by burdening the consumers) and route expansion.[3]

Further, innovation cycles in aviation—such as the development of fuel-efficient models like the Boeing 787 and Airbus A350—are driven by manufacturer competition. These innovations reduce airline fuel costs and enable longer, direct flights, enhancing both the travel experience and environmental sustainability.

Yet, when innovation is rushed under competitive pressure, consumer welfare may suffer. The Boeing 737 MAX crisis, in which over 300 lives were lost due to design and oversight failures, reveals the dark side of cost-driven competition.[4] The regulatory failures of the Federal Aviation Administration (FAA), which delegated safety assessments to Boeing itself, underscored the need for robust legal oversight and international harmonisation in certification standards.

The 2000s–2020s: A new chapter in global aviation competition

UAC's regional constraints

The Soviet Union had, until its downfall, a considerable level of production of commercial aircraft (although not commercially successful by western standards, with only minimum exports out of Eastern Bloc) such as the Tu-154, Yak-42 and Il-86 models. The collapse of the internal passenger market due to the dissolution of USSR resulted in empty orderbooks for the manufacturers, with the domestic airlines barely surviving. Russia's UAC was formed after the Russian government decided to impose a merger of ex-Soviet aerospace companies/design bureaus in Russian territory (i.e. Sukhoi, MiG, Yakovlev, Tupolev) to consolidate efficient control and address the enormous financial adversities of the post Soviet era. It entered anew the commercial aviation market with the Superjet 100, in late 00s, aiming to serve regional routes with a modern, domestically produced aircraft. However, persistent technical issues, catastrophic accidents, a lack of after-sales service networks and geopolitical sanctions affecting imports of critical components from the West have severely limited the jet's marketability.[5]

From a consumer protection standpoint, UAC's failure to meet international maintenance and reliability benchmarks has resulted in operational disruptions and diminished confidence. For example, Mexico's carrier Interjet finally became insolvent after having 15 airplanes of its S100 fleet grounded due to lack of support, affecting hundreds of passengers. Despite its lower acquisition cost, the Superjet's limited serviceability has deterred airline adoption, and, therefore, it has failed to affect the broader commercial aviation structure significantly.

COMAC's strategic trajectory

By contrast, COMAC has emerged as a more formidable contender. Backed by the Chinese state, the C919 seeks to compete with the Boeing 737 MAX and Airbus A320neo.[6] It has already attracted the attention of foreign customers, with the first orders made by an airline in Laos. COMAC benefits from several strategic advantages: a captive domestic market, policy-driven procurement mandates from state-owned airlines, and substantial R&D subsidies.[7] However, the C919 has yet to achieve certification from western regulatory bodies such as the FAA or EASA, restricting its global competitiveness.

If COMAC succeeds in certifying and exporting its aircraft, the implications for consumer welfare are significant. Lower aircraft acquisition costs could allow budget and emerging-market airlines to expand routes and reduce fares. Additionally, the presence of a third global competitor, backed by the geopolitically ambitious China, may erode Airbus-Boeing pricing power and stimulate innovation in a way that other minor manufacturers such as Brazil's Embraer and Canada's Bombardier have not managed to achieve.

The 2010s–2020s: Competition law, consumer welfare and regulatory challenges

Legal responses to market concentration

Airbus and Boeing have been the subject of regulatory scrutiny not only at the WTO but also under domestic antitrust laws. Investigations into maintenance monopolies, tied servicing agreements and restrictive parts-supply contracts suggest that the duopoly may have abused its dominance in ancillary markets.[8] For instance, the European Commission's investigation into maintenance service bundling examined whether Airbus and Boeing were leveraging their manufacturing dominance to stifle independent service providers, thereby inflating airline maintenance costs and restricting competition.[9]

From a legal perspective, this raises questions about vertical integration and market foreclosure—core issues in competition law. Where such practices diminish airline flexibility and increase operational costs, they may ultimately reduce passenger welfare by driving up fares or limiting fleet modernisation.

Regulatory arbitrage and certification politics

A key legal challenge in international aviation is the harmonisation of aircraft certification standards. The duopoly has historically navigated well-established certification channels in the U.S. and Europe. Emerging manufacturers like COMAC, however, face considerable regulatory hurdles, often perceived as being politically motivated.

There is a risk that certification becomes a tool of protectionism rather than safety assurance. If regulatory bodies impose excessive delays or additional scrutiny on new entrants without evidence-based reasoning, this could violate the principles of fairness and market openness enshrined in international trade and commercial law.

Thus, commercial law must evolve to monitor not only the actions of manufacturers but also the integrity of regulatory institutions. International coordination is vital in ensuring that competition enhances consumer outcomes rather than being stifled by geopolitical bias.[10]

| Manufacturer | Global Market Share (% - Orders) | Primary Models | Certification Status |
|---------------|-----------------------------------|-----------------------------------|-----------------------------|
| Airbus | 45% | A320neo, A350 | FAA/EASA Certified |
| Boeing | 38% | 737 MAX 8, 787 Dreamliner | FAA/EASA Certified |
| COMAC | ~5% (est., based on limited data) | C919 | CAAC only |
| Airbus Canada | ~3% (part of Airbus Group) | A220 | FAA/EASA Certified |
| UAC | ~2% (Superjet 100, MC-21) | MC-21, Superjet 100 | Limited (Russia, CIS only) |
| Embraer | ~3% | E2 Series | Regional Certification Only |
| ATR | ~1% | ATR 72 | Regional Certification Only |
| Others | ~3% combined | Various regional and niche models | Regional Certification Only |

[11]

Lessons for contemporary policy and law

The history and current dynamics of aircraft manufacturing reveal critical lessons for legal scholars and policymakers:

1. Fair competition requires legal oversight: State aid, vertical integration and anti-competitive practices must be monitored to ensure markets remain open and innovation-driven. WTO jurisprudence, despite enforcement limitations, remains a valuable tool for this oversight.
2. Market concentration risks: The dangers of over-reliance on two manufacturers became clear during Boeing's 737 MAX grounding and COVID-19-related supply chain disruptions. Diversifying the manufacturing base increases systemic resilience.
3. Certification must be depoliticised: Certification delays driven by protectionism harm consumers by denying access to affordable alternatives. Legal reforms must minimise geopolitical interference.
4. Legal instruments must encompass indirect consumer effects: Although manufacturers and passengers are separated by one or more intermediaries, the legal frameworks of commercial law must evolve to recognise and regulate these indirect—but tangible—impacts on consumer welfare.

Conclusion

Commercial aircraft manufacturers operate at the intersection of industry, law and public welfare. While their direct clients are airlines, their strategic decisions determine the structure and accessibility of global air travel. The longstanding Airbus-Boeing duopoly has delivered both innovation and controversy, with benefits and risks tightly interconnected.

The rise of COMAC signals a potentially transformative shift—one that could reshape pricing structures, diversify airline choices and pressure incumbents to innovate. However, this outcome depends on legal and institutional readiness. Trade law, competition regulation and certification governance must adapt to new realities, prioritising fairness, safety and consumer benefit.

The future of global aviation depends on legal systems that balance innovation with oversight, enable competition without compromising standards, and protect consumers not only from airline misconduct but from structural market failures at the manufacturer level.

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A Different approach to Leading:
What we can learn about leadership from
in-migrant Chinese women in the UK

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Abstract

Throughout the leadership literature there is robust evidence that both gender and culture can have a profound effect on how leadership should be understood and perceived. Studies of in-migration and studies of gender and leadership rarely overlap though, instead often conflating the experiences of all migrants as if culture was not experienced or expressed differently between genders. This paper addresses this gap by exploring the experiences of leadership simultaneously through the lenses of both gender and natal culture. Using a qualitative methodology with a sample of 20 ex-patriate Chinese women leaders in the UK, the study finds highly effective leadership practice, but also several challenges. Notable amongst these is that while the gendered and culturally-informed tendencies to modesty, humility and passivity serve to support performance in the teams these women lead, they also seem to disadvantage the career progression of the women themselves in the UK work context. The paper argues that organisations have much to learn from the person-based approaches to leadership these women exhibit, but that to optimise the advantage of this and to fully realise the potentials for organisational performance, organisations need to challenge their own understanding of leadership to acknowledge and learn from the contributions of people with diverse approaches.

Keywords: leadership, in-migration, women, gender, culture, Chinese.

Introduction

There are many studies exploring the experiences of in-migrants to European and North American countries in terms of their experiences of work. Similarly, there are also many studies that explore the effects of gender on the experiences of work and careers. Rarely do these converge, however: studies of immigration rarely differentiate between the experiences of men and women, and rarely do studies of gender and work experience explore specific in-migrant minorities. This paper makes some contribution to filling this gap in the literature by exploring the experiences of leadership opportunities and roles amongst a sample of twenty female Chinese in-migrants to the UK. Viewed through a lens that allows for an intersectional effect of both gender and culture on behaviours, the study explores how these women navigate leadership roles in the UK context, as they identify with the mores and values attributed to women and to their background Chinese culture.

Since the mid twentieth century, there has been much migration from China to different parts of the world, including the UK, via Hong Kong. New migrants commonly found employment in the new country in the agriculture and hospitality sectors (Chong, 2019). But, more recently, as the diaspora has grown, people of Chinese origin are to be found throughout the labour force, and this includes notable representation in leadership roles. According to UK Government (2020) statistics, 27 percent of women and 31 percent of men of Chinese ethnicity were in managerial roles in England and Wales. Of note here is that there appears to be a disproportionate representation of Chinese-origin leaders relative to other populations, and there is an uncommonly small difference between the rates of Chinese women and Chinese men; both Grant Thornton (2021) and UN Women (2021) report much greater gaps between women and men in leadership roles throughout the world. In this paper, we explore the experiences of a sample of UK-based women leaders of Chinese origin with a particular focus on understanding their attitudes and approaches to leading in organisations. The central aim is to provide data that might inform an understanding of why Chinese women seem to have disproportionate experiences of leadership, their perceptions about their leadership, and the implications for organisations.

The paper proceeds as follows: First, a review of extant literature and our gaps in knowledge are presented. Following the presentation of the research methodology, the paper goes on to report findings from a sample of Chinese ex-patriate women leaders in the UK to explore their lived experiences of leadership in organisations, including the challenges they face, and what organisations may learn from them. An analysis and discussion of the evidence is presented prior to the conclusion of the paper that includes implications for knowledge and practice.

Throughout the employment literature, there is a growing body of evidence that diversity has a positive relationship with organisational performance and this is attributed to the additional information and intelligence derived from including multiple perspectives, based on multiple experiences and backgrounds (Forsythe et al., 2024). Leadership in multi-cultural contexts is optimal where it is informed by, sympathetic to, and inclusive of diverse workforces (Chin and Sanchez-Hucles, 2007), such as the multicultural contexts of many UK firms. Alongside this, there is evidence that culture is a key influence on leadership approaches, including variation in attitudes to and expectations of work, to social relations, and to values (Leong and Fischer, 2011), and Chinese culture is found by Wang and Shirmohammadi (2016) to have a specific effect.

Chinese¹ culture is underpinned by Daoism, Confucianism and Legalism (Ma and Tsui, 2015; Rarick, 2007). In particular, Confucianism has had a profound effect on what it means to be Chinese and how social life, morality and ethics are understood (Fan, 2000). In the context of work and employment, harmony is achieved by hierarchy and benevolence (Tu, 1998), and by commitment and loyalty (Rarick, 2007). Confucianism advocates rules, rewards and penalties, combining to afford a shared understanding of structures and power hierarchies (Ma and Tsui, 2015; Tsui et al., 2004): “higher ups govern, lower ranks obey” (Beamer, 1998, p. 54). But there is also an expectation that leadership involves ethics, benevolence and emulatory conduct (King and Zhang, 2014) such that while authoritarian, it is also paternalistic, invoking trust amongst those being led (Pellegrini and Scandura, 2008).

While culture has as much effect on women as men of Chinese identity, as in many cultures throughout the world, men are valorised and women subordinated (Law, 2013; Tu, 1998). Historically, Confucianism asserts that women present the core ‘virtues’ of fidelity, attractiveness, being mindful in speech, and focus on family. The ‘Cultural Revolution’ and the Maoism that followed rejected much of this (Gregor and Chang, 1979), and advocated equality (Shu and Zhu, 2012) but 2000 years of tradition is slow to change, and indeed, more recently according to Ai (2009) and Lauridsen (2008) there has been increased interest and pride in Confucianist values in China. Whether this has had a specific effect on women’s behaviours and expectations of work is unknown, but, as with cultures throughout the world, it remains the case that women predominate in domestic and caring contexts (ONS, 2016), and amongst Chinese-origin women, passivity and modesty prevail as expectations (Foley et al., 2015; Rosenlee, 2012).

In terms of leadership, Confucianism holds that leaders require strength, power and assertiveness, attributes usually regarded as masculine (Bem, 1981). Notwithstanding this though, contemporary thinking regarding leadership in organisations has, for the last half a century, noted the importance of social skills, positioning leadership as relational (Graen and Uhl-Bien, 1995) and requiring emotional intelligence (Goleman, 1998). Transformational leadership, and other person-based methodologies for leading in organisations have been advocated as particularly beneficial since these align the interest of organisations with those of the people who work in them (Avolio and Yammarino, 2013). Incongruous with traditional views of gender and leadership, therefore, there is an argument in Galloway et al. (2015) that women may be *more*, not less, suited to effective leadership, since social and relational skills are most often attributed to them. Despite this, women continue to lag behind men in terms of the rates at which they occupy organisational leadership roles (Hoyt, 2010).

There appears, therefore, to be inconsistency between the observation that, relatively speaking, Chinese expatriate women in the UK occupy leadership positions in organisations at a greater rate than other women, and traditional cultural perceptions and attitudes attributed to women of Chinese background. The concept of leadership may lie at the heart of this though. In Chinese culture, the term ‘leadership’ is conceptually differentiated into *lingxiu* and *lingdao*. *Lingxiu* refers to high status leadership, usually reserved for those who

¹ In this paper, ‘Chinese’ refers specifically to the Han Chinese ethnicity.

hold significant political power, such as state leaders. *Lingdao* on the other hand, refers to leadership roles and activities in organisations. Galloway (2022) also refers to leadership involving dual elements: *thought leadership* – encompassing ideas and vision, and *leading people* – influencing others to action. While both are required of organisational leaders, the conceptual distinction between *lingxiu* and *lingdao* may be understood as biasing *thought leadership* and *leading people* respectively, and as such, ones' identity as a leader may well be influenced by this distinction. Certainly, there is evidence from studies that people in leadership roles in organisations do not always perceive themselves as having a strong leadership identity (Bedeian and Hunt, 2006; Bligh et al., 2006). This may describe the situation for Chinese ethnic migrant women in leadership positions in the UK. Thus, in answer to Tsang et al. (2011), who notes the absence of research in this area, the rest of this paper reports an empirical study that presents some data about Chinese ex-patriate women leaders in the UK from the perspectives of those practitioners themselves.

Methodology

The methodology employed for the empirical research comprised a sample of 20 in-migrant Chinese women in the UK, each of whom was in a leadership role in their organisation, defined as leading a team of at least three other people. Table 1 provides a description of the sample, including the level of leadership of each participant, ranging from junior (leading non-leading employees), middle (leading those in subordinate leadership roles), and senior leadership (CEOs, directors). Each woman participated in a one-to-one semi-structured interview to elicit testimony in their own words about their lived experiences of leading in the UK (Bertaux, 1981). The narrative data obtained was analysed using the technique described in Miles et al. (2014): *data reduction*, *data presentation* and *data explanation*.

Table 1 can be found on the next page.

| No. | Pseudonym* | Generation | Region | Industry | Leadership Position |
|-----|------------|------------|----------------|---------------------|-----------------------|
| 1 | Hongmei | 1960s | Mainland China | Academia | Middle |
| 2 | Fang | 1960s | Mainland China | Medical | Middle |
| 3 | Yurong | 1960s | Mainland China | Academia | Middle |
| 4 | Meixin | 1970s | HK China | Retail | Middle |
| 5 | Kai'An | 1970s | HK China | Medical/Consultancy | Senior/Business Owner |
| 6 | Limin | 1970s | Mainland China | Finance | Junior |
| 7 | Jiamei | 1970s | Mainland China | Asset Management | Junior |
| 8 | Zhilin | 1970s | Mainland China | Academia | Middle |
| 9 | Jiahui | 1980s | HK China | Architecture | Middle |
| 10 | Fangxin | 1980s | Mainland China | Charity | Junior |
| 11 | Zhuoya | 1980s | HK China | Finance | Junior |
| 12 | Xinyi | 1980s | HK China | Charity | Junior |
| 13 | Yangna | 1980s | Mainland China | Education | Senior/Business Owner |
| 14 | Jingyi | 1980s | Mainland China | Finance | Junior |
| 15 | Shiying | 1980s | Mainland China | Medical | Junior |
| 16 | Meiling | 1980s | Mainland China | Architecture | Junior |
| 17 | Mengxin | 1990s | HK China | Charity | Middle |
| 18 | Zitong | 1990s | Mainland China | Education | Junior |
| 19 | Shihan | 1990s | Mainland China | Consultancy | Junior |
| 20 | Houjing | 1990s | Mainland China | Consultancy | Junior |

Table 1: Sample details

* Pseudonyms used throughout for purposes of anonymity

The effect of Chinese cultural values on leadership

Each of the participants claimed their leadership role was the result of progression within organisations and career. Despite the implication of merit this evokes, there was, however, inconsistency in terms of identifying oneself as a leader. Some claimed strong identity, such as Kai'An (1970s, Senior/Business Owner) who asserted *"I was always a leader, it's my character... even in school I tended to be the chosen one to lead a team of schoolmates"*. The opposite was more common though, with a larger number of participants refuting they were leaders despite objective evidence to the contrary. The following exemplify: *"It is out of my character", "I am a facilitator", "I am a helper"*. In each case, interviewees set themselves apart from their understanding of what a leader is, describing leadership as more "grand" than their role, more authoritative and high-ranking. Instead, these women described their approaches at work to being nurturing and supportive; as Kai'An (1970s, Senior/Business Owner) puts it: *"you have to be always at the front because...you are also a protector"*.

When asked specifically about the effects of Chinese culture on their leadership, there was some inconsistency, with some (mostly younger) participants claiming it was not an influence, and more commonly, others saying it was. The comments of Jingyi and Yurong about how Chinese culture has informed their leadership exemplify:

"I see culture is deeply in me...I think one quite important thing is relationship building. You know, in China it's quite important. So I suppose at work, I think I do spend time to build relationships with others. Either with people reporting to me or the people I report to" (Jingyi, 1980s, Junior).

"We are always Chinese, we emphasise less on individuals as we grew up in collectivism, and you don't try to stand out in a crowd, you always try to be part of the team. So I am a leader in a way that never assumes I have the authority. I feel I do more work and I listen to others. I think that is a Chinese way, to be more modest, more humble. You listen to others more, you always sympathise" (Yurong, 1960s, Middle).

Other culture-related factors included the idea of loyalty to one's organisation, and that hard work is culturally informed. The following are illustrative:

"My Chinese colleagues and myself are very dedicated" (Shiying, 1980s, Junior).

"That is part of the blood... Chinese people do work very hard, and we don't complain" (Meixin, 1970s, Middle).

Consistent with this, and implied in Meixin's comment, is a commonly reported resilience and self-reliance, and it was noted by several of the women that this is based on a desire to not appear incompetent, but also to deflect attention. Hongmei (1960s, Middle) expresses it thus: *"You're using up their time... I don't want to bother people... I'm reluctant"*. Therein lie values of modesty and passivity, each of which seem to be particularly characteristic of women of Chinese cultural background. Indeed, this was by far the most mentioned part of the descriptions of how these women approach leadership. On one hand this was identified as beneficial to their leadership; the women led by example, and they sought no specific attention. They were also keen to maintain 'harmony', and to this end their avoidance of confrontation afforded a working environment that was characterised by support and diplomacy amongst their teams. On the other hand, this modest, passive approach to leadership was also seen as disadvantageous to their own career progression. Jiahui (1980s, Middle) explains *"I don't usually ask for immediate reward or appreciation...expecting that the quality and skill set I have acquired over the years will eventually be appreciated and rewarded"*. In the UK organisational context, this lack of assertion amongst participants was also perceived to have led to them being overlooked to a large extent in terms of their own career progression and rewards, as articulated below by Meixin and Fang.

"I think a lot of people are not very good [at]selling themselves" (Meixin, 1970s, Middle);

"[In terms of] Chinese values the loyalty and the respect for your superiors, and that kind of modesty.... I think it's got both good and bad sides. The good side is that people don't see you as a threat. And the bad side, is not pushing yourself forward, sometimes you just do not get the credit you deserve." (Fang, 1960s, Middle)

The implications for development

The influence of culture on leadership style was, as noted already, identified by all participants, at least to some degree. While they may not identify their own practice as aligned with their perceptions of leadership, they were all objectively speaking, leaders. Consistent with the culturally-informed tendency to modesty, Meixin (1970s, Middle) recalls how a conversation with her line manager made her realise she was a proficient leader:

"[during an appraisal]...the score that my line manager gave me didn't quite match mine. I gave myself quite a low score whereas my line manager said, 'No, I think you did this, you did that'. So he gave me quite a high score and that's when I realised actually I did all of these things."

Hongmei (1960s, Middle) similarly expressed a specific point at which she became aware that she was a leader:

"I thought initially that this was just part of my admin job...and later I realised...people recognise my contributions and I have a lot of potential"

Hongmei's comment alludes both to a realisation of her value as a leader, and as someone with the potential to develop. Most of the women in the sample referred to the long-term orientation of development and support of people, a culturally Chinese expectation of organisational life. They noted that they had developed as leaders through experience over time, using methods such as self-reflection and observation of peers and role models, and that this is what made them good at their jobs. The advantage of their supportive person-focused approaches to leadership was that they engendered trust within their teams and that had served them and their organisations well. At the same time though, several also remarked that patience and perseverance were not likely to be noticed and rewarded in UK organisations. The tendency to humbleness and modesty meant that they could feel overlooked, and indeed, Houjing noted that this could be as a result of a perception of a lack of ambition to develop further, a perception she notes as entirely incorrect:

"My leadership is...within a small team. I really want to be a leader and really want to..... develop my leadership so I actually require more opportunities". (Houjing, 1990s, Junior)

In this respect, participants were aware that they required a specific type of development to proceed in their careers. Indeed, development was a commonly reported ambition amongst the sample.

Generally, throughout the sample, there was acknowledgement that there was a lack of 'fit' between Chinese cultural expectations and UK work practices. Other culturally-informed issues that were raised included the Chinese expectation that leaders have authority. For example, Limin notes: *"In China you don't say 'no' to your boss, you just follow orders, but here you do get 'no' from your team members and being Chinese I feel that can be difficult to take on".* (Limin, 1970s, Junior)

Despite this, all participants in this research noted that they enjoyed working in their UK organisations and believed they had opportunities there that they would not necessarily have elsewhere. When asked what would assist in their development, several gave suggestions that included support from a peculiarly Chinese cultural perspective. Mentoring was cited as one such vehicle, with several stating the need for this to be specific to their circumstances. The comments of Hongmei and Xinyi below exemplify:

"It would be good to have personal tutors, female in particular" (Hongmei, 1960s, Middle);

"I would appreciate a cultural translator, as they are more open to understanding the cultural difference" (Xinyi, 1980s, Junior).

Despite the numerous suggestions about mentoring, it was also noted that mentoring was very hard to find, culturally sensitive or gender-specific or not. Nevertheless, the women in this sample were all highly effective leaders and had developed themselves over time. But they perceived this had been achieved by natural evolution in their organisations rather than as a consequence of their particular talents, as Hongmei (1960s, Middle) illustrates: *“As you progress in your career you will take on more management or leadership roles I think. I didn’t strive to be a leader in a sense.... I was put into a leadership role rather than self-elected”*. Again, this suggests a modesty that seems to be particularly pertinent amongst culturally Chinese women. The implication for organisations that seek to employ diverse workforces and realise the benefits of the type of leadership that these women are contributing is that development must be cognisant of different cultural values and nuances that affect how they lead, and indeed, inform the person-based, transformational good practice implied by the disproportionate rates of leadership amongst this particular demographic.

Discussion

The women in the current sample were all seasoned leaders. They led in a person-centred way that prioritised support and development in their teams and conflict was avoided. The means by which they approached their leadership was through quiet, reflective practice, deferring success and serving their teams’ interests. Each participant, to some degree or other, noted that their practice was informed by their natal culture, and each demonstrated values that might be described as both gendered and culturally Chinese. The women in the sample enjoyed their jobs and noted the opportunities available to them in the UK career context. They were all in careers where they had progressed to leadership roles through merit. Yet all expressed some frustration at the lack of recognition they appear to receive. Again, participants acknowledged that while modesty, humility and comradeship enabled their leadership, it also meant they could be overlooked and unrewarded relative to other leaders. Nevertheless, ambition was consistently reported, so there is a desire for career development and promotion, at least amongst this sample of women. From an evidence point of view, the outcomes of their leadership were serving organisations well, as per theories about person-based learning (Avolio and Yammarino, 2013). Indeed, they seemed particularly adept at this and actively avoided more directorial, authoritative approaches. Again, this was attributed in the sample, at least to some extent, to being of Chinese origin and being female. Cumulatively then, the evidence in this research suggests diversity was informing and advantaging organisational performance (Forsythe et al., 2024). But there is an argument that this could be better engaged, that there is more potential advantage to organisations than they are currently realising.

There is no suggestion in this research for a need for remedial interventions for the ex-patriate Chinese women in this sample. While recognition might be better achieved with some assertiveness training, in fact, they were all delivering for their organisations. Instead, the implication is that the organisations might learn from them. Because of the value of person-based leaders to organisations there is much potential in learning from the socio-culturally informed leadership approaches of these women. Indeed, the features of modesty, compassion, respect and hard work have served followers’ and organisations’ interests well and there is a clear implication that realising the value of diverse leaders, supporting and rewarding them based on outcomes rather than impressions, may pay dividends to ambitious organisations.

Conclusion

The findings reported in this paper contribute data and analysis on the approaches to leadership within an under-researched group of in-migrants in the UK. Through this, there is contribution to our understanding of how culture and gender may inform leadership, and how person-based, relational leadership approaches can engage people and contribute to performance. A culturally informed and gender-conscious approach to analysing leadership behaviour is recommended for future scholarship.

From a practice point of view, there are also clear implications in terms of contribution to our knowledge of diversity of leadership and the value of culturally-informed practice. Implied also is that focus on developing leaders to emulate traditional (in this case, Western) practice, may be less useful for organisations than a wider focus on how leadership is perceived, and the links between different styles of leading and outcomes. If there are clear implications from this research, and others, that to engage leaders from diverse backgrounds, and realise the clear advantages to the organisations in which they work, organisations themselves might consider a reappraisal of their holistic views of leadership. Greater, and more informed appreciation of the different approaches, skills and potentials of leadership at an organisational level may serve to enable them to best capture and capitalise on the potential for contribution in the diversified working context.

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The Effect of Management Change on Job Satisfaction in the Public Sector: The Case of Cyprus

By

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Abstract

The purpose of this article is to explore how a change in the status of an organisation can impact the employees' job satisfaction. In particular, this study investigates the change of an organisation from a semi-governmental to a fully governmental status and the effect of leadership on employee job satisfaction.

This research is based on primary data from a longitudinal survey that was repeated over a period of two years amongst the employees of a deputy ministry in Cyprus, after its transition from a semi-governmental organisation.

The findings are important so as to better understand the significance of job satisfaction in the public sector and the elements that affect it.

Keywords: Job Satisfaction, Leadership, Change, Human Resource, Working Environment, Public Organisations, Cyprus.

Introduction

Job satisfaction is a notion that has concerned research for many decades and it is still relevant today. Job satisfaction was firstly introduced as a concept in the 1920s and it was identified in many pieces of research thereafter. Vroom (1964) noted that job satisfaction is a mixture of employees' emotions towards their work, while some years previous to this, Hoppok and Spielgler (1938) had suggested that job satisfaction is achieved through a set of psychological, physiological and environmental conditions that need to be aligned.

Employees seek job satisfaction and an organisation needs to be able to provide a working environment in which people will be happy and productive (Chandrasekar, 2011). This is true for both private and public organisations and, albeit they have different structures and expectations, job satisfaction is a key element for both.

This study investigates the job satisfaction levels of public servants in Cyprus after a change in their working environment from semi-governmental to a fully governmental entity. The survey was replicated two years later to investigate any differences after the establishment of the new regime.

Job Satisfaction

Job satisfaction is a very important factor with regards to employee retention and organisations need to invest to keep their personnel happy. Raziq and Maulabakhsh (2015) identified that job satisfaction derives from a healthy working environment that includes working hours, job safety and security, relationships with co-workers, esteem needs and leadership support. Satisfied employees are the ones who find pleasure in their job (Wright and Davis, 2003) and happy employees are more devoted, have better performance and care for their colleagues (Dziuba, Ingaldi and Zhuravskaya, 2020).

A working environment should be healthy enough to allow employees to work freely and reach their full potential (Raziq and Maulabakhsh, 2015). In this context, the working environment should also provide appropriate leadership so that employees are constantly motivated and satisfied, with reduced stress levels and greater flexibility (Abuhashesh et al., 2019). If employees are satisfied with their job and their working environment, they will have higher levels of work performance (Haque et al., 2015; Raziq and Maulabakhsh, 2015; Haque and Aston, 2016). More importantly, a satisfied employee will experience more psychological safety (Niciejewska, 2017; Wolniak and Olkiewicz, 2019) which in turn leads to life satisfaction. When employees are treated well, they will feel better (Aziri, 2011; Haque, Faizan and Cockrill, 2017).

The importance of leadership and effective supervision has been stressed by several researchers who have noted that having a good leader resulted in higher job satisfaction (Schroffell, 1999; Raziq and Maulabakhsh, 2015). Furthermore, Brenninger (2011) indicated that leaders should adapt their styles to get employees more involved in the decision-making process, which will result in higher commitment and job satisfaction. This was in agreement with Herzberg et al. (1959) who noted four factors that aid prolonged satisfaction—namely, achievement, recognition, work tasks and responsibility.

A supportive leadership not only significantly increases job satisfaction and commitment (Lok and Crawford, 2001; Mosadegh Rad and Yarmohammadian, 2006) but it also increases employees' psychological and physical wellbeing (Ilardi et al., 1983).

When employees are involved in decision-making processes their work performance and productivity increase, reducing absenteeism and turnover (Bin Shmailan, 2016). With a friendly environment in place, employees are happy to go to work and are not afraid of the workload, despite the fact that they might need to put in extra effort (Dziuba et al., 2020). In effect, creating such an organisational culture instils employees with the feeling of belonging, which in turn benefits the organisation itself.

This kind of organisational culture should be in place in both private and public sector enterprises. However, public organisations, due to various laws and regulations that are in place, tend to have more bureaucracy which might hinder employees' job satisfaction.

Public Servants

It has been identified, in earlier studies, that public servants are generally more dissatisfied with their jobs than their private sector counterparts (Rainey, 1989; Steel and Warner, 1990; Baldwin and Farley, 1991). This displeasure can be partly attributed to the structure of public organisations, which are mainly characterised by extreme bureaucracy (red tape) and conflict (Wright and Davis, 2003). The dissatisfaction of public servants is reflected in issues of self-esteem, autonomy and self-actualisation (Porter and Mitchell, 1967; Solomon, 1986).

Although much is known about the processes that influence job satisfaction in the private sector, this is not the case for public organisations, where there is only limited and/or dated research concerning elements such as the work environment and the job characteristics that affect job satisfaction. To understand job satisfaction within the public sector it is necessary to identify the differences between the public and private sectors (Wright and Davis, 2003). As has been noted over many years, the working context of public organisations is fundamentally different from private ones (Whorton and Worthley, 1981; Rainey, 1989; Baldwin and Farley, 1991).

Public organisations often have conflicting goals and are frequently restrained by the demands of external stakeholders; in parallel, the general public seeks equity, accountability and responsiveness from public servants (Wright and Davis, 2003). Expectations are often ambiguous and it can be easier to identify what public servants should not do rather than what they should (ibid.). They are often constrained by strict rules (Buchanan, 1975), resulting in conflict and lower job satisfaction amongst employees. Strict organisational rules and administrative bureaucracy also limits employees' creativity, which in turn leads to work that is boring and routine – with reduced job satisfaction (Wright and Davis, 2003).

As mentioned earlier, there is limited and/or dated research with regards to the job satisfaction of public servants and even more so when it comes to Cyprus. Previous studies have focused on investigating the effect of leadership on job satisfaction in healthcare, military, educational and business organisations (Cook et al., 1989; Bass, 1990; Chen and Silversthorpe, 2005) and such research suggests that employee job satisfaction

in the public sector is as important as in the private sector (Voon et al., 2011). This piece of research investigates job satisfaction within a public organisation in Cyprus which was previously a semi-governmental entity. It attempts a comparison of employee satisfaction, especially at the point of leadership change in a switch to a fully governmental entity.

The research

The research was conducted amongst the employees of a deputy ministry in Cyprus (former semi-governmental organisation) in an attempt to investigate the level of their job satisfaction and identify possible problems people face within their workplace. For the purposes of this research, the inductive approach was applied. The inductive approach is all about building a theory and in this case the theory will follow the data collection (Saunders et al., 2009). Researchers adopting this approach are more likely to employ qualitative data and use a variety of collection methods to maintain multiple perspectives of phenomena (Easterby-Smith et al., 2008). Under the inductive approach, reality is seen as internal to social actors. Therefore, both the researcher and the actors under investigation can affect the research and its outcome (Creswell, 2009).

A survey was deemed appropriate for gathering the data. Survey is a form of study mainly linked with the deductive approach and is widely used in social sciences research in an attempt to answer questions such as who, what, where, how much and how many (Saunders et al., 2009). Hence, it is used in the scope of exploratory and descriptive research, allowing the collection of quantitative data which can be analysed by using 'descriptive and inferential statistics' (Saunders et al., 2009, p. 144). Surveys are used frequently, as they serve to collect large amounts of data at minimum cost (Creswell, 2009; Saunders et al., 2009). The data collected is standardised and easy to compare. Further to the collection of quantitative data, the questionnaire (see Appendix) entailed one open-ended question which asked people to give suggestions on the things they would like to be changed in their workplace.

The survey was conducted in the form of a longitudinal study. Firstly, data was collected during May 2019, in order to investigate the job satisfaction of the employees after the transformation of semi-governmental organisation to a fully public one. Data was then collected again in September 2020 (one year after the previous survey) to observe the shift in the feelings/satisfaction level of the employees in the established deputy ministry.

The sample

The survey was conducted through a questionnaire that was sent to all employees of the Deputy Ministry of Tourism, via email. The questionnaire was prepared both in English and Greek in an attempt to accommodate employees who do not speak Greek (offices abroad). The employees were given the option to either submit the questionnaire in a box (placed in the library) or send it via mail to the researchers, who then placed it in the box. The surveys both lasted for a period of one month (May 2019 and September 2020). Access to participants for this step of the research was fairly easy as the survey was sent via email, and it did not require more than 10 minutes to complete.

Part A (May 2019): The First Survey

The last question was open-ended and was optional. The number of the participants was 118 (the questionnaire was sent to all the employees of the Deputy Ministry) out of which 54% were women and 31% were men. Eighteen people (15%) did not indicate their gender (see Table of Participants). Since the survey was anonymous, the number of the questionnaire (as drawn from the box) and the gender of the participant were used to identify the answers. For example, questionnaire 1 – female would be referred to as F1. In the cases that participants did not indicate their gender, they are referred to with the letter N – i.e., N16.

It should be noted that all data percentages within this paper are rounded to the nearest whole number and may therefore not always total 100%. The details of the first survey are shown in Table 1 below.

| Questionnaire | Gender | Age | Reference |
|---------------|----------------|----------------|-----------|
| 1 | Female | 50+ | F1 |
| 2 | Male | 31-40 | M2 |
| 3 | Female | 41-50 | F3 |
| 4 | Female | 31-40 | F4 |
| 5 | Female | 31-40 | F5 |
| 6 | Female | 31-40 | F6 |
| 7 | Male | 31-40 | M7 |
| 8 | Male | 41-50 | M8 |
| 9 | Female | 41-50 | F9 |
| 10 | Female | 41-50 | F10 |
| 11 | Male | 41-50 | M11 |
| 12 | Female | 31-40 | F12 |
| 13 | Female | 31-40 | F13 |
| 14 | Male | 50+ | M14 |
| 15 | Male | 31-40 | M15 |
| 16 | Not identified | 41-50 | N16 |
| 17 | Male | 50+ | M17 |
| 18 | Not identified | Not identified | N18 |
| 19 | Not identified | Not identified | N19 |
| 20 | Female | 31-40 | F20 |
| 21 | Female | 41-50 | F21 |
| 22 | Male | 50+ | M22 |
| 23 | Female | 41-50 | F23 |
| 24 | Male | 50+ | M24 |
| 25 | Not identified | 50+ | N25 |
| 26 | Female | 31-40 | F26 |
| 27 | Not identified | Not identified | N27 |
| 28 | Male | 50+ | M28 |
| 29 | Female | 50+ | F29 |
| 30 | Male | 50+ | M30 |
| 31 | Female | 31-40 | F31 |
| 32 | Male | 50+ | M32 |
| 33 | Female | 31-40 | F33 |

| Questionnaire | Gender | Age | Reference |
|---------------|----------------|----------------|-----------|
| 34 | Female | 31-40 | F34 |
| 35 | Female | 50+ | F35 |
| 36 | Male | 50+ | M36 |
| 37 | Male | 41-50 | M37 |
| 38 | Male | 50+ | M38 |
| 39 | Female | 50+ | F39 |
| 40 | Female | 50+ | F40 |
| 41 | Female | 50+ | F41 |
| 42 | Male | 50+ | M42 |
| 43 | Male | 50+ | M43 |
| 44 | Male | 31-40 | M44 |
| 45 | Female | 31-40 | F45 |
| 46 | Male | 31-40 | M46 |
| 47 | Male | 31-40 | M47 |
| 48 | Female | 31-40 | F48 |
| 49 | Not identified | Not identified | N49 |
| 50 | Male | 50+ | M50 |
| 51 | Female | 50+ | F51 |
| 52 | Male | 50+ | M52 |
| 53 | Female | 41-50 | F53 |
| 54 | Not identified | Not identified | N54 |
| 55 | Female | 41-50 | F55 |
| 56 | Female | 50+ | F56 |
| 57 | Female | 50+ | F57 |
| 58 | Female | 50+ | F58 |
| 59 | Male | 50+ | M59 |
| 60 | Male | 41-50 | M60 |
| 61 | Female | 50+ | F61 |
| 62 | Female | 41-50 | F62 |
| 63 | Female | 50+ | F63 |
| 64 | Female | 50+ | F64 |
| 65 | Female | 41-50 | F65 |
| 66 | Male | 31-40 | M66 |
| 67 | Female | 50+ | F67 |
| 68 | Male | 50+ | M68 |
| 69 | Female | 41-50 | F69 |
| 70 | Male | 50+ | M70 |
| 71 | Female | 31-40 | F71 |
| 72 | Female | 50+ | F72 |
| 73 | Female | 41-50 | F73 |
| 74 | Female | 50+ | F74 |
| 75 | Male | 31-40 | M75 |
| 76 | Female | 50+ | F76 |
| 77 | Not identified | Not identified | N77 |
| 78 | Female | Not identified | F78 |

| Questionnaire | Gender | Age | Reference |
|---------------------------------------|----------------|----------------|-----------|
| 79 | Female | 50+ | F79 |
| 80 | Male | 50+ | M80 |
| 81 | Female | 50+ | F81 |
| 82 | Not identified | 41-50 | N82 |
| 83 | Female | Not identified | F83 |
| 84 | Female | 50+ | F84 |
| 85 | Female | 41-50 | F85 |
| 86 | Male | 50+ | M86 |
| 87 | Male | 41-50 | M87 |
| 88 | Not identified | 41-50 | N88 |
| 89 | Female | 50+ | F89 |
| 90 | Not identified | Not identified | N90 |
| 91 | Female | 31-40 | F91 |
| 92 | Male | 50+ | M92 |
| 93 | Female | 41-50 | F93 |
| 94 | Female | 41-50 | F94 |
| 95 | Male | 50+ | M95 |
| 96 | Not identified | Not identified | N96 |
| 97 | Not identified | Not identified | N97 |
| 98 | Male | 50+ | M98 |
| 99 | Not identified | Not identified | N99 |
| 100 | Female | 41-50 | F100 |
| 101 | Female | 31-40 | F101 |
| 102 | Female | 41-50 | F102 |
| 103 | Female | 31-40 | F103 |
| 104 | Female | 50+ | F104 |
| 105 | Female | 41-50 | F105 |
| 106 | Male | 41-50 | M106 |
| 107 | Male | 31-40 | M107 |
| 108 | Female | 41-50 | F108 |
| 109 | Female | 31-40 | F109 |
| 110 | Female | 31-40 | F110 |
| 111 | Female | 41-50 | F111 |
| 112 | Not identified | Not identified | N112 |
| 113 | Female | 50+ | F113 |
| 114 | Not identified | Not identified | N114 |
| 115 | Not identified | 41-50 | N115 |
| 116 | Not identified | Not identified | N116 |
| 117 | Female | 41-50 | F117 |
| 118 | Female | 31-40 | F118 |
| Table 1: Part A (May 2019) - Survey 1 | | | |

Six aspects of the quality of the workplace were defined:

Quality of workplace relationships among employees. Four features of this aspect were measured: —socialising with colleagues, feeling respected, collaboration with and support from colleagues. Findings indicated that more than 70% of the employees like to socialise with colleagues at work, feel that their colleagues treat them with respect, are able to work with their colleagues in order to collectively solve problems, and can rely on their colleagues for help and support.

Attitudes towards immediate supervisors and top management. Six features of this aspect were measured: —recognition for good work, feedback received, whether employee concerns are dealt with, feeling respected by supervisor/management, the extent to which employees felt the latter would defend them if they made an honest mistake, and supervisors'/managements' knowledge and skills.

52% reported that they received recognition for good work from their immediate supervisor, while 27% reported that they did not. 52% reported that they had the opportunity to discuss with and receive feedback from their immediate supervisor about their work performance. 27% reported that they did not have this opportunity. 47% felt that their concerns were dealt with by their immediate supervisor, while 30% did not. 66% felt that their immediate supervisor treated them with respect, while 20% did not feel so. 53% felt that their immediate supervisor would defend them before others in the organisation if they made an honest mistake, while 23% did not. 61% respect their immediate supervisors' knowledge and skills. 17% did not and 23% neither agreed nor disagreed with this statement. Overall, it could be derived that around half of the employees were satisfied with their immediate supervisor's attitude and behaviour.

As far as top management is concerned, conclusions were less sanguine. Only a little over one third of the personnel reported that they received recognition for good work from management, had the opportunity to discuss with and receive feedback from management about their progress, felt that their concerns were dealt with by the management and felt that the management would defend them if they made an honest mistake. Around half of the employees felt that the management treated them with respect and respected management's knowledge and skills. A significant percentage of participants answered that they neither agreed nor disagreed with these six items when it came to top management. This is something that is difficult to interpret. It is unclear whether they did not want to express an opinion, felt unsure, or were actually dissatisfied.

Health and safety (H&S). Four features of this aspect were measured: —the extent to which management is concerned with H&S, whether employees felt that they know how to improve cleanliness and safety, how to perform their job safely, and are aware of their role and responsibility for protecting their personal health and safety at work. Only 36% agreed that the management were concerned with employee health and safety. Around 80% reported that they knew how to maintain or improve workplace safety and cleanliness, or to perform their job safely, and were aware of their role and responsibility for protecting their personal health and safety at work.

Work pressure. Two features of this aspect were measured: —having no time to relax at work and feeling overloaded with work. **Harassment.** Four features of this aspect were measured: —being threatened due to refusal to engage in sex, attempts that have been made to engage one sexually, receiving sexual remarks and being mistreated due to one's gender. The vast majority reported that they had not been threatened or treated poorly as a result of not being sexually cooperative. Over 84% said no attempts to engage them sexually had been made, and they had not received offensive sexual remarks publicly or privately. 14% reported that they

had been mistreated or ignored because of their gender. 38% felt that there was no time to relax at work, 30% felt that there was, and 31% neither agreed nor disagreed with the statement. Furthermore, more than half of the personnel felt overloaded with work.

Work motivation. Five features of this aspect were measured: —the extent to which employees find their job meaningful and interesting, work tasks are a driving power, work objectives are well-defined, there are opportunities for skills development, and they are encouraged to pursue further professional development. 64% reported that they found their job meaningful and interesting, yet only 42% considered their job tasks a driving power in their job. 37% found their job tasks neither motivating nor demotivating. Just over a third of the employees agreed that their work objectives were clearly defined and that there were opportunities for skills development within the organisation, more than a half did not think that this was the case. Around one fifth of the participants felt encouraged to pursue further professional growth, while almost half of the participants reported the opposite.

Affective commitment refers to the ‘desire’ component of organisational commitment (Meyer and Allen, 1997). An employee who is affectively committed strongly identifies with the goals of the organisation and commits to the organisation because they really want to. Four features of this aspect were measured: —the extent to which an employee is willing to put in a great deal of effort beyond that normally expected in order to help this organisation to be successful, the extent to which they feel proud to tell others they work for the Deputy Ministry, whether the latter inspires them to do their work, and the degree to which they find their values and the Deputy Ministry’s values to be aligned. Results indicated that 61% felt proud to work for the Deputy Ministry, and 86% reported that they were willing to put in a great deal of effort beyond that normally expected, in order to help the Deputy Ministry succeed. 65% reported that the Minister inspired them to do their work, while 33% reported the opposite. Around a third of the personnel appeared to find their values to be very similar to the organisational values, which was not the case for the majority of the employees.

Qualitative Data Analysis (question C16)

When analysing the data in qualitative research there is definitely not a clear path a researcher should follow and some researchers acknowledge this process ‘as peeling back the layers of an onion’ (Creswell, 2009, p. 183). Data analysis in qualitative research is an ongoing process which involves data collection, interpreting this data and compiling reports; these actions can occur simultaneously (Rossman and Rallis, 1998; Creswell, 2009). Mason (2002, p. 147) indicated that a core process of data analysis is sorting the collected information, and he suggested three categories for doing so: ‘cross-sectional and categorical indexing; non-cross-sectional data organisation; use of diagrams and charts’.

For the scope of Question 16, the analysis was undertaken after the completion of the whole questionnaire. Since there was no personal contact (through face-to-face interviews), facial expressions and body language could not be recorded. The data analysis used for the purposes of this study was based on a thematic approach (Creswell, 2009). The steps included in this method are (a) organisation of data (transcription, notes, etc.), (b) reading all the data, (c) dividing the data into themes, (d) grouping similar themes together from all available data, (e) making sense of the data and creating a narrative. In this way, the researcher could construct ‘a representation, or a line of reasoning or analysis’ that makes sense and reflects back to the people for whom the argument was built (Mason, 2002, p.173). In addition, Mason (2002) indicated that the researcher needs to be able to effectively support their arguments to make them convincing to others.

The answers to Question 16 were submitted both in Greek and English and were then recorded by the researchers in English. Analysis included the identification of the most common themes, decoding or making sense of the meanings, and then their categorisation based on decoded narratives. Specifically, a template approach was used which consisted of (a) categorisation of themes, (b) coding of the information and (c) qualitative interpretation of the information (Creswell, 2009).

Findings

The themes identified by the participants in the survey can be divided into four main categories: (a) management¹, (b) ambiance², (c) human resource department and (d) top management³. It should be noted that not all the participants gave an answer to this question—67 out of 118 participants provided an answer. It is also worth mentioning that some participants identified personal problems that are not recorded for the purposes of this survey. Apart from the general themes identified, there were some specific problems that applied to either the offices abroad or the inspectors' offices and these are discussed at the end.

(a) Management

People indicated that there was lack of managerial, and other skills among the people occupying positions A13 and A15 in the Deputy Ministry. Most of the participants noted that there was a lack of leadership and that managers should get training for leadership and managerial skills. One person also indicated that managers could use emotional intelligence training. The quotes below are indicative:

“Anyone who holds a managerial position should get a training in personnel management and emotional intelligence” (M2).

“People with limited knowledge and no leadership skills hold high-ranked positions” (F12).

“Train all managers and supervisors for leadership skills” (F13).

Further to that, it was noted that the departments, through their managers, should communicate better with each other and also there should be better communication between managers and employees of the respective departments especially when it comes to regional offices. It was noted that some managers did not show the appropriate respect towards their employees, took credit for the employees' work and did not act professionally in some circumstances. Generally, inadequacy of management was noted. Initiatives by employees were not welcomed by their managers and the employees felt that their work was not being valued enough. The quotes below are indicative:

“The biggest problem of all has always been the management in each department” (F1).

“Managers should give credit for the work done” (F102).

¹ A13 & A15 personnel.

² Includes cleanliness and safety.

³ Acting Director General & Deputy Minister.

(b) Ambiance

When it comes to ambiance, people identified several issues like the safety of the building, the cleanliness, parking space, etc. Specifically, people noted that the cleaning personnel should be reinforced in numbers and receive proper training on how to execute their job. They suggested that cleaning should be done before the rest of the employees arrive at work and that toilet cleaning should be more meticulous. In addition, it was suggested that recycling procedures should be applied. Participants noted:

“The cleaning personnel should change” (M2).

“The number of the cleaning personnel is inadequate” (F5).

Some people suggested the use of a uniform for employees at the information offices and when people travel abroad for exhibitions. It was also suggested to introduce a dressing code for all personnel (M2). For example:

“I suggest the adoption of a uniform for people at the information offices and people who travel abroad for exhibitions” (M2).

The issue of old equipment and software was raised. It was noted that old A/C units and PCs need to be replaced in addition to software being updated. Furthermore, it was noted that when health and safety issues are raised, they need to be resolved faster.

The most important issue within this theme was the relocation of the Deputy Ministry. The building was considered by the employees as dangerous and in serious need of renovation. It was noted that the new building should be environmentally friendly, have bigger storage units, parking spaces for all employees, better electronic equipment (i.e. fridges) for the personnel and ergonomic furniture. In addition, it was noted that inspector's offices need relocation and information offices need renovation. The quotes below are indicative:

“The building needs serious renovation and modernisation of the equipment” (F10).

“The building is too old – not really safe” (F12).

“Not enough parking spaces” (N54).

(c) Human Resource Management

The most important issue raised by the participants in the survey was the inadequacy of the Human Resource Department⁴. It was indicated that the HRD is incapable of taking into consideration the employees' needs (F3) and that no opportunities for development were offered. Participants indicated:

“There are no development opportunities (seminars, interchanging duties, engagement in projects)” (F12).

“The HR Department is inadequate” (F73).

⁴ By the Human Resource Department, the participants mean the head of the department and not the employees.

Some participants indicated that colleagues receive extended sick leaves that were not controlled by the HRD. In effect, a lot of work was re-allocated to other employees. For example:

“Colleagues receive extensive sick leaves, and this puts an extra burden on everyone else” (F9).

Participants noted that trainings and educational excursions (field trips – get to know Cyprus) should be organised for all personnel. Additionally, there was a need to organise events to strengthen relationships amongst employees, and for employees to participate in team-building activities. These activities could also entail corporate social responsibility (i.e. fundraising). Participants indicated:

“There is a need for networking activities for the personnel” (M44).

The participants indicated that employees were demotivated by the way things were run and that there was a need to introduce incentive/rewards schemes. Participants noted:

“There is no respect or recognition of our efforts” (F9).

“There is no recognition of the work done” (M14).

In addition, as suggested by the findings, there is a need for talent management and the allocation of duties should be based on people’s expertise, knowledge and talents. Participants noted:

“There should be a better and more fair allocation of duties” (F20).

“Clear and fair allocation of duties is needed” (F39).

Furthermore, the participants felt frustrated by the way evaluations and promotions were made. It was noted that promotions were not done based on merit but instead on political identification. In effect, it was suggested that employees should evaluate their supervisors/managers and that the evaluation system must change. For example:

“There is no meritocracy within the workplace” (M7).

“Employee evaluation should be made with the same standards for everyone” (F12).

“There is no meritocracy with regards to hiring and promotions” (M15).

“People are being promoted based on their political identification” (M37).

(d) Top Management

Participants noted that there were problems concerning the top management of the Deputy Ministry and the way things were run.

It was noted that there were too many secretaries for the Deputy Minister and the Acting Director General and this created confusion between the employees. It was suggested that the Deputy Minister and the Acting Director General should consult/be informed by the personnel before having meetings with external collaborators and/or the private sector to involve the employees and have transparency in the decision-making procedures. Participants felt the need to be informed and updated by the top management on the actions and plans for the future. Participants noted:

“There is chaos. No clear direction on behalf of the top management” (M30).

“Employees should be more informed on the decision-making by the top management” (F41).

“The personnel need to be more informed” (M46).

Some participants acknowledged extreme bureaucracy and slower procedures than before the change to a fully governmental institution, due to the additional paperwork that was required. On this note, it was suggested that more freedom/responsibilities should be given to the respective departments (decentralisation) and not everything should be scanned by the top management. The quotes below are indicative:

“The worst problem we are facing as a Deputy Ministry is bureaucracy” (N27).

“Less bureaucracy and centralisation” (F41).

“Too much bureaucracy” (F58).

In effect, there was a need to change the organisational culture and the way things operate. There was no clear vision and mission for the Deputy Ministry and it was indicated that the top management trusted the wrong people. For example:

“We need to change our mentality” (M42).

“There is a need for a general restructuring and change in the organisational culture” (M43).

Finally, it was indicated that the Deputy Ministry was understaffed and that hiring of new personnel was of utmost importance. For example:

“The vacancies need to be filled as soon as possible” (M59).

“We need more staff” (F71).

In addition to the four main themes above, there were some problems specifically related to either the offices abroad or the inspectors' offices which are discussed in the following sections.

(e) Inspectors' Offices

It was noted that there was no control over who or when they work (referring to the inspectors) as there was no supervision by the HRD. It was also suggested that the inspectors' offices needed relocation or renovation (wherever possible). Specifically, it was noted that the offices need better cleaning, parking spaces for all employees and placement of signs for easy access for visitors.

(f) Offices Abroad

Participants in the study indicated that the personnel abroad were not being remunerated based on the work they produce, and they suggested that the salaries should be defined according to the country they are based in. It was also suggested that all benefits (pension and insurance plans) should cover the personnel in the offices abroad.

Further to these, it was noted that there was a need for each office abroad to have their own account and petty cash, as the payments by the Accounts Department were very slow and this caused problems with the collaborators of the Deputy Ministry.

Part B (September 2020): The Second Survey

There were two additional questions added in the second questionnaire; Firstly, C17 in the quantitative part (The satisfaction I gain from my job and the work environment has increased during the last year.). Secondly, two questions were formed in the qualitative part, C18 (How did you feel at work during last year, compared to previous years? Why?) and C19 (What do you think should change at the Deputy Ministry so that your job satisfaction increases?).

The last questions (open-ended) were optional. The number of the total participants was 111 (the questionnaire was sent to all the employees of the Deputy Ministry) out of which 65 were women and 36 were men. Ten people did not indicate their gender (see Table of Participants). Since the survey was anonymous the number of the questionnaire (as drawn from the box) and the gender of the participant were used to identify the answers. For example, questionnaire 1 – female would be referred to as F1. Where participants did not indicate their gender, they are referred to with the letter N – i.e., N16.

The details of the second survey are shown in Table 2 below.

| Questionnaire | Gender | Age | Reference |
|---------------|--------|-------|-----------|
| 1 | Female | 50+ | F1 |
| 2 | Male | 41-50 | M2 |
| 3 | Male | 31-40 | M3 |
| 4 | Female | 41-50 | F4 |
| 5 | Male | 50+ | M5 |
| 6 | Female | 41-50 | F6 |
| 7 | Male | 50+ | M7 |
| 8 | Male | 50+ | M8 |
| 9 | Male | 41-50 | M9 |
| 10 | Female | 50+ | F10 |
| 11 | Female | 41-50 | F11 |

| Questionnaire | Gender | Age | Reference |
|---------------|----------------|----------------|-----------|
| 12 | Female | 31-40 | F12 |
| 13 | Female | 41-50 | F13 |
| 14 | Female | 50+ | M14 |
| 15 | Male | Not identified | M15 |
| 16 | Female | 41-50 | F16 |
| 17 | Female | 41-50 | F17 |
| 18 | Female | 41-50 | F18 |
| 19 | Female | 41-50 | F19 |
| 20 | Female | 31-40 | F20 |
| 21 | Female | Not identified | F21 |
| 22 | Female | 31-40 | F22 |
| 23 | Female | 41-50 | F23 |
| 24 | Male | 50+ | M24 |
| 25 | Not identified | Not identified | N25 |
| 26 | Not identified | 41-50 | N26 |
| 27 | Not identified | 31-40 | N27 |
| 28 | Male | 50+ | M28 |
| 29 | Female | 41-50 | F29 |
| 30 | Male | 50+ | M30 |
| 31 | Female | 41-50 | F31 |
| 32 | Male | 31-40 | M32 |
| 33 | Female | 41-50 | F33 |
| 34 | Female | 50+ | F34 |
| 35 | Female | 31-40 | F35 |
| 36 | Female | 50+ | F36 |
| 37 | Male | 50+ | M37 |
| 38 | Female | 50+ | F38 |
| 39 | Male | 18-30 | M39 |
| 40 | Female | 50+ | F40 |
| 41 | Female | 41-50 | F41 |
| 42 | Male | 41-50 | M42 |
| 43 | Female | 50+ | F43 |
| 44 | Not identified | Not identified | N44 |
| 45 | Male | 50+ | M45 |
| 46 | Male | 31-40 | M46 |
| 47 | Female | 31-40 | F47 |
| 48 | Male | 50+ | M48 |
| 49 | Female | 41-50 | F49 |
| 50 | Male | 41-50 | M50 |
| 51 | Not identified | Not identified | N51 |
| 52 | Female | 31-40 | F52 |
| 53 | Female | 50+ | F53 |
| 54 | Female | 50+ | F54 |
| 55 | Male | 31-40 | M55 |
| 56 | Male | Not identified | M56 |

| Questionnaire | Gender | Age | Reference |
|---------------|----------------|----------------|-----------|
| 57 | Female | 50+ | F57 |
| 58 | Female | 31-40 | F58 |
| 59 | Female | 41-50 | F59 |
| 60 | Female | 50+ | F60 |
| 61 | Male | 50+ | M61 |
| 62 | Male | 50+ | M62 |
| 63 | Female | 41-50 | F63 |
| 64 | Female | 41-50 | F64 |
| 65 | Not identified | Not identified | N65 |
| 66 | Female | 41-50 | F66 |
| 67 | Female | 31-40 | F67 |
| 68 | Male | 41-50 | M68 |
| 69 | Female | 50+ | F69 |
| 70 | Female | 41-50 | F70 |
| 71 | Female | 41-50 | F71 |
| 72 | Male | 31-40 | M72 |
| 73 | Male | 50+ | M73 |
| 74 | Male | 50+ | M74 |
| 75 | Not identified | Not identified | N75 |
| 76 | Female | Not identified | F76 |
| 77 | Female | 50+ | F77 |
| 78 | Female | 31-40 | F78 |
| 79 | Female | 31-40 | F79 |
| 80 | Female | 31-40 | F80 |
| 81 | Female | 41-50 | F81 |
| 82 | Male | 41-50 | M82 |
| 83 | Female | 31-40 | F83 |
| 84 | Male | 41-50 | M84 |
| 85 | Female | 50+ | F85 |
| 86 | Female | 50+ | F86 |
| 87 | Not identified | Not identified | N87 |
| 88 | Female | 50+ | F88 |
| 89 | Not identified | Not identified | N89 |
| 90 | Female | 50+ | F90 |
| 91 | Female | 31-40 | F91 |
| 92 | Female | 18-30 | F92 |
| 93 | Female | 50+ | F93 |
| 94 | Female | 31-40 | F94 |
| 95 | Female | 41-50 | F95 |
| 96 | Male | 41-50 | M96 |
| 97 | Female | 41-50 | F97 |
| 98 | Female | 41-50 | F98 |
| 99 | Male | 50+ | M99 |
| 100 | Female | 41-50 | F100 |
| 101 | Male | 50+ | M101 |
| 102 | Female | 31-40 | F102 |

| Questionnaire | Gender | Age | Reference |
|---|----------------|----------------|-----------|
| 103 | Male | 50+ | M103 |
| 104 | Male | 31-40 | M104 |
| 105 | Female | 41-50 | F105 |
| 106 | Male | 31-40 | M106 |
| 107 | Not identified | Not identified | N107 |
| 108 | Male | 31-40 | M108 |
| 109 | Female | 41-50 | F109 |
| 110 | Male | 31-40 | M110 |
| 111 | Female | 14-50 | F111 |
| Table 2: Part B (September 2020) - Survey 2 | | | |

Quantitative Data Analysis (survey)

Quality of workplace relationships among employees was measured using four features: —socialising with colleagues, feeling respected, collaboration with and support from colleagues. Findings indicated that more than 70% of employees liked to socialise with colleagues at work, felt that their colleagues treated them with respect, and were able to work with their colleagues to collectively solve problems. 69% said they could rely on their colleagues for help and support. These trends are similar to the earlier survey.

Attitudes towards immediate supervisors and top management was measured using six features: — recognition for good work, feedback received, whether employee concerns are dealt with, feeling respected by supervisor/management, the extent to which employees felt the latter would defend them if they made an honest mistake, and supervisors/managements' knowledge skills.

71% reported that they had received recognition for good work from their immediate supervisor, a significant improvement on the previous year's percentage (52%). Only 10% reported that they disagreed with this statement, as opposed to last year's 27%. 65% reported that they had had the opportunity to discuss with and receive feedback from their immediate supervisor about their work performance—again, a significant difference to last year's 52%. Only 14% reported they did not have this opportunity, while last year this was at 27%. 73% felt that their concerns were dealt with by their immediate supervisor, and only 8% felt that this was not the case, as opposed to last year, when 47% felt that their concerns were dealt with by their immediate supervisor and up to 30% disagreed with this statement. 83% felt that their immediate supervisor treated them with respect, a rise compared to 66% in the first survey, while only 6% appeared to feel otherwise, as opposed to 20% previously. As to whether their immediate supervisor would defend them before others in the organisation, 74% answered that they agreed, and 8% that they disagreed. In the 2019's survey, slightly more than half (53%) agreed and 23% disagreed. Lastly, the personnel's respect towards their immediate supervisors' knowledge and skills increased, from 61% to 85%, and the number of those who did not respect their immediate supervisors' knowledge and skills fell from 73% to 5%. Overall, it could be considered that around half of the employees were indeed satisfied with their immediate supervisor's attitude and behaviour.

As far as top management is concerned, conclusions are less sanguine. Only around one-third of the personnel (36%) reported receiving recognition for good work from top management, which is not significantly different to the previous figure of 38%. The same applies to the opportunity to discuss with and receive feedback from management about their progress (31%), as well as the extent to which they felt that top management would

defend them before others if they made an honest mistake (32%). In comparison to 2019, an improvement was noted in terms of the extent to which personnel felt that their concerns were dealt with by the management, with 51% answering that they did, as opposed to 33% previously. Similarly to 2019's findings, around half of the employees in the second survey appeared to feel that the management treated them with respect and they respected management's knowledge and skills. Notably, a significant percentage of participants answered that they neither agreed nor disagreed with these six items when it came to top management, which is challenging to interpret. It is unclear whether they did not want to express an opinion, they felt unsure, or were still dissatisfied.

Health and safety (H&S) was measured using four features: —the extent to which management is concerned with H&S, whether employees feel that they know how to improve cleanliness and safety, can perform their job safely, and are aware of their role and responsibility for protecting their personal health and safety at work. Only 49% agreed that the management was concerned with employee H&S, even though this signifies a positive change when compared to last year (36%). 90% reported that they knew how to maintain or improve workplace safety and cleanliness and how to perform their job safely, and 84% appeared to be aware of their role and responsibility in protecting their personal health and safety at work. These findings indicate an improvement on 2019's figures. **Work pressure** was measured using two features: having no time to relax at work and feeling overloaded with work. 61% felt overloaded with work, an increase on last year's numbers, while 45% reported there was no time to relax—again, an increase compared to 38% in 2019. Moreover, only 7% and 13% respectively reported that they completely disagreed or disagreed with these statements, as opposed to last year's findings, which were 13% and 30% respectively.

Harassment was measured using four features: —being threatened due to denial to engage in sex, attempts that have been made to engage one sexually, receiving sexual remarks and being mistreated because of gender. The vast majority reported that they had not been threatened or treated poorly due to not being sexually cooperative. 93% said no attempts to engage them sexually had been made, and 85% reported no unwelcome attempts to draw them into a discussion of sexual matters. These percentages are slightly lower than 2019's results and 11% (as opposed to 5% in 2019) reported that there had been attempts to draw them into such discussions. 82% said they had not received offensive sexual remarks publicly or privately, and 81% said they had not been mistreated or ignored because of their gender. However, 11% received sexual remarks and 10% said they were mistreated or ignored because of their gender

Work motivation was measured using five features: —the extent to which employees find their job meaningful and interesting, work tasks are a driving power, work objectives are well-defined, there are opportunities for skills development, and they are encouraged to pursue further professional development. 66% reported that they found their job meaningful and interesting (similar to last year's findings), and 59% (an improvement on last year's 42%) seemed to consider that their job tasks were a driving power in their job. Nearly half of the employees agreed that their work objectives were clearly defined, which signifies a positive change on last year's 34%. Fewer participants also replied negatively to this statement—27% in 2020 as opposed to 39% in 2019. As far as opportunities for skills development within the organisation were concerned, the 2020 results were slightly worse than 2019—with less than one-third reporting that they were satisfied with growth opportunities and closer to 40% reporting the opposite. Notably, it is hard to interpret the high percentage of those who neither agreed nor disagreed with the two statements around professional development (44% and 29% respectively). Some of the participants might fall into the category of dissatisfied employees, while others may have preferred to not express an opinion.

Affective commitment refers to the ‘desire’ component of organisational commitment (Meyer and Allen, 1997). An employee who is affectively committed, strongly identifies with the goals of the organisation and commits to the organisation because they really want to. This aspect was measured using five features: —the extent to which an employee is willing to put in a great deal of effort beyond that normally expected in order to help this organisation to be successful, the extent to which they feel proud to tell others they work for the Deputy Ministry, whether the latter inspires them to do their work, the degree to which they find their values and the Deputy Ministry’s values to be very similar, and (a question added in the 2020 questionnaire), the extent to which their knowledge and experience are being put into good use. Results indicated that 56% felt proud to work for the Deputy Ministry (a reduction on 2019’s 61%), yet 19% reported that they did not feel pride (again, a negative change from the previous year’s 13%). Some improvement has been noted in terms of the extent to which employees feel inspired to do their work (39% compared to 35% in 2019), and an even greater improvement in terms of the extent to which they felt their values were similar to organisational values (52% as opposed to 30% in 2019). Close to 2019’s findings, more than 80% of the participants reported in 2020 that they were willing to put in a great deal of effort beyond that normally expected in order to help the Deputy Ministry succeed. 65% reported that the organisation inspired them to do their work, while 33% reported the opposite. Lastly, more than half of the participants agreed that their knowledge and experience were being put to good use, as opposed to 21% that felt this was not the case.

An extra question was added, asking whether the satisfaction personnel gained from their job and the work environment had increased during the last year. Only 29% answered positively to this statement, while 35% answered negatively and a significant 36% reported that they neither agreed nor disagreed.

In addition, comparisons have been made with respect to demographic variables, and several trends have been observed. Specifically, respondents aged 31-40 seem to be less satisfied with top management. Their affective commitment (extent to which they feel inspired to do their work, proud to work there, extent to which their values are similar to those of the organisation), appears to be lower than the other groups. Importantly, however, none of the groups expressed high satisfaction with top management, and all groups felt that there were limited opportunities for professional development.

Respondents who had worked at the Deputy Ministry for 5-10 years seemed to be less satisfied with top management than respondents who had been there from 10 to 20 years, who were also mostly dissatisfied. Affective commitment also appears to be lower in these two groups compared to those who had worked at the organisation for over 20 years or for less than 5 years. Lastly, respondents with 5-10 years of experience reported a significantly lower quality of relationships with colleagues.

Qualitative Data Analysis (questions C18 and C19)

To analyse these questions the same procedure was followed as in the first survey. For the scope of these questions, the analysis was conducted in the same way as previously for C16 in the first survey, after the completion of the whole questionnaire.

The answers to questions C18 and C19 were submitted both in Greek and English and were then recorded by the researchers in English. Analysis included the identification of the most common themes, their categorisation based on decoding/making sense of the meanings in respondents’ narratives. Specifically, a template approach was used which consisted of (a) categorisation of themes, (b) coding of the information and (c) qualitative interpretation of the information (Creswell, 2009).

The themes identified by the participants in the survey can be divided into six main categories; (a) general feelings within the workplace, (b) immediate supervisors and management⁵, (c) top management⁶, (d) duties and workload, (e) health and safety and (f) sensitive issues. It should be noted that the majority of the participants gave an answer to this question (89 out of 111 participants). It is also worth mentioning that some participants identified their personal problems, but these were recorded for the purposes of this survey. Apart from the general themes identified, there were some specific problems applied to the offices abroad and these are discussed at the end.

(a) General Feelings within the workplace

The majority of the people (58%)—felt disappointed with the regime and indicated that the situation had become worse in the last year in the Deputy Ministry. The quotes below are indicative:

“I feel worse than the previous years” (F16).

“The work environment has gotten worse” (F23).

“Fully disappointed” (F34).

“I feel aversion” (M45).

“I feel broken and disappointed” (M55).

“I don’t want to continue working here” (M104).

More than half of the people indicated that they were not at all motivated to do their jobs and that they did not feel well in the workplace. They clearly stated that the bureaucracy was getting worse, there was too much centralisation, and that the Deputy Minister micromanaged everything. The quotes below are indicative:

“Can’t see any improvement after the change from CTO to DMT rather the opposite, we become more bureaucratic, centralised and inefficient” (F1).

“Time for approvals increased” (F3).

“The Deputy Minister micromanages everything” (F35).

“Too much centralisation on behalf of the Deputy Minister” (F83).

⁵ A11, A13 and A15.

⁶ Secretary General & Deputy Minister.

It is worth mentioning that 21% of the participants felt insecure in the workplace and that was caused by the chaos that prevailed and the dictatorship by the top management⁷. Specifically, participants noted:

“Dictatorship and chaos” (F4).

“The situation is getting worse. I feel disgusted” (F31).

“I feel insecure” (N44).

“I feel insecurity and destabilisation” (F52).

“I feel disorientation, anxiety and insecurity” (F70).

“The Deputy Minister just wants soldiers to execute his orders” (F79).

A small percentage of the participants (78%) noted that nothing had changed within the past year, although they had been promised significant improvement in the workplace environment. Some of the participants noted:

“Nothing has changed [...]” (M2).

“Similar to previous years” (F13).

In contrast, a small percentage of participants (11%) felt that there had been some improvement during the past year and they noted receiving positive vibes from the top management. For example:

“It is a good thing that the CTO has transitioned into the DMT. Things are better now” (M32).

“The climate is the best in the past few years” (M42).

(b) Immediate Supervisors and Management

When it comes to the immediate supervisors (A11 and A13) and the management of the departments (A15), a significant improvement was noted with regards to the satisfaction of the participants. This can also be observed when comparing the results of 2019 and 2020 in the quantitative part of the research.

A good percentage of the participants (22%) indicated improvement in the relationships between themselves and their supervisors. They noted better communication and more respect by the managers. Participants mentioned:

“[...] supervisors and colleagues are more keen and helpful [...]” (F18).

“I feel better to do change of duties” (F22).

⁷ Secretary General and Deputy Minister.

(c) Top Management

Most of the participants were generally disappointed with how the Deputy Ministry was being run, and felt disappointed and demotivated. Participants acknowledged extreme bureaucracy and slower procedures than before, due to the additional paperwork that was required (see Section (a) above). Further to that, a good percentage of the participants (26%) noted that their hard work was not being recognised by top management. Specifically, participants noted:

“The top management does not recognise the hard work that I do” (F20).

“I have no motivation to do my job” (F35).

“No motivation of the personnel to perform their duties due to underestimation of their abilities” (F83).

“The way the top management operates is inhumane” (N89).

In addition, more than half of the participants noted that they were not being treated with respect by the top management and they felt a lack of trust and suspicion towards them. Further to that, some participants felt that they were being underestimated by the top management. The quotes below are indicative:

“There is a lack of respect on behalf of the top management” (F16).

“I don’t feel any respect by the top management” (F31).

“The top management underestimates the abilities and knowledge of the personnel” (F71).

“I have not received any respect or appreciation by the top management” (M55).

“I observe colleagues being undermined just because they expressed different opinions than the one of the Deputy Minister” (M72).

“There is a climate of surveillance [...]” (F92).

Three people felt that there was no transparency with regards to the decisions made by the top management and especially when it came to changes of duties and the transfer of colleagues. Participants noted:

“There is secrecy with regards to the intentions of the Deputy Minister concerning our office” (F40).

“The leadership of the Deputy Ministry is inadequate. The decisions made are wrong and dishonest” (M45).

“There is discrimination on behalf of the top management. If you don’t know someone (‘meson’) you cannot survive” (N65).

“There is change of duties and transfer of people without the prior knowledge or discussion with the employees” (F71).

“We don’t have clear goals and direction. Everything depends on the mood of the Deputy Minister” (M72).

Lastly, five participants indicated that some people were gossiping with the top management concerning their colleagues and the rest of the employees. In effect, participants felt that their privacy was not guaranteed in the current regime and that there was no protection of their personal data. For example:

"I cannot discuss something serious with the Permanent Secretary as I feel that there will be gossiping afterwards" (F34).

"There is a group of employees that gossips with everyone else about the top management. These people are treated favourably" (F66).

"Some employees undermine their colleagues and gossip about them with the top management" (F77).

(d) Duties and Workload

Some participants noted that they were overloaded with work which is not being duly appreciated. In addition, people felt that they were being assigned work and duties that were not their responsibility and that most of the time the same tasks were being assigned to two or three people with no clear guidelines. The quotes below are indicative:

"There is too much pressure and too much workload. We are asked to perform duties that are out of the scope of our contracts" (F53).

"We are assigned extra duties that have nothing to do with tourism" (F80).

"Too many working groups that are not functional just for the sake of creating the group" (F83).

"Assignment of duties to 2 or 3 people at the same time causes confusion and disorientation" (N107).

(e) Health and Safety

With regards to health and safety issues, more than half of the participants noted that the building and premises of the Deputy Ministry were not appropriate and that some offices were very crowded and, in effect, they could not concentrate on their work. The constant malfunctioning of the building and equipment were also mentioned (water, landlines, internet and elevators). For example:

"The management is not at all interested in the health and safety of the employees" (F53).

"The building is like a barn" (F94).

(f) Sensitive issues

There was a very serious claim of sexual harassment within the workplace by one of the participants. The participant noted that the Secretary General was duly informed about the situation and had done nothing to change or handle the matter.

(g) Offices Abroad

It was noted that offices abroad were understaffed and in effect could not do their job properly and people were overloaded. In addition, personnel from the offices abroad felt that their opinion were not taken into consideration when it came to decisions within their markets. There was a general disregard for the role of offices abroad by the top management.

Furthermore, the need for having independent offices and not being a part of the respective embassies was raised.

Findings (C19)

The participants in the survey suggested certain actions should be taken in order for their job satisfaction to improve. The main suggestions that were indicated by most of the participants are reported below:

1. More recognition for the work of employees is essential.
2. Better allocation of duties based on the knowledge and interests of the employees is important.
3. A fair allocation of duties, with an equal burden for everyone is important.
4. Better, more humane treatment of the employees by the top management. The top management needs to show more respect towards the employees.
5. The top management need to listen to the employees more.
6. Employees need to be motivated to perform better in the workplace.
7. Decentralisation is of the utmost importance.
8. A change of premises is needed, as these are currently considered inappropriate and hazardous for the employees.
9. Education and development of the personnel (seminars, field trips) should be improved.
10. Networking activities for the personnel would be valuable.
11. There needs to be more autonomy for offices abroad, and they need to be treated as the equals of the rest of the personnel.
12. Personnel should be allowed to offer beverages to their guests, even if they are fewer than three people.
13. The HR Department should allocate one person to deal with personnel issues exclusively.

It should be noted that most of the participants expressed their opinion and identified their problems in Question C18, but did not offer a solution for increasing their job satisfaction in Question C19. Therefore, the findings of both questions should be taken into consideration when forming and introducing changes within the Deputy Ministry.

Discussion and Way Forward

The research reported in this paper has indicated the general dissatisfaction of employees in a public organisation in Cyprus, after its transition from a semi-governmental one. It seems evident that bureaucracy and strict procedures may hinder job satisfaction in a public organisation, as noted in the literature (i.e. Buchanan, 1975; Wright and Davis, 2003) and that the lack of appropriate H&S is a crucial point as well. It is also noted that the absence of a healthy HR department triggers job dissatisfaction, as employees do not have anyone to protect them from unjust practices and difficult leadership regimes.

Employees need to feel valued and appreciated and they need to identify justice within their job settings with regards to the allocation of duties. People feel demotivated and expressed a lack of meritocracy when it comes to promotion (e.g. Herzberg et al., 1959), lack of motivation and networking opportunities. This is a general issue with public servants, as the only incentive they have is a good annual assessment and a possible promotion after several years of service. The majority of the participants in the study do not consider job tasks as a driving power in their work.

Furthermore, the study noted that leadership is very important in keeping employees happy and that an autocratic leadership style hinders job satisfaction. In effect, leadership has been identified as the most important element of job dissatisfaction in the organisation under investigation, with participants noting that they do not receive recognition for their work, that management would not defend them if they made an honest mistake, that there is micromanagement and too much centralisation within the organisation, and that employees are disappointed and demotivated. This is in accordance with the literature indicating that leadership, involvement and a friendly working environment play a significant role in job satisfaction both in private and public organisations (i.e. Herzberg et al., 1959; Lok and Crawford, 2001; Mosadegh Rad and Yarmohammadian, 2006; Dziuba et al., 2020).

Conclusion

The following recommendations may need to be taken into account in the said organisation, and possibly other public organisations in Cyprus; leadership training directed at the higher levels of the organisational pyramid, inclusion of employees in the decision-making processes, give praise when due, create a more friendly environment and in effect, create a more inclusive and supporting organisational culture.

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Questionnaire 2019

ORGANISATIONAL CLIMATE AT THE WORKPLACE

This questionnaire aims to capture your thoughts and feelings about the organisational climate at the Deputy Ministry of Tourism. Findings will provide useful information regarding the quality of workplace relationships, employee wellbeing, and ways of creating a positive organisational climate and work experience.

There are no right or wrong answers. What is important is that you answer **as honestly as you can**. Your responses are **confidential** and **anonymous**. The questionnaire will take about 10 minutes.

A. Workplace Relationships

Below are some statements pertaining to relationships with your colleagues and supervisors. Please indicate the degree to which each statement applies to you by circling the appropriate response on a scale where **1= Strongly Disagree** and **5= Strongly Agree**.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|------|---|-------------------|----------|----------------------------|-------|----------------|
| A.1 | I can rely on my colleagues for support and assistance when needed. | 1 | 2 | 3 | 4 | 5 |
| A.2 | I am able to work with my colleagues to collectively solve problems. | 1 | 2 | 3 | 4 | 5 |
| A.3 | My colleagues treat me with respect. | 1 | 2 | 3 | 4 | 5 |
| A.4 | I like to socialise with my colleagues at work. | 1 | 2 | 3 | 4 | 5 |
| A.5 | I respect my immediate supervisors' knowledge and competence on the job. | 1 | 2 | 3 | 4 | 5 |
| A.6 | My immediate supervisor would defend me to others in the organisation if I made an honest mistake. | 1 | 2 | 3 | 4 | 5 |
| A.7 | My immediate supervisor treats me with respect. | 1 | 2 | 3 | 4 | 5 |
| A.8 | My concerns are dealt with by my immediate supervisor. | 1 | 2 | 3 | 4 | 5 |
| A.9 | I have the opportunity to discuss and receive feedback on my work performance by my immediate supervisor. | 1 | 2 | 3 | 4 | 5 |
| A.10 | I receive recognition for good work by my immediate supervisor. | 1 | 2 | 3 | 4 | 5 |
| A.11 | I respect the management's knowledge and competence on the job. | 1 | 2 | 3 | 4 | 5 |
| A.12 | The management would defend me to others in the organisation if I made an honest mistake. | 1 | 2 | 3 | 4 | 5 |
| A.13 | The management treat me with respect. | 1 | 2 | 3 | 4 | 5 |
| A.14 | My concerns are dealt with by the management. | 1 | 2 | 3 | 4 | 5 |
| A.15 | I have the opportunity to discuss and receive feedback on my work performance by the management. | 1 | 2 | 3 | 4 | 5 |
| A.16 | I receive recognition for good work by the management. | 1 | 2 | 3 | 4 | 5 |

B. Wellbeing at the workplace

The following statements refer to employee wellbeing, namely health and safety, workload and harassment. Please indicate the degree to which they apply to you by circling the appropriate response. On the scale, **1= Strongly Disagree** and **5= Strongly Agree**.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|-------------|--|-------------------|----------|----------------------------|-------|----------------|
| B.1 | I am aware of my role and responsibility for protecting my personal health and safety at work. | 1 | 2 | 3 | 4 | 5 |
| B.2 | I know how to perform my job in a safe manner. | 1 | 2 | 3 | 4 | 5 |
| B.3 | I know how to maintain or improve workplace safety and cleanliness. | 1 | 2 | 3 | 4 | 5 |
| B.4 | Management is concerned for the health and safety of employees. | 1 | 2 | 3 | 4 | 5 |
| B.5 | I feel overloaded with work. | 1 | 2 | 3 | 4 | 5 |
| B.6 | There is no time for employees to relax at work. | 1 | 2 | 3 | 4 | 5 |
| B.7 | I have been mistreated or ignored because of my sex. | 1 | 2 | 3 | 4 | 5 |
| B.8 | I have received offensive sexual remarks publicly or privately. | 1 | 2 | 3 | 4 | 5 |
| B.9 | There have been unwelcome attempts to draw me into a discussion of sexual matters or contact. | 1 | 2 | 3 | 4 | 5 |
| B.10 | I have been threatened or been treated poorly for not being sexually cooperative. | 1 | 2 | 3 | 4 | 5 |

C. Work motivation

This section concerns work motivation and influential factors. Please indicate the degree to which the following statements apply to you on a scale where: **1 = Strongly Disagree** and **5 = Strongly Agree**.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|-----|--|-------------------|----------|----------------------------|-------|----------------|
| C.1 | I am encouraged to pursue further professional development. | 1 | 2 | 3 | 4 | 5 |
| C.2 | There are opportunities in this organisation for developing new skills. | 1 | 2 | 3 | 4 | 5 |
| C.3 | My work objectives are always well defined. | 1 | 2 | 3 | 4 | 5 |
| C.4 | The tasks that I do at work are a driving power in my job. | 1 | 2 | 3 | 4 | 5 |
| C.5 | My job is meaningful and interesting. | 1 | 2 | 3 | 4 | 5 |
| C.6 | I am proud to tell others I work for this organisation. | 1 | 2 | 3 | 4 | 5 |
| C.7 | My organisation inspires me to do my work. | 1 | 2 | 3 | 4 | 5 |
| C.8 | I find that my values and the organisation's values are very similar. | 1 | 2 | 3 | 4 | 5 |
| C.9 | I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation to be successful. | 1 | 2 | 3 | 4 | 5 |

On a scale where **1 = Not important** and **5 = Very important**, please rate the following elements of work experience. How important is each of the following for a positive work experience and climate?

| | I find... | Not important | Slightly important | Moderately important | Important | Very important |
|------|---|---------------|--------------------|----------------------|-----------|----------------|
| C.10 | Working conditions, i.e. hours, intensity, physical environment | 1 | 2 | 3 | 4 | 5 |
| C.11 | Salary and benefits | 1 | 2 | 3 | 4 | 5 |
| C.12 | Relationships with colleagues | 1 | 2 | 3 | 4 | 5 |
| C.13 | Relationships with supervisors / Leadership support | 1 | 2 | 3 | 4 | 5 |
| C.14 | Health and cleanliness | 1 | 2 | 3 | 4 | 5 |
| C.15 | Development opportunities | 1 | 2 | 3 | 4 | 5 |

[illegible]

D. Demographics and Other Related Information

The following questions refer to background information that will contribute to data analysis. Please answer by circling the response that applies to you. **Circle only one response for each question:**

| | | | | | |
|-----|------------|---------|---|---------|---|
| D.1 | Gender: | Male | 1 | Female | 2 |
| | | | | | |
| D.2 | Age group: | 18 - 30 | 1 | 31 - 40 | 2 |
| | | 41 - 50 | 3 | Over 50 | 4 |

THANK YOU VERY MUCH FOR YOUR VALUABLE CONTRIBUTION!

Questionnaire 2020

ORGANISATIONAL CLIMATE AT THE WORKPLACE

This questionnaire aims to capture your thoughts and feelings about the organisational climate at the Deputy Ministry of Tourism. Findings will provide useful information regarding the quality of workplace relationships, employee wellbeing, and ways of creating a positive organisational climate and work experience.

There are no right or wrong answers. What is important is that you answer **as honestly as you can**. Your responses are **confidential** and **anonymous**. The completion of the questionnaire will take about 15 minutes.

A. Workplace Relationships

Below are some statements pertaining to relationships with your colleagues and supervisors. Please indicate the degree to which each statement applies to you by circling the appropriate response on a scale where **1= Strongly Disagree** and **5= Strongly Agree**.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|------|---|-------------------|----------|----------------------------|-------|----------------|
| A.1 | I can rely on my colleagues for support and assistance when needed. | 1 | 2 | 3 | 4 | 5 |
| A.2 | I am able to work with my colleagues to collectively solve problems. | 1 | 2 | 3 | 4 | 5 |
| A.3 | My colleagues treat me with respect. | 1 | 2 | 3 | 4 | 5 |
| A.4 | I like to socialise with my colleagues at work. | 1 | 2 | 3 | 4 | 5 |
| A.5 | I respect my immediate supervisors' knowledge and competence on the job. | 1 | 2 | 3 | 4 | 5 |
| A.6 | My immediate supervisor would defend me to others in the organisation if I made an honest mistake. | 1 | 2 | 3 | 4 | 5 |
| A.7 | My immediate supervisor treats me with respect. | 1 | 2 | 3 | 4 | 5 |
| A.8 | My concerns are dealt with by my immediate supervisor. | 1 | 2 | 3 | 4 | 5 |
| A.9 | I have the opportunity to discuss and receive feedback on my work performance by my immediate supervisor. | 1 | 2 | 3 | 4 | 5 |
| A.10 | I receive recognition for good work by my immediate supervisor. | 1 | 2 | 3 | 4 | 5 |
| A.11 | I respect the management's knowledge and competence on the job. | 1 | 2 | 3 | 4 | 5 |
| A.12 | The management would defend me to others in the organisation if I made an honest mistake. | 1 | 2 | 3 | 4 | 5 |
| A.13 | The management treat me with respect. | 1 | 2 | 3 | 4 | 5 |
| A.14 | My concerns are dealt with by the management. | 1 | 2 | 3 | 4 | 5 |
| A.15 | I have the opportunity to discuss and receive feedback on my work performance by the management. | 1 | 2 | 3 | 4 | 5 |
| A.16 | I receive recognition for good work by the management. | 1 | 2 | 3 | 4 | 5 |

B. Wellbeing at the workplace

The following statements refer to employee wellbeing, namely health and safety, workload and harassment. Please indicate the degree to which they apply to you by circling the appropriate response. On the scale, **1 = Strongly Disagree** and **5 = Strongly Agree**.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|-------------|--|-------------------|----------|----------------------------|-------|----------------|
| B.1 | I am aware of my role and responsibility for protecting my personal health and safety at work. | 1 | 2 | 3 | 4 | 5 |
| B.2 | I know how to perform my job in a safe manner. | 1 | 2 | 3 | 4 | 5 |
| B.3 | I know how to maintain or improve workplace safety and cleanliness. | 1 | 2 | 3 | 4 | 5 |
| B.4 | Management is concerned for the health and safety of employees. | 1 | 2 | 3 | 4 | 5 |
| B.5 | I feel overloaded with work. | 1 | 2 | 3 | 4 | 5 |
| B.6 | There is no time for employees to relax at work. | 1 | 2 | 3 | 4 | 5 |
| B.7 | I have been mistreated or ignored because of my sex. | 1 | 2 | 3 | 4 | 5 |
| B.8 | I have received offensive sexual remarks publicly or privately. | 1 | 2 | 3 | 4 | 5 |
| B.9 | There have been unwelcome attempts to draw me into a discussion of sexual matters or contact. | 1 | 2 | 3 | 4 | 5 |
| B.10 | I have been threatened or been treated poorly for not being sexually cooperative. | 1 | 2 | 3 | 4 | 5 |

C. Work motivation & Job satisfaction

This section concerns work motivation and influential factors. Please indicate the degree to which the following statements apply to you on a scale where: **1 = Strongly Disagree** and **5 = Strongly Agree**.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|------|--|-------------------|----------|----------------------------|-------|----------------|
| C.1 | I am encouraged to pursue further professional development. | 1 | 2 | 3 | 4 | 5 |
| C.2 | There are opportunities in this Deputy Ministry for developing new skills. | 1 | 2 | 3 | 4 | 5 |
| C.3 | My work objectives are always well defined. | 1 | 2 | 3 | 4 | 5 |
| C.4 | The tasks that I do at work are a driving power in my job. | 1 | 2 | 3 | 4 | 5 |
| C.5 | My job is meaningful and interesting. | 1 | 2 | 3 | 4 | 5 |
| C.6 | My knowledge and experience are being put into good use. | 1 | 2 | 3 | 4 | 5 |
| C.7 | I am proud to tell others I work for this Deputy Ministry. | 1 | 2 | 3 | 4 | 5 |
| C.8 | My Deputy Ministry inspires me to do my work. | 1 | 2 | 3 | 4 | 5 |
| C.9 | I find that my values and the Deputy Ministry's values are very similar. | 1 | 2 | 3 | 4 | 5 |
| C.10 | I am willing to put in a great deal of effort beyond that normally expected in order to help the Deputy Ministry to be successful. | 1 | 2 | 3 | 4 | 5 |

On a scale where **1 = Not important** and **5 = Very important**, please rate the following elements of work experience. How important is each of the following for a positive work experience and climate?

| | I find... | Not important | Slightly important | Moderately important | Important | Very important |
|------|---|---------------|--------------------|----------------------|-----------|----------------|
| C.11 | Working conditions, i.e. hours, intensity, physical environment | 1 | 2 | 3 | 4 | 5 |
| C.12 | Salary and benefits | 1 | 2 | 3 | 4 | 5 |
| C.13 | Relationships with colleagues | 1 | 2 | 3 | 4 | 5 |
| C.14 | Relationships with supervisors / Leadership support | 1 | 2 | 3 | 4 | 5 |
| C.15 | Health and cleanliness | 1 | 2 | 3 | 4 | 5 |
| C.16 | Development opportunities | 1 | 2 | 3 | 4 | 5 |

1= Strongly Disagree and 5= Strongly Agree.

| | | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|------|--|-------------------|----------|----------------------------|-------|----------------|
| C.17 | The satisfaction I gain from my job and the work environment has increased during the last year. | 1 | 2 | 3 | 4 | 5 |

C.18: How do you feel at work during the last year, compared to previous years? Why?

[illegible]

C.19: What do you think should change at the Deputy Ministry so that your job satisfaction increases?

[illegible]

D. Demographics and Other Related Information

The following questions refer to background information that will contribute to data analysis. Please answer by circling the response that applies to you. ***Circle only one response for each question:***

D.1 Gender:

| | | | |
|------|----------|--------|----------|
| Male | 1 | Female | 2 |
|------|----------|--------|----------|

D.2 Age group:

| | | | |
|---------|----------|---------|----------|
| 18 - 30 | 1 | 31 - 40 | 2 |
| 41 - 50 | 3 | Over 50 | 4 |

D.3 Length of employment at the Organisation:

| | | | |
|---------------|----------|---------------|----------|
| 0 - 1 year | 1 | 1 - 5 years | 2 |
| 5 - 10 years | 3 | 10 - 20 years | 4 |
| Over 20 years | 5 | - | - |

THANK YOU VERY MUCH FOR YOUR VALUABLE CONTRIBUTION!

Culminovation: A New Approach to Innovation and Business Strategy

By

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the Cyprus Centre for Business Research – CIM-Cyprus Business School

This article introduces the concept of ‘culminovation,’ a novel approach to innovation and business strategy that bridges the gap between continuous innovation and exnovation. While innovation drives progress and exnovation facilitates the removal of outdated practices, culminovation represents a strategic decision to maintain a product or service at its peak without further development. This study explores the theoretical underpinnings of culminovation, its practical applications in various industries, and its potential impact on business growth and profitability. By analysing case studies of iconic products that have maintained consistent designs over extended periods, this research provides insights into how a culminovation strategy can contribute to brand recognition and market presence.

Keywords: Culminovation, Innovation Strategy, Exnovation, Business Growth, Product Lifecycle, Brand Recognition, Market Presence.

1. Introduction

In today’s rapidly evolving business landscape, innovation has become a mantra for survival and growth. The prevailing wisdom often presents a stark choice: innovate or perish. This ‘do or die’ approach has driven remarkable technological advancements and business transformations. However, it has also led to a relentless pursuit of novelty that may not always align with optimal business outcomes or consumer needs.

At the opposite end of this spectrum lies the concept of exnovation, which involves the deliberate termination of existing practices, technologies or products (Kimberly, 1981; David & Gross, 2019). Exnovation recognises that not all innovations are beneficial in the long term and that strategic removal can create space for more valuable alternatives.

This article proposes a third path: culminovation. Derived from the words, ‘culmination’ and ‘innovation,’ culminovation represents a strategic decision to recognise when a product or service has reached its optimal state and to maintain it at that level without further development. This approach challenges the binary thinking of ‘innovate or exnovate’ and offers a nuanced perspective on product and service lifecycle management.

2. The Innovation Imperative: Promises and Pitfalls

2.1 The ‘Do or Die’ Innovation Paradigm

Innovation is the practical implementation of ideas that result in the introduction of new goods or services or improvement in offering goods or services. This process often involves developing more effective products, processes, services, technologies or business models (Lijster & Celikates, 2018).

The pressure to innovate constantly has become a defining characteristic of modern business strategy. Companies that fail to innovate risk obsolescence, loss of market share and, ultimately, failure. This mindset has driven remarkable progress across industries, from technology to healthcare to finance.

2.2 Limitations of Continuous Innovation

While the benefits of innovation are undeniable, the relentless pursuit of novelty can have drawbacks:

1. **Resource drain:** Continuous innovation requires significant investment in research and development, potentially diverting resources from other critical areas of the business.
2. **Consumer fatigue:** Rapid product iterations can overwhelm consumers, leading to decision paralysis or reduced brand loyalty.
3. **Diminishing returns:** As products or services approach optimal functionality, further innovations may yield only marginal improvements while increasing complexity and cost.
4. **Environmental impact:** The constant creation of new products can contribute to increased waste and resource consumption.

The pressure for constant innovation can also lead to what some researchers call 'innovation fatigue.' This phenomenon can result in decreased creativity and productivity among employees, as well as increased stress levels (Goldstein et al., 2002).

3. Exnovation: The Art of Strategic Removal

3.1 Defining Exnovation

Exnovation is the process of terminating a practice, or the use of a technology or product, within an organisation, community or society. It can be viewed as the opposite of innovation, creating space for new ideas by strategically removing existing ones (Kimberly, 1981; David & Gross, 2019).

3.2 The Interplay Between Innovation and Exnovation

Exnovation and innovation are interrelated. Exnovating products and practices creates spaces for new products and practices. Conversely, the promise of a new product or practice helps eliminate old products and practices (Williams, 2011; Holbek & Knudsen, 2020).

3.3 Benefits and Challenges of Exnovation

The implementation of exnovation strategies presents both significant benefits and notable challenges for organisations. Understanding these can help companies make informed decisions about when and how to implement exnovation.

Benefits:

- Resource reallocation enables organisations to shift financial, human and technical resources away from maintaining outdated products or services toward more promising innovations or core business functions. This strategic redistribution of resources can lead to improved efficiency and better returns on investment (Williams, 2011).

- Simplification of product lines reduces operational complexity and associated costs. When companies eliminate redundant or underperforming products, they can streamline their manufacturing processes, inventory management and supply chain operations. This simplification often results in reduced overhead costs and improved operational efficiency (David & Gross, 2019).
- Reduced organisational complexity occurs when fewer products or services need to be managed, marketed and maintained. This streamlining can lead to clearer communication channels, more focused organisational structures, and more efficient decision-making processes. Organisations can operate with greater agility and respond more quickly to market changes when they have fewer products or services to consider in their strategic planning (Holbek & Knudsen, 2020).

Challenges:

- Potential loss of revenue from discontinued products represents a significant risk in exnovation. Even when products are underperforming, they may still contribute to the company's overall revenue stream. The immediate impact of discontinuing these products can create financial pressures, particularly if replacement products or services are not yet generating an equivalent revenue (Kimberly, 1981).
- Resistance to change within organisations often emerges when exnovation initiatives are introduced. Employees may feel threatened by the elimination of familiar products or processes, particularly if these changes affect their roles or require new skills. This resistance can manifest as reduced productivity, increased turnover, or active opposition to the implementation of exnovation strategies (David & Gross, 2019).
- The risk of alienating loyal customers poses a significant challenge, as some customers may have strong attachments to products scheduled for discontinuation. These customers might not only resist switching to alternative products but could also develop negative perceptions of the brand. The loss of loyal customers can have ripple effects beyond immediate sales, affecting long-term brand loyalty and market reputation (Williams, 2011).

4. Culminovation: A New Perspective

4.1 Defining Culminovation

Culminovation, a term coined by the author, represents a blend of 'culmination' and 'innovation.' It implies that a product or service has reached its peak, and further innovation is not needed. Unlike exnovation, culminovation does not call for termination but rather for the continuation of the product or service without further development.

4.2 Key Characteristics of Culminovation

1. Peak performance: The product or service has achieved optimal functionality for its intended purpose.
2. Consumer satisfaction: Users are highly satisfied with the current offering.
3. Cost-effectiveness: Further improvements would yield diminishing returns relative to investment.
4. Sustainability: The product or service can be maintained at its current level without significant resource drain.

4.3 Culminovation vs. Exnovation

While both culminovation and exnovation involve a cessation of further innovation, they differ in their outcomes:

- Exnovation leads to the termination or replacement of a product or service.
- Culminovation results in the maintenance of a product or service at its optimal state.

5. Examples of Culminovation in Products

Several products have reached a state that could be described as culminovation:

5.1 Non-Stick Cookware

Modern non-stick pans, particularly those using advanced coatings like Teflon or ceramic, have achieved a level of performance where further innovations offer only marginal improvements. The basic concept has reached culminovation (Freinkel, 2011).

5.2 Paper Clip

The humble paper clip, invented in the late 19th century, remains largely unchanged. Its simple yet highly functional design efficiently holds papers together, with little need for further innovation in its form or function (Petroski, 1992). The paper clip's design has become so iconic that it serves as a prime example of how everyday objects can reach a state of optimal design, resisting significant changes over time (Petroski, 1990).

5.3 Analog Watches

High-end mechanical watches, especially from luxury brands like Rolex or Patek Philippe, have reached a peak in terms of precision, materials and design. Any further innovations would likely have minimal impact on their core functionality or appeal (Clerizo, 2009).

5.4 BIC Cristal Ballpoint Pen

Introduced in 1950, the BIC Cristal ballpoint pen's design has remained virtually unchanged. Its hexagonal shape, transparent barrel, and reliable ballpoint mechanism have made it a ubiquitous writing tool globally. The pen has achieved such a high level of functionality, cost-efficiency and durability that further innovation seems unnecessary (Petroski, 1992; Wilson, 2024).

6. Culminovation in Services

The concept of culminovation can also be applied to services:

6.1 Public Transportation Systems

Many cities have optimised their public transportation services to efficiently meet commuter needs. The combination of fixed routes, schedules and pricing structures has reached a point where adding more complexity often doesn't result in significantly better user experience or efficiency (Vuchic, 2005).

6.2 Grocery Delivery Services

Grocery delivery services have streamlined the process of ordering and receiving groceries to a point where most customers are satisfied with the efficiency and reliability of current offerings. While niche improvements are possible, the core service has reached a stage where further innovation does not significantly enhance the experience (McKinsey & Company, 2022).

6.3 Hotel Accommodations

Traditional hotel services—such as check-in/check-out processes, room cleaning and basic amenities—have been optimised over many decades. While some hotels innovate with unique experiences or technology, the basic service model of providing clean, comfortable rooms and basic hospitality has reached a point where further enhancements often add little extra value (Walker, 2017).

7. Implementing Culminovation: Strategies and Considerations

7.1 Recognising the Culminovation Point

Identifying when a product or service has reached culminovation requires a careful analysis of several factors:

1. **Market saturation** indicates that a product has achieved optimal market penetration and established a stable consumer base. This occurs when sales patterns stabilise, market share becomes consistent, and growth primarily comes from replacement purchases rather than new customer acquisition. Market saturation suggests that the product has reached a mature stage where additional features or innovations may not significantly expand the customer base or increase market share (Goldstein et al., 2002).
2. **Customer feedback and satisfaction levels** serve as crucial indicators of a product's evolutionary state. When customer satisfaction consistently reaches high levels (typically above 90%), and complaints primarily focus on peripheral rather than core functionality issues, it may indicate that the product has reached its optimal form. The absence of significant customer demands for fundamental changes, coupled with high satisfaction rates, suggests that the product successfully meets its intended purpose (Williams, 2011).

3. **Technological limitations** arise when further improvements would require disproportionate investments in research and development for minimal gains in functionality or performance. This occurs when a product approaches the theoretical limits of its underlying technology or when improvements become increasingly incremental rather than transformative. In such cases, the cost and complexity of innovation may outweigh potential benefits (Levy, 2010).
4. **Cost-benefit analysis of further innovations** involves evaluating the financial viability of continued product development. This assessment considers factors such as development costs, potential revenue gains, market demand for new features, and the risk of disrupting existing customer satisfaction. When the projected returns on innovation investment become marginal or negative, it may indicate that the product has reached its culmination point (David & Gross, 2019).

When considering whether a product or service has reached culmination, it's also important to consider the broader context of the industry and potential disruptive technologies. As Levy (2010) points out in his study of the computer industry, even seemingly perfected products can be rendered obsolete by unforeseen technological advancements.

7.2 Managing Stakeholder Expectations

Implementing a culmination strategy may face resistance from various stakeholders:

1. Shareholders expecting continuous growth
2. Employees focused on innovation-driven career advancement
3. Customers accustomed to regular product updates

Clear communication of the rationale behind culmination is crucial for gaining stakeholder buy-in.

7.3 Allocating Resources Post-Culmination

Once a product or service reaches culmination, resources previously allocated to innovation can be redirected to several key areas:

1. **Perfecting production processes** involves optimising manufacturing efficiency, reducing waste, and improving quality control systems. This focus on operational excellence can lead to increased profit margins through cost reduction, while maintaining or enhancing product quality. Companies can invest in lean manufacturing techniques, automation improvements, and supply chain optimisation to ensure the mature product is produced as efficiently as possible.
2. **Enhancing customer support** becomes increasingly important for products that have reached culmination. Resources can be directed toward developing comprehensive service networks, improving response times, and creating better user education programs. This investment in customer experience can strengthen brand loyalty and maintain market position even without continued product innovation. Companies might also focus on developing predictive maintenance capabilities and improving spare parts availability.

3. **Exploring new market opportunities** allows companies to leverage their culminated product's success in different geographical regions or customer segments. This might involve adapting marketing strategies for different cultures, developing market-specific packaging, or creating targeted distribution channels. Companies can focus on expanding their market reach rather than changing the core product, potentially accessing untapped revenue streams while maintaining the product's proven design.
4. **Developing complementary products or services** enables companies to create additional value around their culminated product without modifying its core design. This might include developing accessories, maintenance products, or related services that enhance the user experience. For example, a company with a culminated tool might develop specialised carrying cases, cleaning products or training programs, creating new revenue streams while reinforcing the value of the original product.

7.4 Monitoring for Disruptive Innovations

While maintaining a product or service at its culmination point, businesses must remain vigilant for disruptive innovations that could render the existing offering obsolete. This requires ongoing market analysis and a willingness to pivot if necessary. The challenge lies in balancing the stability of a culminated product with the need to respond to significant market changes.

Effective monitoring requires a systematic approach to market surveillance. Companies should establish dedicated teams or processes for tracking emerging technologies, changing consumer behaviours, and competitive innovations. This monitoring should extend beyond immediate competitors to include adjacent industries and emerging startups that might introduce disruptive alternatives.

The impact of disruptive innovations can manifest in various ways. Some innovations might offer dramatically improved performance, while others might provide similar functionality at significantly lower costs. For example, digital photography eventually disrupted the traditional film camera industry, despite the technical perfection many film cameras had achieved. Companies must be particularly alert to innovations that change the fundamental value proposition of their product category.

Organisations should also monitor shifts in consumer preferences and behaviours that might signal the need for change. Even when a product has reached culmination, external factors such as environmental concerns, changing social norms, or new regulatory requirements might necessitate modifications to the existing design or business model.

Companies practicing culmination should develop clear criteria for when to break from the strategy. These criteria might include specific market share thresholds, customer satisfaction metrics, or technological benchmarks that, when crossed, signal the need to reinvest in innovation. This approach helps balance the benefits of culmination with the need to remain competitive in a changing market.

Maintaining organisational readiness for change is crucial. While a product may have reached culmination, the company should preserve its innovation capabilities through continued investment in research and development, albeit at a reduced scale. This ensures the organisation can respond effectively when market conditions require a departure from the culmination strategy.

8. Empirical Evidence: Case Studies in Culminovation

To explore the viability of culminovation as a strategic approach, we conducted a qualitative analysis of ten iconic consumer products that have maintained consistent designs or formulations for extended periods (20+ years). Our research question was: “How have iconic consumer products that have maintained consistent designs or formulations for extended periods contributed to their respective companies’ brand recognition and market presence?”.

8.1 Methodology

We examined 10 case studies of iconic products, discussing each product’s history, design consistency, brand recognition, market presence and cultural impact. This approach allows us to understand the long-term effects of a strategy akin to culminovation in real-world contexts.

8.2 Case Studies

1. Coca-Cola Classic, formulated in 1886, exemplifies the power of consistency in branding. Its bottle shape and logo have remained iconic since the early 20th century, contributing to its status as one of the most recognised brands globally. As a market leader in carbonated soft drinks, Coca-Cola has transcended its role as a mere beverage to become a symbol of American culture, even featuring in art pieces by renowned artists like Andy Warhol.
2. The LEGO brick, with its basic design patented in 1958, demonstrates how a simple, consistent concept can lead to extraordinary brand recognition and market presence. The interchangeability of LEGO bricks from 1958 with modern pieces showcases the timeless nature of its design. This consistency has helped LEGO become synonymous with plastic construction toys, propelling it to become the world’s largest toy company by revenue as of 2015.
3. Zippo lighters, first produced in 1933, have retained their distinctive shape and characteristic ‘click’ sound, making them instantly recognisable. This design consistency has contributed to remarkable market presence, with over 600 million units sold as of 2020. Zippo’s cultural impact is profound, with the lighters becoming associated with Americana, military history, and rock and roll culture.
4. The Chuck Taylor All-Star by Converse, introduced in 1917 with Chuck Taylor’s signature added in 1923, has maintained its basic design since 1949. This consistency has established the shoe as an icon in casual footwear, with over 60% of Americans having owned a pair at some point. The All-Star’s cultural impact extends beyond its athletic origins, becoming a symbol of various counterculture movements.
5. The Swiss Army Knife, first created by Victorinox in 1897, has kept its basic multi-tool concept unchanged, leading to widespread brand recognition. The term ‘Swiss Army Knife’ is now widely used to describe any versatile tool, indicating the product’s impact on language itself. With Victorinox producing 45,000 knives daily, the consistent design has clearly maintained strong market presence.
6. WD-40, developed in 1953, has maintained a largely unchanged formula, contributing to its name becoming synonymous with multipurpose lubricants. Used in 80% of American households, WD-40’s market presence is a testament to the power of a consistent, reliable product. Its cultural impact extends beyond its intended use, inspiring numerous off-label applications and fostering a dedicated fan culture.

7. Monopoly, first published by Parker Brothers (now Hasbro) in 1935, has kept its basic game mechanics and board layout unchanged, contributing to its status as one of the best-selling board games worldwide. Sold in 114 countries and produced in 47 languages, Monopoly's consistent design has facilitated global market presence.
8. Ray-Ban Aviator sunglasses, designed in 1937, have maintained their basic teardrop shape, becoming iconic in eyewear fashion. As one of the best-selling sunglass models in history, the Aviators showcase how design consistency can lead to enduring market presence.
9. The Rubik's Cube, invented in 1974, has kept its basic 3x3x3 cube design unchanged, becoming synonymous with 3D combination puzzles. With over 350 million cubes sold worldwide, its market presence is undeniable. The Rubik's Cube has spawned international competitions and a global speedcubing community.
10. Post-it Notes, accidentally invented by 3M in 1968 and marketed in 1977, have maintained their basic square, sticky note design. The name 'Post-it' is often used generically for all sticky notes, indicating the brand's strong recognition. Sold in more than 100 countries, Post-it Notes have changed office communication and personal organisation habits worldwide.

8.3 Analysis of Case Studies

The ten products examined in this study have all achieved a remarkable level of brand recognition, often to the point where their names are used generically for their entire product category. This level of recognition can be attributed in large part to their long-standing, consistent designs, which have become instantly identifiable and integral to their brand identities.

Despite minimal changes over decades, these products have maintained strong market positions, often leading their categories. This suggests that continuous innovation is not always necessary for maintaining market relevance, particularly when a product has achieved an optimal design or formulation.

Many of these products have transcended their original purposes to become cultural icons, featured in art, media and everyday language. This cultural embeddedness provides a form of marketing and relevance that goes beyond traditional advertising, contributing to their enduring market presence.

Several of the products, such as WD-40 and the Swiss Army Knife, have found numerous uses beyond their original intent. This versatility, combined with their consistent and reliable design, has extended their market relevance and contributed to their longevity.

The historical consistency of these products adds to their perceived value, with many being viewed as 'classics' or 'originals' in their categories. This heritage value can be a significant factor in maintaining market presence and justifying premium pricing.

9. Discussion: Implications for Culminovation Strategy

The case studies provide compelling evidence for the potential benefits of a culminovation strategy. By maintaining a consistent product design or formulation over an extended period, companies have achieved significant brand recognition and maintained strong market presence. This suggests that the concept of culminovation - recognising when a product has reached its optimal state and maintaining it at that level - can be a viable and potentially profitable strategy.

However, it is important to note that these examples represent exceptional cases, and a culminovation strategy may not be suitable for all products or markets, particularly those driven by rapid technological change. The success of these products also raises questions about how companies can balance maintaining iconic products while innovating in other areas to ensure overall growth and adaptability to market changes.

Implementing a culminovation strategy requires careful consideration of several factors:

1. *Product Maturity*: Culminovation is most applicable to products that have reached a high level of refinement and customer satisfaction.
2. *Market Position*: Products that have achieved market leadership or a strong niche position may be good candidates for culminovation.
3. *Brand Value*: The product should have significant brand equity that can be leveraged through consistency.
4. *Cultural Significance*: Products that have become cultural icons may benefit more from consistency than constant change.
5. *Functional Optimality*: The product should have achieved a level of functionality that is difficult to significantly improve upon.

10. Conclusion

Culminovation represents a nuanced approach to innovation strategy that challenges the prevailing 'innovate or die' mentality. By recognising when a product or service has reached its optimal state and maintaining it at that level, businesses can achieve a balance between innovation and stability.

The case studies presented in this research demonstrate that maintaining a consistent product design or formulation over an extended period can contribute significantly to brand recognition and market presence. These iconic products have become deeply embedded in consumer consciousness and culture, often defining their product categories.

However, implementing a culminovation strategy requires careful analysis, strong leadership and effective communication with stakeholders. It also demands ongoing vigilance to ensure that the decision to cease further innovation remains valid in the face of changing market conditions and emerging technologies.

As businesses navigate an increasingly complex and fast-paced environment, the concept of culminovation offers a valuable tool for strategic decision-making. By embracing this approach where appropriate, companies can optimise their resources, enhance profitability, and maintain a strong market position without succumbing to the pressures of constant, often unnecessary innovation.

Future research could explore how companies successfully balance maintaining iconic products through culmination while innovating in other areas, and how this strategy affects overall company performance and adaptability to market changes. Additionally, investigating the applicability of culmination in rapidly evolving technological sectors could provide valuable insights into the limits and potential adaptations of this strategy.

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Reshaping the Marketer: The Impact of AI on Marketing Roles and Skill Sets

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The dissertation received a Distinction.

This study explores the impact of Artificial Intelligence (AI) on marketing roles, skill sets and organisational support structures. As AI technologies become increasingly embedded in marketing functions, this research investigates how professionals are adapting to evolving expectations and what competencies are emerging as essential.

Employing a mixed methods approach, the study combines quantitative survey data from 164 marketing professionals with qualitative insights from 17 in-depth interviews. Findings indicate a significant shift in daily responsibilities, with 78% of participants reporting role changes due to AI integration. Marketers are transitioning towards more strategic and analytical functions, while routine tasks are increasingly automated. Key skills identified include data analysis (89%), AI tool proficiency (76%), and adaptability (85%), although only 54% reported confidence in data-related capabilities.

Organisational support remains inconsistent: while 68% received some form of training, only 42% found it comprehensive. Organisations with dedicated AI teams reported 30% higher integration success rates, underscoring the value of structured initiatives. Demographic analysis revealed higher AI proficiency among younger professionals and those based in North America and Asia.

Despite skill gaps and ethical concerns—particularly around data privacy and algorithmic bias—87% of respondents anticipate AI will become more integral in the near future, especially in areas such as hyper-personalisation and predictive analytics. This research offers actionable insights for marketers, educators, and organisations, emphasising the need for continuous learning and strategic investment to navigate the AI-driven future of marketing.

Keywords: AI, Marketing, Skill Sets, Role Transformation, AI Adoption, Organisational Training.

1. Introduction

AI is reshaping the marketing profession at an unprecedented pace. Once considered a novel addition to digital strategies, AI has now become an essential operational component across industries. Its capabilities—ranging from content automation to predictive analytics—are redefining both the nature of marketing roles and the competencies required to fulfil them. As AI-driven technologies continue to influence campaign execution, consumer insights and creative production, marketers face increasing pressure to adapt to an evolving professional landscape that demands agility, technical proficiency and strategic thinking.

The existing literature documents several key transformations. Studies by Davenport and Ronanki (2018) and Kumar et al. (2019) highlight the role of AI in automating repetitive tasks and enhancing data-driven decision-making. Others, including Wedel and Kannan (2016), emphasise the growing need for marketers to acquire competencies in data analytics and AI tool usage. However, while there is considerable focus on AI's general benefits, the specific ways in which it redefines marketing roles, alters required skill sets and challenges organisational structures remain underexplored—particularly across different demographics and global contexts.

This study addresses these gaps by examining how marketing professionals experience AI's integration in their daily work. It investigates changes in responsibilities, the emergence of new technical and soft skills, and the extent to which organisations provide adequate training and support. Furthermore, it explores demographic differences in adoption rates and anticipates future developments as perceived by professionals within the field.

The aim of this research is to offer a comprehensive, evidence-based account of how AI is transforming marketing as a profession. By employing a mixed methods approach—quantitative surveys and qualitative interviews—the study provides both statistical trends and nuanced insights. These findings not only contribute to the academic understanding of AI’s role in marketing but also serve as a practical guide for organisations, educators and professionals seeking to align with the changing demands of the industry.

In an environment where technological change is accelerating, understanding AI’s real-world impact on marketing practice is both timely and necessary. This research seeks to equip stakeholders with the knowledge required to make informed decisions about skill development, workforce planning and strategic investment in an AI-enabled future.

2. Research Questions

This study seeks to understand how AI is transforming marketing roles, skill requirements and organisational dynamics. The following research questions were formulated to address critical dimensions of this transformation:

1. How has AI integration altered the daily responsibilities and required skill sets of marketing professionals?

This question investigates how traditional marketing tasks are evolving due to AI automation and augmentation, aligning with the study’s aim to map role transformation.

2. What new technical, analytical and strategic skills are essential for marketers, and how are these skills being developed?

This explores skill acquisition in response to AI-driven demands, offering insight into training needs and professional development.

3. What types of organisational support and changes (e.g., training, mentorship, structural adjustments) are in place to assist marketing teams in adapting to AI technologies?

This examines institutional readiness and identifies areas for improvement in organisational infrastructure.

4. How do AI adoption rates, attitudes and skill adaptation vary across marketing professionals of different age groups, genders and geographic regions?

This question addresses equity and diversity in the adoption and use of AI in marketing practice.

5. How do marketing professionals anticipate AI will continue to reshape their field, and what future developments do they see as most impactful?

This assesses expectations and preparedness for continued transformation.

3. Methodology

This study adopts a mixed methods research design to examine the impact of AI on marketing roles, skill sets and organisational adaptation. The decision to use both quantitative and qualitative approaches was guided by the exploratory nature of the research, which sought to capture both broad patterns and individual experiences.

The quantitative component involved a structured online survey distributed to a global sample of marketing professionals. Participants were recruited through multiple channels, including the Superpath marketing network (21,000+ members), LinkedIn, Reddit, and 36 Facebook and 12 LinkedIn marketing groups. In total, responses were gathered from 164 marketing professionals, offering diverse perspectives across age groups, regions and levels of experience. The survey included Likert scale items, multiple-choice questions and open-ended responses to assess AI adoption, skill adaptation and organisational support.

The qualitative component comprised 17 semi-structured interviews with marketing professionals across varying seniority levels and geographic regions. Participants were selected through purposive sampling from the researcher's network, ensuring diverse representation. Interviews were conducted via Google Meet and recorded with participant consent. The interviews explored in greater depth the themes raised in the survey, such as changes in daily tasks, perceptions of AI's future role, and experiences with organisational training.

For data analysis, quantitative survey responses were processed using SPSS and R. Descriptive statistics were used to summarise central tendencies and frequency distributions. Inferential analyses—including t-tests, ANOVA, Chi-square tests and regression analysis—were conducted to examine demographic differences and associations between variables such as AI usage, training and skill development.

Qualitative data from interviews and open-ended survey responses were analysed using thematic analysis via NVivo. The process involved initial open coding followed by the development of thematic categories aligned with the research questions. Themes such as "AI role transformation," "skills acquisition," "organisational support," and "ethical concerns" emerged repeatedly across cases and informed the interpretation of findings.

Ethical considerations were integral to the research process. Participants received clear information about the purpose of the study and were informed of their right to withdraw at any point. Informed consent was obtained prior to participation, and all data was anonymised to ensure confidentiality. Interview recordings were securely stored and accessible only to the researcher. The study adhered to university ethical guidelines, including data protection and participant welfare protocols.

By employing a methodologically rigorous and ethically sound research design, this study ensures the reliability, validity, and depth necessary to draw meaningful conclusions about the evolving role of AI in marketing practice.

4. Discussion/Findings

This section presents and interprets the findings of the study based on the mixed methods approach employed. Results are grouped according to the core research questions and supported by figures derived from the original data.

4.1 Role Transformation and AI Usage by Experience

The findings indicate that AI is significantly altering the nature of marketing roles. A substantial portion of participants reported shifts in daily tasks from manual execution to strategy-focused work enabled by AI tools.

Respondents highlighted increased usage of generative AI platforms, automation tools and AI-enhanced analytics, confirming that AI is embedded in core marketing processes.

Analysis by experience level revealed that marketers with 1–3 years of experience had the highest AI usage frequency (mean: 3.83), followed closely by those with 7–10 years (mean: 3.72) (**Figure 1**). In contrast, those with over 10 years of experience reported a lower mean of 3.42, suggesting that younger professionals may be more engaged with or adaptable to AI technologies.

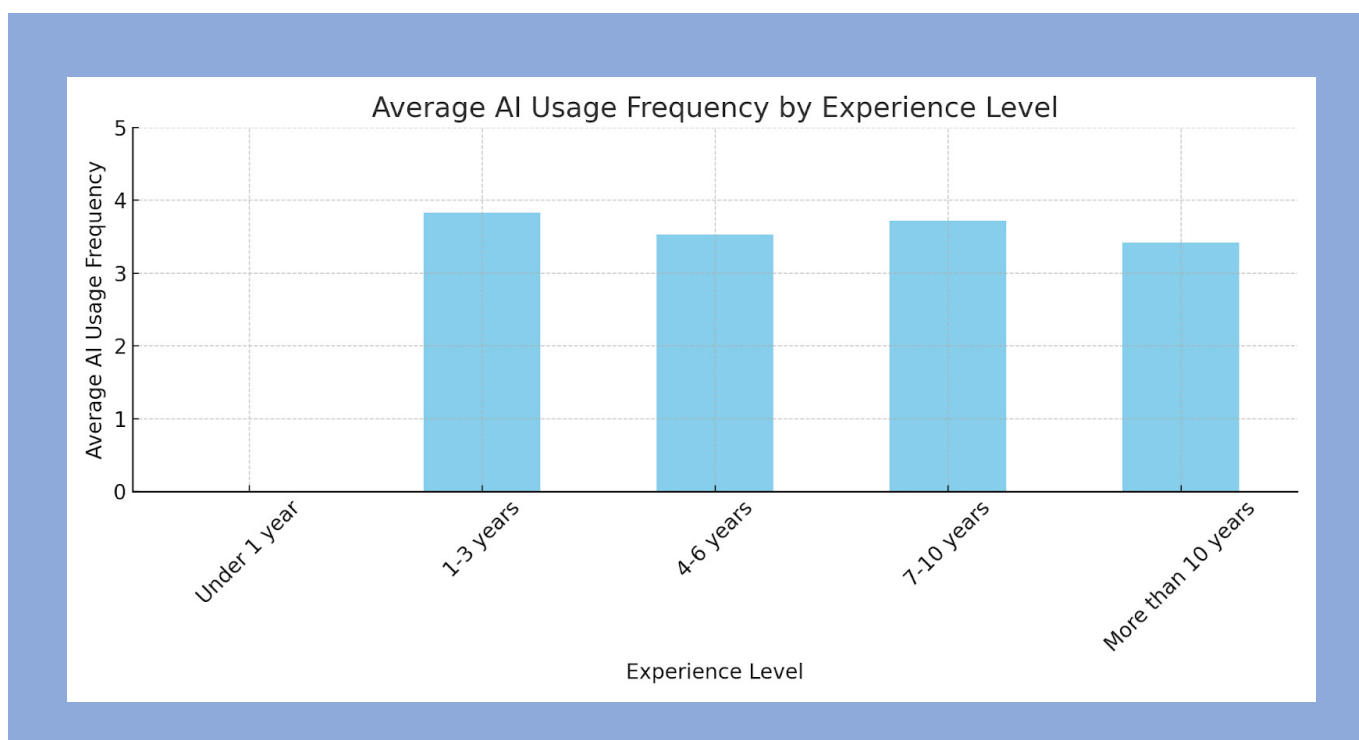


Figure 1: Average AI Usage Frequency by Experience Level

4.2 AI Integration Across Career Stages

In terms of integration into workflow, professionals with 4–6 years and 1–3 years of experience reported the highest levels of integration (means of 3.17 and 3.13 respectively), while those with more than 10 years reported an integration level of 2.82 (**Figure 2**). This pattern indicates that early and mid-career professionals are more likely to experience structured AI incorporation into their roles. These findings may reflect generational shifts in training, technological exposure and workplace digital maturity.

Figure 2 can be found on the next page.

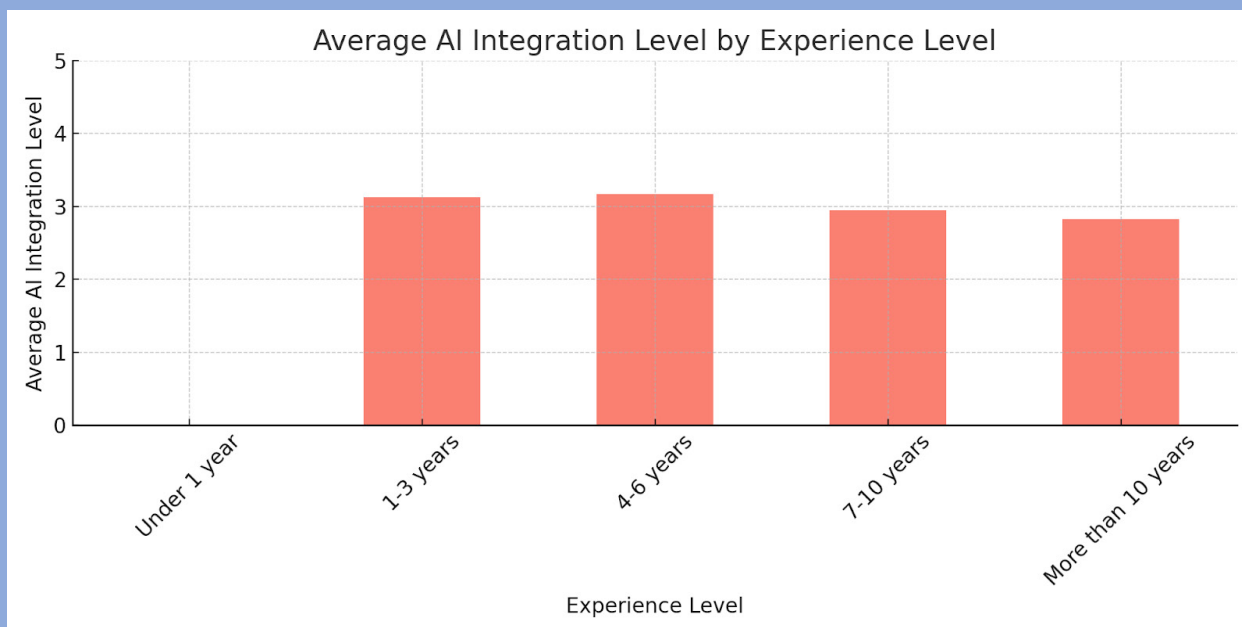


Figure 2: Average AI Integration Level by Experience Level

4.3 Emerging Skills and Learning Behaviours

Survey data and interviews confirmed a shift in skill requirements. Respondents cited the need to acquire capabilities in data analytics, automation platforms, AI prompt engineering and tools such as ChatGPT and Jasper. The most frequently acquired new skills included Automation Technologies (33 mentions), AI-Driven Personalisation (27 mentions) and Data Analysis (26 mentions), highlighting the prominence of data and automation in the evolving skillset (**Figure 3**).

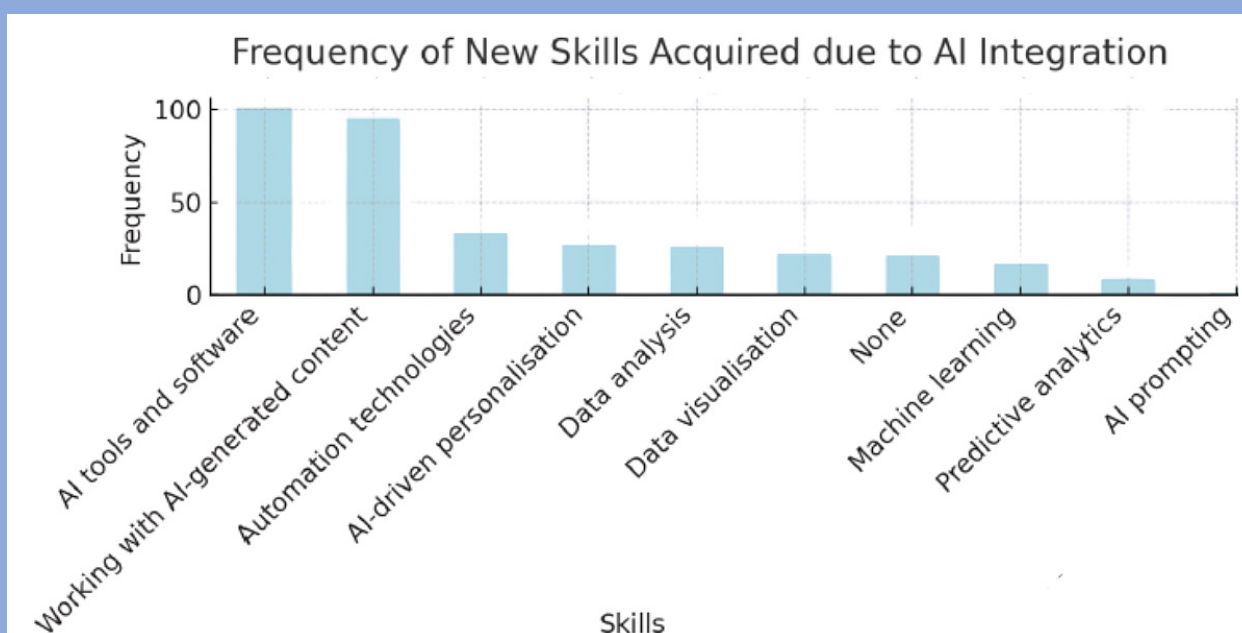


Figure 3: Frequency of New Skills Acquired due to AI Integration

Despite these new skill demands, several participants expressed low confidence in technical areas, reinforcing the need for ongoing training and self-directed learning. This gap between required and existing capabilities was particularly pronounced among senior marketers, many of whom reported that skill adaptation felt reactive rather than proactive.

4.4 Organisational Training and Confidence

The presence or absence of formal organisational support emerged as a key differentiator in successful AI integration. Figure 4 demonstrates that respondents who received structured training were significantly more likely to report higher confidence levels and a more seamless integration of AI into their daily tasks (**Figure 4**).

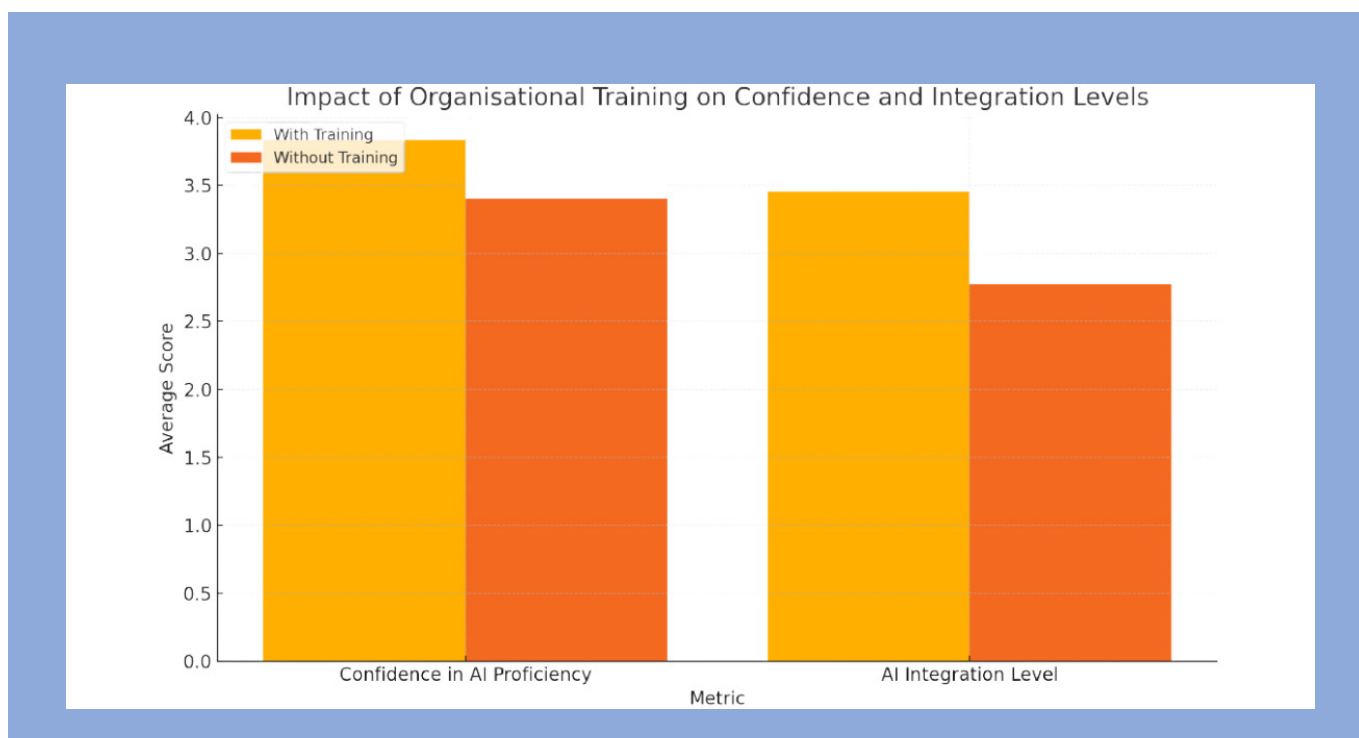


Figure 4: Impact of Organisational Training on Confidence and Integration Levels

Participants from organisations with defined AI adoption strategies described their transitions as “supported,” while those relying on self-learning felt “left behind.” The study confirms that the presence of internal training correlates positively with skill confidence and effective tool usage, suggesting a clear organisational role in shaping AI readiness.

4.5 Demographic Differences in AI Use

Disparities in AI adoption and usage were evident across gender and age groups. Male respondents were found to have a slightly higher AI usage frequency than female respondents when normalised for role and industry (**Figure 5**). These findings suggest potential barriers or confidence disparities that merit deeper organisational reflection.

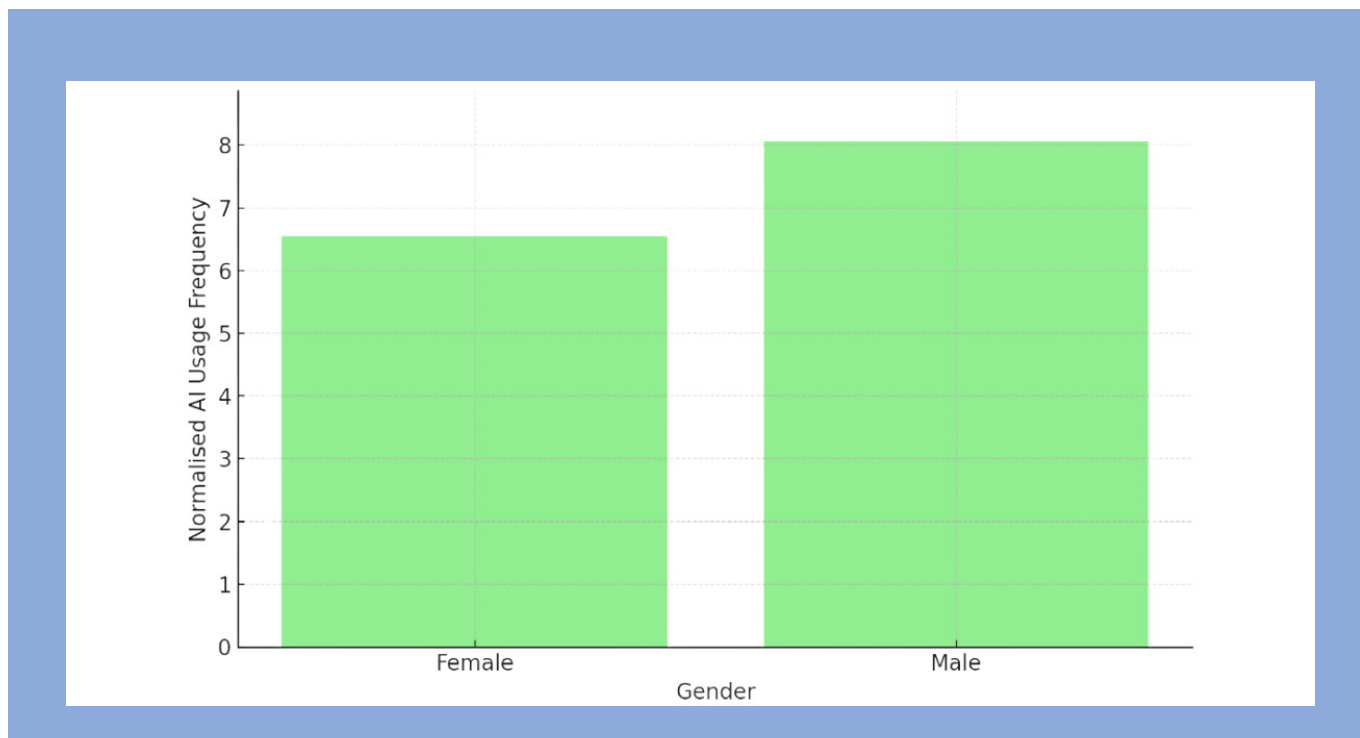


Figure 5. AI Usage Frequency by Gender (Normalised)

In terms of age, younger marketers (under 30) exhibited higher integration levels than older age groups, suggesting either a generational comfort with technology or differing exposure to AI tools in the workplace (**Figure 6**). These patterns underscore the need for inclusive training strategies that address the needs of both early-career and veteran marketers.

Figure 6 can be found on the next page.

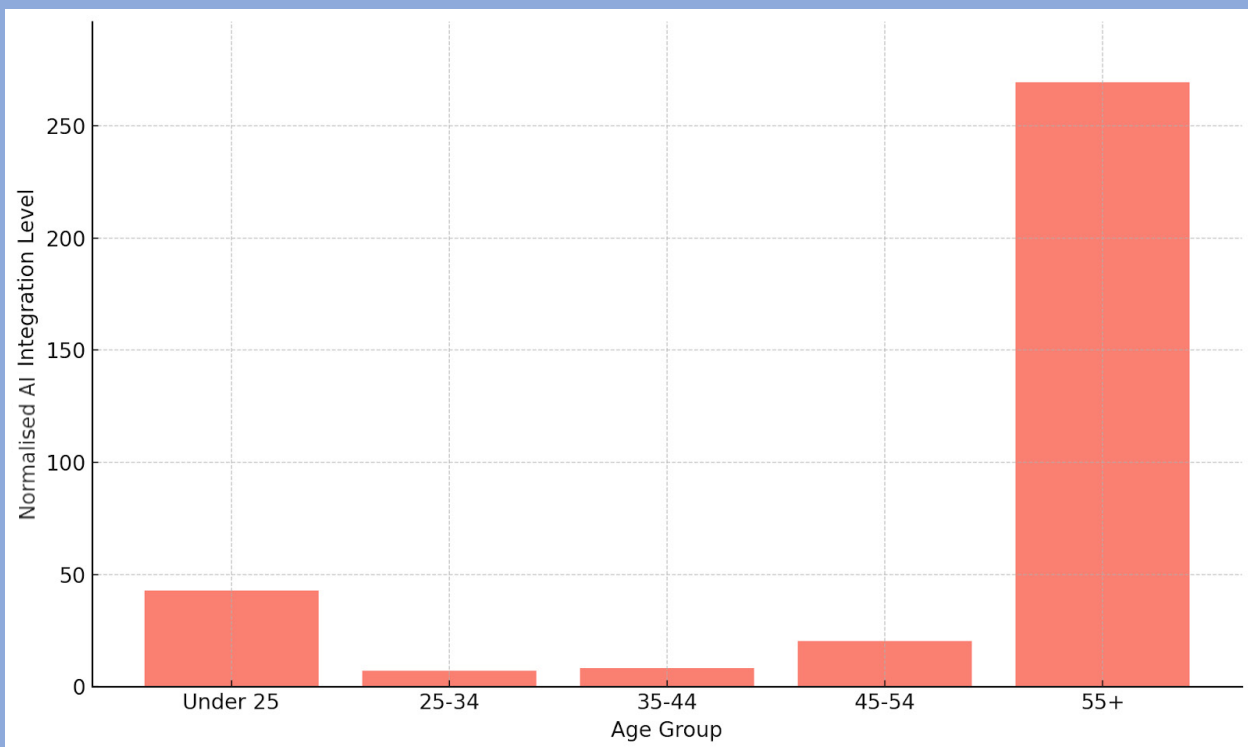


Figure 6. AI Integration Level by Age Group (Normalised)

4.6 Expectations of AI's Future Role

The vast majority of respondents anticipated that AI will continue to reshape marketing. When asked to rate AI's expected future impact on a five-point Likert scale, the average score was **4.31**, with **75%** of respondents rating it **4 or higher** (Figure 7). Interviews further reflected a nuanced optimism—participants saw AI as an opportunity to elevate their work but were cautious about ethical and creative implications.

Figure 7 can be found on the next page.

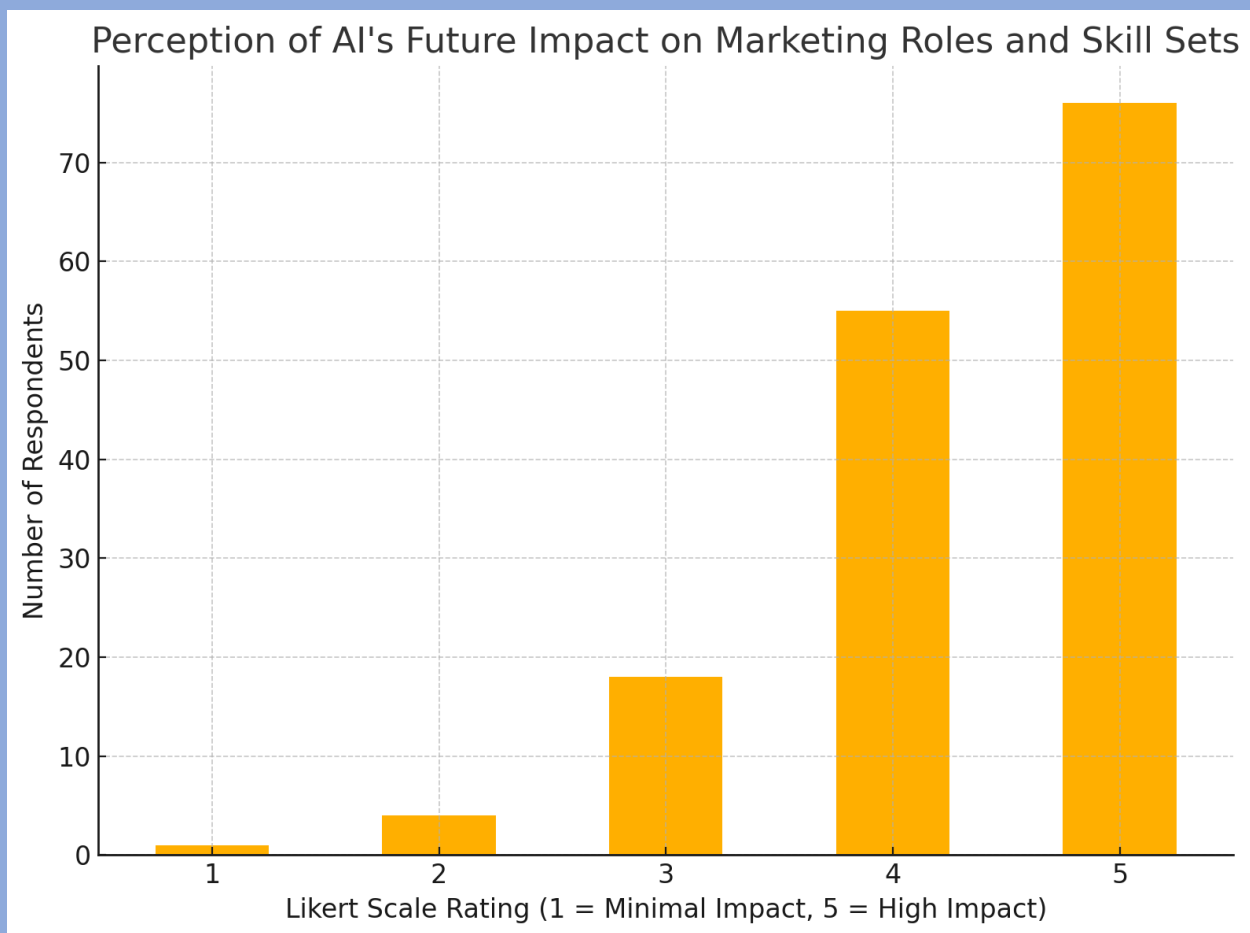


Figure 7: Perception of AI's Future Impact on Marketing Roles and Skill Sets

Respondents cited expectations around deeper personalisation, predictive analytics and real-time content creation, with several stressing that the profession would “never return to a pre-AI normal.” This underscores a shared recognition that AI fluency will soon be non-negotiable in marketing roles.

4.7 Implications, Limitations and Future Research

These findings reinforce the view that AI is not just automating routine tasks but is fundamentally shifting the strategic core of marketing roles. The implications are twofold: first, marketers must embrace continuous learning and upskilling; second, organisations must commit to inclusive, structured support systems.

Limitations of this study include its reliance on self-reported data and non-randomised sampling. While responses spanned diverse geographies and experience levels, the findings may not be universally representative. Additionally, perceptions of AI adoption may vary significantly by sector, which was not a focal variable in this study.

Future research should explore longitudinal impacts of AI training programs, the intersection of ethics and automation, and comparative studies across industries and organisational structures.

5. Conclusion

This study set out to explore how AI is reshaping marketing roles, skill sets and organisational practices across diverse global contexts. Drawing on quantitative responses from over 164 professionals and qualitative interviews with 17 marketers, the findings offer a timely and grounded examination of how AI is transforming the marketing profession in practice—not just in theory.

Key insights include a generational gradient in AI adoption, with early-career professionals reporting the highest usage and integration levels. A substantial skills gap persists across data analytics, automation technologies and AI prompt engineering, even as these capabilities are increasingly recognised as essential. Organisational support—particularly structured training—emerged as a critical factor influencing both confidence and integration success. Gender and regional disparities further underscore the need for inclusive strategies to ensure equitable adaptation.

These findings contribute to both academic and practitioner discourse by providing empirical evidence of AI's uneven but accelerating impact on marketing work. The results highlight the urgency of developing targeted training interventions and adaptive organisational structures to future-proof the profession.

Future research should build on these insights by examining long-term impacts, sector-specific differences, and the evolving ethical dimensions of AI in marketing practice.

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AI in Online Games: A Buzzword or a Game Changer?

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Abstract

This paper explores the role of artificial intelligence (AI)—including generative AI (GenAI), which is able to generate new content by employing existing data—in relation to the future of the gaming industry. To that end, secondary research analysis on how the integration of AI in videogaming can both support and disrupt the gaming industry is presented, noting both the advantages and disadvantages of AI in the online gaming industry.

The wider context in which the discussion takes place is the link between marketing, AI and online games. Specifically, given the current hype around AI, this research strives to unearth whether AI in online games is merely a buzzword.

To be sure, the AI trend relating to online games raises consumer awareness of how marketers can use such a tactic to grab audience attention. But the research findings prove that AI in online games is beyond just a marketing gimmick—it is a game changer.

This article investigates the degree to which AI can create benefits for those firms that embrace it during their game development stage while, equally importantly, providing evidence of the drawbacks that the very same use of AI can bring.

Through this investigation, the current article sheds light on the problems pertinent to the spread of GenAI and provides solutions on how these issues can be mitigated when seen through a different lens. It also aims to help consumers better understand the use of AI by game developers—including marketers—while also giving a glimpse of what lies ahead. Finally, the limitations of this research will be considered, alongside directions for future research.

Keywords: artificial intelligence (AI); generative AI (GenAI); marketing; online games; videogames.

Introduction

This study considers how AI in videogaming can present both an opportunity and a challenge to the gaming industry. Previous articles published by the authors have also looked at online gaming, and act as a springboard for the present study.¹

The first videogame in the world—the Nimatron—appeared in 1939 (Kellem, 2022). A lot has changed since then. Fast-forward to today, when GenAI has entered the scene. GenAI is AI that creates text, images and audio in reaction to a prompt (Cairns, 2023). It is a category of AI algorithms that can create fresh content using existing data as a basis (J.P. Morgan, 2024). Specifically, GenAI is the technology behind tools such as ChatGPT, and utilises substantial computing power to find patterns in text or images and create new content from the data (Liao, 2023). Further, GenAI allows videogame characters to ask questions out loud and have them respond in a spontaneous manner (Trouvé, 2024).

With respect to GenAI and start-up collaborations, even if a videogame studio is small and without the resources to create GenAI tools itself, it can still turn to a start-up for assistance. For instance, Scenario, which raised \$6m in seed funding, produces image databases to turn text prompts into assets that can then be integrated into videogames. However, a typical limitation for image generators, as has been evident during tests, is that it can sometimes give animated characters unrealistic-looking hands, for example (Liao, 2023). Hence, there is also a downside, as will be further illustrated later.

¹ Specifically, 'Online games, female gamers and marketing: New business opportunities and challenges' (Terekhova & Constantinou, 2024), 'Online Games, Celebrities and Licensing: Igniting a New World' (Terekhova & Constantinou, 2023), 'Online Games: Exploring Future Possibilities' (Terekhova & Constantinou, 2022), and the first article in the series entitled, 'Are our Battles in Online Games Enough to Attain Peace across the Globe?' (Terekhova & Constantinou, 2021).

AI is nowadays utilised as a marketing strategy to assist the sales of game software and hardware alike (Hennig, 2020, p. 151). Certainly, gaming is a mass market phenomenon (Solomon et al., 2019, p. 538), with the videogame industry currently being worth \$184.3bn (Sherry, 2024) and expected to reach \$363.20bn by 2027 (Statista, 2024). This is why the present article focuses on such a prominent industry. The online gaming industry, which connects millions of gamers worldwide, has received significant benefits from AI technologies (Darbinyan, 2022).

Videogames may also incorporate AI algorithms into their gameplay (Sousa et al., 2022, p. 321). AI is ever more commonly used in game development, such as in the role-playing videogame 'Dimensionals' (Reymann-Schneider, 2023). ChatGPT² also plays a role in amplifying player engagement as well as improving gaming experiences (Huang & Huang, 2023). Because we can see that the world is moving all the time towards a more AI-influenced future (Yoon, 2024), we will also take a close look at the pros and cons of using AI in online gaming.

Although the use of AI in gaming is not something new, as we will discuss later, recent developments introduce new possibilities whose outcomes should be investigated to confirm whether they live up to the hype (Correia, 2023). Evidence seems to suggest that 'AI' is merely a buzzword that everybody has become accustomed to, because of its long-standing use in the industry.³ This explains why business leaders and gaming firms make much use of the AI term, because they know it will connect well with their audiences and is inexpensive. So perhaps it all consists of just an inexpensive marketing trick (e.g., Pearson, 2015; Vanian, 2019) as AI gains attention worldwide and turns into a buzzword (Walid, 2024). At the other end of the continuum, however, evidence suggests that AI is more than just a buzzword. Thus, grasping the true potential of AI is essential for any marketer wishing to employ it in an effective manner to refine marketing initiatives, while also driving business success (e.g., Fisher, 2023; Sherry, 2024).

The main *research question* of this study then is whether AI in online games constitutes a buzzword or a game changer. Specifically, we will investigate the extent to which AI influences or will influence both the present and future of the gaming industry. By doing so, this article aims to reveal the degree to which AI can prove helpful for those firms that embrace it in their game development phase while, equally significant, considering evidence of the drawbacks it brings. In this manner, consumers may better grasp the purpose and nature of the use of AI by game developers—particularly marketers—and decide for themselves whether it is a game changer or no more than a marketing trick. To that end, we will employ secondary research analysis of how AI as a whole can both disrupt and support the gaming industry, offering both the advantages and disadvantages of AI in general in the online gaming industry.⁴

We begin our analysis by first unpacking the difference between traditional AI and GenAI and then providing a brief history of the association of AI and videogames, while also considering AI in online gaming. We then consider the supportive role of AI in the gaming industry—including the advantages of GenAI in the online gaming industry and a discussion on GenAI and start-up collaborations—while also presenting AI as a disruptor in the gaming industry. A focus will be placed on the disadvantages of GenAI in the online gaming industry and the challenges pertinent to AI spreading into the entertainment industry, too. Throughout the present article, we strive to highlight the pivotal role of GenAI and its impact for firms using it effectively, that is investigating whether it gives them a competitive edge. Additionally, we present a case study of an organisation that makes successful use of AI and then move on to discuss the future of AI in online gaming. Finally, the limitations of this research and specific recommendations for future research are stated after some concluding remarks.

² For more info about ChatGPT, please visit: <https://openai.com/chatgpt/>.

³ In accordance with Weeks (2020), machine learning (ML) constitutes a machine that appears to be intelligent on its own, hence, it could be argued that it is ML that deserves the credit—not AI.

⁴ Any mention of AI evident throughout the analysis of this article may thus also incorporate GenAI.

Traditional AI vs. GenAI

GenAI constitutes a subset of AI, and it is different from traditional AI. Specifically, traditional AI—which is frequently called Narrow or Weak AI—places emphasis on performing a specific task in an intelligent manner. For example, the computer knows all the rules when you play computer chess, but although it can predict your moves and make its own as per a pre-defined strategy, it is not creating novel ways to play chess but only choosing from strategies that it was programmed with. Other examples of traditional AI to consider are voice assistants such as Siri or Alexa, Google’s search algorithm, and recommendation engines on Netflix or Amazon; these AIs have been trained to follow precise rules, perform a certain job, and do it well—but they do not produce anything new.

In contrast, GenAI can be considered as the next generation of AI—a form of AI that can generate something new. OpenAI’s language prediction model, GPT-4, is a prime example of GenAI, as it can produce human-like text that is nearly identical to a text written by a human being. In addition, in the entertainment industry, GenAI can assist in the creation of new music and the writing of scripts. In journalism, GenAI can write articles or even reports. All in all, the key distinction between traditional AI and GenAI rests in their capabilities as well as their application. Traditional AI systems are principally utilised to analyse data and make predictions, while GenAI goes a step further by generating new data analogous to its training data (Marr, 2023).

AI and videogames: *Tracing the origins of a long-lasting connection*

In this section, we show that AI has been linked with gaming from early on. This association dates back to 1956, when the name as well as principles of the scientific discipline under study were devised in workshops at Dartmouth College in a private university in New Hampshire. However, it was only during the initial success of arcade games that the public came across AI for the first time. The evolution of AI in gaming can then surely be traced back to groundbreaking AI pathfinding in classic games like ‘Pac-Man’ (1980) in particular,⁵ which was so popular thanks to AI animating the four ghosts that went up against the hero.⁶ The ghosts in Namco’s notable franchise were able to change between various roles (i.e., neutral, aggressive, or elusive) through the use of AI (Trouvé, 2024; Wilcheck & Archaumbeault, 2024). It should be noted that AI systems were used in other 2D games as well, such as Tetris (Wu et al., 2023, pp. 15356, 15358). Since then, multinational technology companies like IBM have investigated the link between AI, ethics and ‘Pac-Man’ (McCracken, 2018). Besides the trademark ghosts of ‘Pac-Man’, autonomous decision-making in ‘The Sims’ is also worth noting, given that AI is fundamental for things such as making adaptive characters and storylines (Cairns, 2023).

As we can see, videogames have long utilised AI in various capacities, even during the time of arcade games such as ‘Pac-Man’, where videogames leveraged AI to keep the player’s experience stimulating. AI in videogames has certainly advanced since 1980 and has been utilised in many ways—simulation, characters, combat and storylines, to name but a few. Now, however, with GenAI, these experiences will become yet more dynamic (Goswami, 2024). GenAI, for instance, provides the potential of streamlining quality assurance testing. According to Kate Rayner, the technical director for the Coalition—the studio behind Gears of War—AI can be employed to catch any glitches so that players experience less crashes once the game is finally launched (Liao, 2023). Further to this, GenAI presents advanced ways for videogame developers to generate engaging content and realistic visuals in addition to immersive gameplay experiences, with GenAI being able to speed up the game’s development (Marr, 2024). In the same way that the Internet got to be vital for survival in the

⁵ ‘Pac-Man’, along with its equally prevalent successor ‘Ms. Pac-Man’, are frequently recognised as the frontrunners of the golden age of arcade videogames (Rohlfshagen et al., 2018). See more at: <https://www.pacman.com/en/>.

⁶ ‘Pac-Man’ comprises a great platform for demonstrations as well as examples during lectures, with the University of California Berkeley’s introductory AI course teaching foundational concepts using this classic videogame (DeNero & Klein, 2010, pp. 1885, 1889).

late 1990s, so publicly accessible GenAI tools (e.g., ChatGPT, Midjourney) as they develop to be more precise, applicable and secure, will become more and more important as a competitive advantage going forward (Cook, Hagi & Wright, 2024; Paizanis et al., 2024). Adding to this, GenAI can potentially transform the gaming industry, and firms that utilise GenAI effectively will discover that it constitutes a game changer (Goswami, 2024; Info-Tech Research Group, 2023; Paizanis et al., 2024).

The supportive role of AI in the gaming industry: *The present-day and a glimpse into the future*

We have already seen how the origins of AI in games can be traced back to the 1950s and, at the time of writing, we also witness the building of computer games with the use of AI. Despite such collaborations, human beings are still needed in the process.

Specifically, gaming companies such as Nintendo have opted for human creativity over AI, given that technology falls short of making great games on its own. PlayStation also deems AI as an inexorable joint force in videogame development (Schwarz, 2024).

Concerning the building of computer games in the future, although human beings will still play a significant role in the production process, AI will nevertheless work together with people and assist them in being more creative (Wakefield, 2024). In the future, moreover, AI is expected to assist in game development to an even greater extent (Agrawal, 2019).

Advantages of AI in the online gaming industry

An advantage of AI in the gaming industry is that AI-powered tools can aid testers in doing their tasks more efficiently. Videogame developers must test their games and levels inside of the game to discover any issues—such as bugs, shortcuts and, in general, all of the potential actions a player can do. AI can be used to automate this playtesting of games, given its ability to handle thousands of intricate test cases a lot quicker than a human being. It can then identify all the small things that can be taken out from the videogame structure (Darbinyan, 2022).

AI in-game development

According to a recent poll by a16z, 87% of studios are utilising AI tools such as Midjourney to produce in-game environments, while others are employing it for game testing or searching for bugs. Additionally, Ubisoft is trying out the use of AI to generate unique basic dialogue options. Further to note, the team at Roblox⁷ have developed a tool which aims to let developers create 3D environments as well as scenes in an instant—with only text prompts. Usually, producing an environment can take a whole week for a small game or even much longer for a studio project, depending on how complicated the designs happen to be. But Roblox aims to allow developers almost immediately to materialise their personal vision (Mulligan, 2024). Because AI saves time for the game developers, this can lead to more content being offered to the videogame players.

AI in gaming – ‘No Man’s Sky’

The game ‘No Man’s Sky’⁸ (2016) comprises a space exploration/survival game that utilises procedural AI to generate planets (including the flora, wildlife as well as terrain on each of its 18 quintillion planets). In other words, this game includes 18,000,000,000,000,000,000 planets, generating an exceptional experience for each individual gamer; an experience that is made possible only thanks to the use of AI (Cairns, 2023; Goswami, 2024).

⁷ See more at: <https://www.roblox.com/>.

⁸ For more info: <https://www.nomanssky.com/>.

Other AI-powered games which utilise AI to offer an engaging playthrough, include ‘Starfield’⁹ and even earlier versions of games such as ‘Age of Empires II: Definitive Edition’¹⁰ (Keary, 2024).

AI as a disruptor for the gaming industry

AI is currently disrupting the industry that aided bringing it into being, with GenAI being able to influence each area of entertainment. The games industry particularly is expected to change the most, according to venture capital company Andreessen Horowitz (*The Economist*, 2023). Despite the benefits of AI in the online gaming industry that were analysed earlier, some shortcomings are considered next to bring additional insights to the discussion.

The Blizzard Entertainment studio,¹¹ after being fascinated by the potential that GenAI brings to videogame design, decided to train an image generator on its own hit titles. Specifically, by feeding assets such as the combative orcs of ‘World of Warcraft’ and the lively heroes of ‘Overwatch’ into the machine, Blizzard could produce concept art for novel ideas (Liao, 2023). Because of these developments in the use of AI to generate concepts, the jobs of developers, designers and programmers are at risk. Stated in another way, the degree to which the gaming realm will be automated might rest on the level to which employees push back or request control in making use of AI systems (Merchant, 2024). Still, innovation that is more incremental—rather than disruptive—is what will probably be seen soon (Paizanis et al., 2024). Later we will present a successful case to show how the use of AI can be employed by an organisation to avoid the controversy around artists losing their jobs due to AI-generated celebrity voices, as we analyse later.

Disadvantages of AI in the online gaming industry

A challenge of using AI in the gaming industry includes revealing cheats in multiplayer online games. Specifically, cheating constitutes an enormous problem in online multiplayer gaming that can adversely influence gamers while additionally generating big concerns for game publishers. Many gamers globally believe that they are not protected against players who have unfair benefits. There seems therefore to be a race to identify cheaters in videogames and a need to incorporate better anti-cheating mechanisms. Numerous videogame firms now employ AI to analyse the patterns of player movements as well as keys to spot whether a user is cheating. However, at the same time cheaters utilise AI to cheat in a realistic manner analogous to human beings to evade being noticed (Darbinyan, 2022).

Evidence also supports the fact that game developers are alarmed about issues pertinent to originality, consistency and quality deterioration. Alongside this they find AI programs not just scraping data from their own games without their consent but exposing them to likely copyright infringement complaints as well (iXie, 2023; Parrish, 2024). GenAI seems to come with several challenges that the gaming industry needs to address, including creative, technical and ethical problems. This is especially with gaming officials maintaining that GenAI is going to contribute to over half of the game development procedures in the next decade (iXie, 2023).

AI and online games: Challenges extending to the entertainment industry

Gaming is an artistic form that draws together not only programmers, but also writers, artists, musicians and actors (Richardson, 2024). Consequently, besides the drawbacks presented above concerning AI in the online gaming industry, it is worth noting that the growth of AI-driven voice technology poses a salient issue for voice actors. For example, Troy Baker the American voice actor who has had numerous roles in video

⁹ See more at: <https://bethesda.net/en/game/starfield>.

¹⁰ For more info: <https://www.ageofempires.com/games/aoeiide/>.

¹¹ For more info about Blizzard Entertainment, please visit: <https://www.blizzard.com/en-gb/>.

games, withdrew from a project that used AI-generated celebrity voices. Further, the wider effects of AI in the entertainment industry (Hollywood), with the use of AI-generated synthetic voice clones (O'Brien, 2024), have induced union disputes as well as fears of extensive job losses as shown in a mounting body of evidence (e.g., Amies, 2024; Barnes & Browning, 2024; Bloom, 2024; Broadway, 2024; CBS News, 2024; Cieslak, 2024; Dalton, 2023; Isidore, 2023; Lombardo, 2024; Swartz, 2024; Taylor, 2024; Quach, 2023).

Case study: Wargaming

A noteworthy event took place last summer where Wargaming players could experience intense action. The headliners were announced by the Metal Fest, and included the legendary Motörhead, featuring the 'Ace of Spades' himself, Lemmy Kilmister, and horror rock icon Rob Zombie. Both musical giants brought their unique sounds and styles to the adrenaline-fueled tank versus tank combat of World of Tanks Modern Armor.

This case study shows how an organisation can use technology in what might be considered a correct manner, even after an artist has passed away, as in the case of Motorhead frontman Lemmy Kilmister.¹² In the words of Motörhead:

“Modern technology has enabled us to have Lemmy fully integrated into the game, which felt appropriate given that this is exactly the sort of game he played and avidly enjoyed.”

In addition, the Audio Director of World of Tanks Modern Armor, Brendan Blewett, stated:

“Motörhead guided the development of both the Warpig and Lemmy voices. For Lemmy, it was obvious that using a sound-alike would lack an important level of authenticity,”

Adding:

“So, we collaborated with the band to create an AI emulation of Lemmy’s voice, based on original voice samples from his private unpublished archives, including interviews and raw in-booth recordings.”
(Wargaming.net, 2024).

The future of AI in online gaming: In Search of the New Normal

Nowadays, the gaming landscape is evolving quickly (Werzansky-Orland, 2024). A glimpse into the future of AI and online gaming perhaps shows how AI will continue to empower the creation of games, providing more interactivity as well as infinite combinations of stories and landscapes. Besides continuing to deepen the experiences gamers can have in videogames while simultaneously making them more accessible (Goswami, 2024), AI will also provide high-level graphics, in addition to more realistic non-player characters and more engaging, immersive and customised personalised gaming experiences (Darbinyan, 2022; Filipović, 2023; Karaca, Derias & Sarsar, 2023; Walid, 2024; Wilcheck & Archaumbeault, 2024; Wu et al., 2023).

A note of caution

In the context of GenAI, although there might now be plenty of opportunities thanks to the widespread use of AI, at the same time there are also important legal processes that need to be kept in mind. For instance, in terms of intellectual property (Baris, 2024), businesses utilising GenAI must make sure that they comply with the law, while also taking action to lessen possible risks. This might be potentially guaranteeing the use of training data without unlicensed content or developing ways to demonstrate source(s) of generated content (Appel, Neelbauer & Schweidel, 2023).

¹² For more info about the lead singer of the band: <https://www.bbc.com/news/magazine-35193411>.

Conclusion

This article has tried to provide an overview as regards the association between AI, online games and marketing by illustrating the transformation of AI in online games from a buzzword into a game changer. Specifically, this study has shown how AI can both disrupt and support the gaming industry, while additionally presenting the advantages and disadvantages of AI in the online gaming industry. It seems that AI is more than just a buzzword and, despite evidence of drawbacks, businesses that embrace AI by incorporating GenAI into their game development can gain a competitive edge. By now, readers of this article who are also gamers can probably formulate a better understanding of the use of AI by game developers. Following thoughts on some key limitations of this study, specific recommendations are then provided for future research.

Limitations of study

This study, which used secondary research for its data method collection, could have been further supported by primary data collection. Another shortcoming was that, due to page length constraints, the ethical component could not be presented in detail.

Future research

This section provides some recommendations for future research. Firstly, taking into consideration the way the world of gaming continues to approach new audiences of all levels and abilities, it is crucial to consider how safe the spaces are that new gamers are about to enter. Particularly given that an investigation of inclusion and representation in developers as well as games, suggests a picture of an industry that still has work to do (Seth, 2023). Future research could take a detailed look into this important issue.

Secondly, future research could also examine how the use of AI can impact the careers of videogame voice actors (Weatherbed, 2024). There is concern about how a game company could utilise AI to reproduce the voice of a videogame actor without permission or payment, hence reducing the value of their work (Smith, 2024).

Thirdly, seeing the current unprecedented growth and technological development, the gaming industry is caught between the challenge of economic gains and ethical accountability in the endless advance of AI (Amies, 2024). Thus, given that game developers are very worried about the ethics of utilising AI (Parrish, 2024), future research could focus on the ethics of using GenAI in game development.

Lastly, analogous to how the study of Chan and Lee (2023) revealed that Generation Z are generally positive regarding the potential advantages GenAI entails, future research could investigate the differences in attitudes vis-à-vis GenAI between Generation X,¹³ Generation Y (or Millennials),¹⁴ Generation Z¹⁵ and Generation Alpha¹⁶ gamers.

Authors' Statement: Any opinions that may have been expressed in this article are entirely those of the authors.

¹³ Generation X—which is also known as, Gen X, baby bust generation or MTV Generation—comprises a term usually employed to describe the generation of US individuals born between 1965 and 1980. Note: some sources, however, utilise somewhat different ranges (McKenna, 2024).

¹⁴ The term 'Millennial'—also called, Generation Y or Gen Y—is used to describe an individual born between 1981 and 1996; however, different sources may vary by 1–2 years (Zelazko, 2024). Millennials—besides, the also tech-savvy Gen Zers—have access to greater content through more platforms than earlier generations (Green & Keegan, 2020, p. 18).

¹⁵ Generation Z is a term utilised to describe US individuals born during the late 1990s and early 2000s. This generation is also known as Gen Z, Homelanders, centennials, iGeneration, post-millennials, and zoomers (A. Eldridge, 2024).

¹⁶ Generation Alpha (which is also known as, Gen Alpha) constitutes a term that is employed to describe the generation of individuals born—or who will be born—between 2010 and 2025 (S. Eldridge, 2024).

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RESEARCH, BUSINESS AND INTELLECTUAL PROPERTY RIGHTS

The Role of OSINT Research and Analysis in Protecting and Enforcing Intellectual Property Rights

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Abstract

This article explores the critical role of professional open-source intelligence (OSINT) research and analysis in protecting and enforcing intellectual property rights in the digital age. As the landscape of IP threats expands, driven by technological advancements and global digital marketplaces, OSINT emerges as a powerful tool for rights holders. The article discusses how OSINT facilitates early detection of infringement, enables comprehensive market surveillance, enhances legal action, and supports brand protection strategies. It examines the process of leveraging OSINT for IP enforcement, from initial detection to strategic action, highlighting its potential to contribute to the growth and profitability of IP assets. The article concludes by emphasising the importance of integrating OSINT into IP management strategies to safeguard creations and unlock new opportunities for business expansion and market leadership.

Keywords: Intellectual Property, Open Source Intelligence (OSINT), Digital Piracy, Brand Protection, IP Strategy, Market Surveillance, Cybersecurity.

Introduction

Intellectual property (IP) rights are critical assets for any individual or organisation, encompassing a wide range of creations—from digital content like software, music and videos to physical products like patented devices and branded merchandise (Lemley, 2015). The value of these assets hinges not just on their creation but also on their protection and enforcement in the marketplace. In this context, professional open-source intelligence (OSINT) research and analysis play a pivotal role in safeguarding these rights, ensuring that IP holders can maximise the value and growth potential of their creations.

Historical Context of IP Protection

The concept of intellectual property protection has evolved significantly over time, mirroring societal and technological changes. Traditionally, IP protection relied heavily on legal mechanisms and physical security measures. Patents, trademarks, and copyrights served as the primary tools for creators to safeguard their innovations and creative works (Bently and Sherman, 2014).

However, the digital revolution has fundamentally altered the landscape of IP protection. As Lessig (2004) argues in his seminal work, the ease of copying and distributing digital content has challenged traditional notions of intellectual property. This shift has necessitated new approaches to IP protection, with OSINT emerging as a crucial tool in this digital age.

The transition from physical to digital IP protection methods reflects a broader change in how we conceptualise and value intellectual property. While traditional methods remain important, they are increasingly supplemented by sophisticated digital techniques that can track and protect IP across the global digital landscape.

In today's digital age, the threat landscape for IP infringement has expanded dramatically. The internet and digital technologies have made it easier for infringers to copy, distribute and profit from intellectual property without authorisation (Lessig, 2004). This applies not only to digital products but also to physical goods, where counterfeiting and brand piracy have become rampant across global markets (OECD/EUIPO, 2019). For instance, an engineered product can be reverse-engineered and reproduced in unauthorised factories, or a t-shirt design can be illegally replicated and sold online.

Similarly, brand-related IP, such as logos, slogans, and even the overall brand identity, can be misappropriated by unscrupulous actors. The proliferation of online marketplaces and social media platforms has made it more challenging for IP owners to track and mitigate such violations (Chaudhry and Zimmerman, 2013). This is where professional OSINT research and analysis come into play.

OSINT in the Protection of Digital and Physical IP

OSINT involves the systematic collection and analysis of publicly available information. When applied to IP protection, it offers several key benefits:

1. Early Detection of Infringement: OSINT enables IP rights holders to monitor a wide array of online and offline channels for signs of infringement (Quick and Choo, 2018). For example, a software company might use OSINT to track unauthorised downloads or pirated versions of their software circulating on torrent sites. Similarly, a brand can monitor social media and e-commerce platforms for counterfeit goods that bear their trademarks.

2. Comprehensive Market Surveillance: Professional OSINT analysts can provide a broader understanding of market dynamics, including where and how counterfeits or pirated versions of products are being sold. This insight allows IP holders to prioritise their enforcement efforts, focusing on regions or platforms where the impact on their business is most significant.

3. Enhanced Legal Action: The evidence gathered through OSINT can be critical in legal proceedings. Detailed reports on the sources of infringement, the networks involved, and the extent of the distribution can strengthen a legal case, making it easier for IP holders to secure injunctions, financial compensation, or other legal remedies (Bently and Sherman, 2014).

4. Brand Protection: OSINT can also help in monitoring the use of brand assets across the web. By identifying unauthorised usage of logos, brand names or marketing materials, companies can take swift action to prevent brand dilution and maintain their brand's integrity (Tian et al., 2001).

Once potential infringements are detected through OSINT, the next step is enforcement. This is where the value of professional OSINT analysis becomes even more apparent. The process typically involves the following steps:

1. Verification and Documentation: OSINT helps in verifying the authenticity of the infringement, ensuring that the evidence collected is both relevant and admissible in court. Detailed documentation, including screenshots, links and descriptions, is compiled to create a comprehensive infringement dossier.

2. Network Analysis: In cases of widespread infringement, OSINT can uncover the networks behind these activities. By mapping out connections between infringing websites, social media profiles and suppliers, analysts can identify the key players involved and potentially disrupt entire counterfeit or piracy operations.

3. Strategic Decision-Making: With the intelligence gathered, IP holders can make informed decisions about how to pursue enforcement. Whether it's initiating legal action, collaborating with law enforcement, or engaging with online platforms to remove infringing content, OSINT provides the data needed to choose the most effective course of action (Bridy, 2016).

4. Continuous Monitoring and Adaptation: IP protection is not a one-time effort but an ongoing process. Professional OSINT services offer continuous monitoring to detect new threats as they emerge, allowing IP holders to adapt their strategies and stay ahead of infringers.

Challenges and Limitations of OSINT in IP Protection

While OSINT offers powerful capabilities for IP protection, it's important to acknowledge its challenges and limitations. One significant concern is the reliability and accuracy of open-source information. The vast amount of data available can lead to information overload, making it difficult to distinguish between relevant intelligence and noise (Sag, 2017).

Privacy and legal concerns also present challenges. The collection and use of publicly available information must be conducted within the bounds of data protection laws and ethical guidelines. There's a fine line between legitimate intelligence gathering and privacy infringement, which IP protectors must navigate carefully.

Another limitation is the dynamic nature of online environments. Infringers can quickly adapt their tactics, making it a constant challenge for OSINT practitioners to keep pace. Additionally, the global nature of the internet means that IP infringers can operate across multiple jurisdictions, complicating enforcement efforts.

Resource constraints can also limit the effectiveness of OSINT. Smaller organisations may lack the expertise or resources to fully leverage OSINT capabilities, potentially putting them at a disadvantage in protecting their IP.

The Growth Potential of Robust IP Protection

Beyond protection, effective OSINT research and analysis can directly contribute to the growth and profitability of IP assets. By ensuring that infringements are swiftly dealt with, IP holders can maintain control over their market, preserve their revenue streams, and build a stronger, more reputable brand.

Moreover, the insights gained from OSINT can inform future product development and marketing strategies. For instance, understanding where counterfeits are most prevalent can reveal untapped markets or highlight the need for more robust distribution channels. Similarly, monitoring brand mentions and product feedback across social media can provide valuable consumer insights, guiding innovation and brand positioning.

Consumer Perspectives and OSINT

Understanding consumer attitudes towards counterfeit goods is crucial for effective IP protection strategies. Tian et al. (2001) highlight the complex motivations behind consumer purchase of counterfeit products, including the desire for status symbols at lower prices and the thrill of acquiring a 'bargain'.

OSINT can play a vital role in uncovering these consumer attitudes and behaviours. By monitoring social media discussions, online reviews and e-commerce platforms, companies can gain insights into how consumers perceive their brand and its counterfeit alternatives. This intelligence can inform targeted anti-counterfeiting campaigns and help companies develop strategies to enhance the perceived value of authentic products.

Moreover, OSINT can help identify trends in consumer behaviour that may indicate a rise in counterfeit purchases. For instance, sudden spikes in searches for a brand name combined with terms like 'cheap' or 'discount' might signal increased interest in potentially counterfeit goods. Companies can use this information to proactively address the issue, perhaps through education campaigns about the risks of counterfeits or by adjusting their pricing and distribution strategies.

By leveraging OSINT to understand consumer perspectives, companies can not only protect their IP more effectively but also strengthen their brand loyalty and market position.

Conclusion

In an era where the value of intellectual property is greater than ever, the importance of professional OSINT research and analysis cannot be overstated. It provides IP rights holders with the tools and insights needed to protect their assets, enforce their rights, and capitalise on their IP's full growth potential (Papageorgiadis and McDonald, 2019). By integrating OSINT into their IP management strategy, organisations can not only safeguard their creations but also unlock new opportunities for business expansion and market leadership (Sag, 2017).

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STRATEGIC COMMUNICATIONS, POLITICAL MARKETING, GEOPOLITICS AND HYBRID WARFARE

Strategic Communications, Geopolitics and Hybrid Warfare: Turkey's acts vis-à-vis the Republic of Cyprus

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This article discusses the significance of strategic communications through the formation of geopolitics and hybrid warfare by exploring Turkey's acts vis-à-vis the Republic of Cyprus. To that end, this research explores the promotion of Turkey's national interests in the context of Cyprus by addressing salient issues through the use of various questionable methods of communication and information, such as propaganda. The novelty of this paper lies in introducing and examining new notions, important elements and contemporary activities—including hybrid threats and fake news, in combination with political marketing and critical geopolitics, based on the case of Turkey versus Cyprus.

The considerable work done regarding the topic of communication and information in the North Atlantic Treaty Organisation (NATO) is also brought into the discussion and is particularly useful in providing a military context for strategic communications. Specific cases are analysed, such as (1) the “Blue Homeland” doctrine, showing how Turkey tries to create geopolitical knowledge and how it handles the narrative—especially by taking advantage of the recent geopolitical developments in the region, such as Hezbollah's threat against Cyprus; (2) Turkey's proposed two-state solution in the context of the Cyprus Question, despite the existing United Nations (UN) resolutions and the European Union's position; and (3) Cyprus' attempt to use counter TV series in response to Turkey's propaganda.

This research comes to some important conclusions. It reveals the fact that Cyprus is short of a strategic communications service acting as a central service to give directions and control key messages. Cyprus should promote its narrative by dealing effectively with strategic communications in the light of Turkey's propaganda.

Lastly, the limitations of this study as well as practical recommendations and future directions are presented.

Keywords: Cyprus; (critical/popular) geopolitics; geopolitical knowledge/imagination; hybrid warfare; NATO; political marketing/communication; propaganda; strategic communications (StratCom); Turkey.

Introduction

This section commences by briefly introducing the reader to the events that led to the island's current status quo, before proceeding further into the structure of the article and a more in-depth analysis.

Cyprus: At a Glance

Cyprus is an island situated in the eastern corner of the Mediterranean Sea which, despite its small geographical size, has had numerous conquerors from the dawn of its history. The Republic of Cyprus became an independent sovereign state on 16 August 1960, based on the Zurich - London Agreements—after a four-year armed liberation struggle (guerrilla war) against British colonial rule (Richter, 2011).¹ In accordance with the founding Agreements, Greece, Turkey and Britain became the guarantors of the new state (Eurydice, 2023).

In 1963 inter-communal violence erupted between the two—Turkish and Greek—communities (BBC, 2022). Further, in July 1974, the military junta then controlling Greece staged a coup to overthrow President Makarios along with the legal government of Cyprus. At that point, Turkey, as a guise, employed its position as a guarantor power to invade the island, to this day occupying about 37% of Cyprus' territory (Eurydice, 2023). According to Ivo Daalder, a former US ambassador to NATO (including being, for example, CEO of the Chicago Council on Global Affairs), even with its division and the continuing conflict, Cyprus remains an island of stability in an ever more chaotic part of the world (Daalder, 2024).

¹ For more info: <https://publications.parliament.uk/pa/cm200405/cmselect/cmfa/113/11307.htm>.

Thus, considering the risks, the US does not want failure in Cyprus. A wide-ranging collapse in Turkish-Greek relations would entail a huge disruption in NATO, especially in its South-eastern flank, alongside the regional consequences that might ensue. Turkey, despite its particularities both as a regime and as regards its foreign policy, is still considered crucial for NATO. This is particularly because it maintains the second-largest army following the US among the allies, borders Iraq, Iran and Syria in the Middle East, and also controls the Bosphorus and Dardanelles straits connecting the Black and Aegean seas (Sitolides, n.d.).

What is more, the tragic events of July-August 1974,² after Turkey invaded the Republic of Cyprus (Bulut, 2024), resulted, among other things, in Nicosia being a city that is best known as the last divided capital in the world; given that, since 1974, it has been partitioned by an UN-controlled buffer zone that separates the Republic of Cyprus and the northern occupied part, self-proclaimed as the Turkish Republic of Northern Cyprus (TRNC)—that is a pseudo-state (Kefalogiannis, 2022; Shtern, Sonan & Papasozomenou, 2022; Zacharaki, 2024).

Since 1974, the existence and survival of the Republic of Cyprus has been constantly in peril, due to the aggressive actions of Turkey which envisages exercising control over the entire island to promote and protect its vested interests. It is for this reason that this article focuses on the importance of strategic communications through the formation of geopolitics and hybrid warfare by investigating Turkey's actions against the Republic. By addressing important issues such as propaganda, this paper explores Turkey's role in the region focused on the island of Cyprus. Turkey's political stance also affects the Eastern Mediterranean, as its interest in this area is diachronic (Moudouros, 2021).

Structure of the Study

This study incorporates several substantial elements, including:

- strategic communications (with a comparative analysis on the similarities of strategic communications in both business and political contexts, and the link between business—marketing—and politics)
- the work of NATO, where Turkey is a member
- hybrid threats and what appears to be fake news, in conjunction with critical geopolitics. The Turkish narrative blends fake news with strategic communications, in an effort to form and establish a new geopolitical knowledge and, in turn, to impose an alternative geopolitical imagination targeting both domestic and international audiences.

To illustrate with examples the link between strategic communications and geopolitics by making the connection with the region, the Blue Homeland doctrine is the first case analysed. This showcases Turkey's efforts to create another geopolitical perception contrary to the one based on international law. This is even though Turkey attempts to interpret the international law in a way that fits its vested interests and then bases this narrative on its arbitrary interpretation. At the time of writing, it appears that Turkey plans to adopt a canny, comprehensive strategic plan to promote its new doctrine, including teaching the Blue Homeland idea at its schools while, additionally, it promotes this narrative by the involvement of other friendly and like-minded entities. This includes the example of Hezbollah, which issued threats against Cyprus based on Turkey's narratives (Ebrahim, 2024). Secondly, Turkey's vision for a two-state solution of the Cyprus issue, against the UN resolutions and absent of any endorsement from the European Union (EU), for instance, is also examined.

Taking into consideration that Cyprus does not have a strategic communications service acting as a central service giving directions and controlling key messages, practical recommendations are provided, after considering other nations' practices (and including recommendations for future research). In doing so, this study may serve as a policy paper for the state's key decision makers. With the creation of such a service, Cyprus

² There is ample evidence that corroborates the events of 1974 (e.g., Hellenic Republic – MFA, 2024; The Holy Basilica and Stavropegic Monastery of Machairas, 2024, p. 27).

would then be able to promote an anti-propaganda narrative and deal correctly with strategic communications in view of Turkey's narrative, as opposed to having different government officials from various ministries making uncoordinated official statements on selected topics.

Finally, the limitations of this study and recommendations for future directions are presented.

Authors' Reflexivity/Positionality Statement

The researchers of this paper, who are both Greek-Cypriots, have experienced what it is like living in the last divided capital—Nicosia—in Europe, following the Turkish invasion of 1974. Hence, in view of the impact the current situation has on the researchers' lenses, this analysis is influenced tacitly and implicitly by the authors' personal values, experiences and traumas. It raises once again the eternal ethical issue of the authors' intimate struggle between subjectivity and objectivity (Alvesson & Skoldberg, 2018; Sultana, 2007). This having been said, the researchers have striven to avoid any research bias occurring in the analysis of this study, based on the commonly accepted bibliography of international law interpretation and strategic communications, including fake news and propaganda.

Theoretical Background: Strategic Communications

A Brief Introduction

In the NATO military context, strategic communications comprise the integration of communication capabilities and information staff function with other military activities, to understand as well as shape the information environment in favour of NATO's strategic aims/objectives (NATO Agreed) (NATO, 2023, Lex-10).

The Inextricable Link Between Business and Politics

Strategic communications are of huge importance in business strategy and success. In a business context, strategic communications entail the integration of strategic planning and research into purposeful messaging that aligns with the goals of the business, thereby effectively engaging in strategic communication practices. It therefore revolves around getting the right message across to the right people, at the right time and via the right channels. Strategic communications aid in producing a captivating message and determining whether to convey it through a press release or via a social media—Instagram—post (Vasconcellos, 2023). The same also applies within a political context, thus showing the intertwining between business and politics.

In the political milieu, the effective use of strategic communications is imperative. As regards matters of warfare, Carl Von Clausewitz noted that the significance of realising the sort of war in which one starts is of great importance (Betz & Phillips, 2017).³ This could be directly linked with the information and psychological campaigns occurring during either hybrid or conventional war.

Next, we elaborate further on strategic communications (StratCom) by bringing NATO into the discussion. We also briefly discuss defence strategic communication (Defence StratCom) by considering the example of the United Kingdom (UK).

³ For more info about war, see e.g., von Clausewitz, C. (1982) *On War* (London: Penguin Classics) and Hanink, J. (2019) *How to Think about War: An Ancient Guide to Foreign Policy by Thucydides* [GR: “ΘΟΥΚΥΔΙΔΗΣ: ΠΕΡΙ ΠΟΛΕΜΟΥ – Σκέψεις και συμπεράσματα του μεγαλύτερου ιστορικού της αρχαιότητας”] (Athens: Dioptra Publications, 2020).

All in all, an arena of antagonism characterises both the world of business and politics alike. In a political context, every attempt is made to use key messages to entice, convince and inculcate the electorate, as opposed to affecting potential clients, which would be the case in a business context. In both contexts, the emphasis is placed on communication which utilises much the same methods. The similarities of the two worlds become more evident in a more detailed analysis of political marketing and communication, where we bridge business (marketing) with politics.

NATO and StratCom

In this sub-section, we will take a closer look at strategic communications and how StratCom is defined by NATO:

The coordinated as well as appropriate use of NATO communications activities and capabilities – Public Diplomacy, Public Affairs (PA), Military Public Affairs, Information Operations (Info Ops), and Psychological Operations (PSYOPS), as appropriate – in support of Alliance policies, operations and activities, and so as to advance NATO's aims. (PO(2009)0141, 2009)⁴ (Reding, Weed & Ghez, 2010, pp. xviii, 41)

Defence StratCom

Firstly, it is important to note that the UK employs 'strategic communication'.⁵ Another point worth mentioning from the outset is that each defence action and inaction entails a communicative effect. Concerning the UK, Defence StratCom is how it communicates about defence activities. Further, Defence StratCom constitutes a chief lever of strategic effect, one which not only safeguards, but strengthens the reputation of the defence of the UK too (NATO, 2023, pp. 3–4, 89). Specifically, the UK defines Defence StratCom as 'advancing national interests by using defence as a means of communication to influence the attitudes, beliefs and behaviours of audiences.' (Joint Doctrine Publication (JDP) 0-01.1, *UK Terminology Supplement to NATO Term*) (NATO, 2023, p. 4).

Public Diplomacy

Public diplomacy entails various government-sponsored efforts intended to communicate directly with foreign publics. It contains all available official efforts to convince targeted sectors of foreign opinion to back or tolerate a government's strategic objectives. This could involve statements by decision makers, purposeful campaigns carried out by government organisations dedicated to public diplomacy, and/or efforts to persuade global media to portray official policies favourably to foreign audiences.

There are two types of public diplomacy: (1) branding or cultural communication, wherein the government attempts to enhance its image without getting backing for any immediate policy objective; and (2) political advocacy, which includes various strategies that are designed to enable more speedy results. Additionally, whereas branding is meant to affect long-term perceptions, political advocacy campaigns employ public diplomacy to build foreign support for immediate policy objectives. Of note, a number of skeptical commentators suggest that public diplomacy is merely a euphemism for propaganda (Britannica, 2024).

⁴ PO(2009)0141 (2009) *NATO Strategic Communications Policy*, Brussels: NATO.

⁵ Specifically, the UK utilises 'strategic communication' in the singular as opposed to the NATO form, 'strategic communications' (NATO, 2023, p. 1). The authors of this study use the term interchangeably.

Public Affairs (PA)

In the context of NATO, the PA office is responsible for communicating the strategic vision as well as messages from NATO's Supreme Allied Commander Transformation (SACT) on a global scale. Besides coordinating and publicising local NATO community events, the PA office also coordinates public affairs doctrine, policy, education plus training, directives, support to Allied Command Transformation's activities as well as associated media engagements (NATO, 2024a).

Military Public Affairs (Mil PA)

Mil PA is the strategic communications capability responsible for promoting military aims/objectives by communicating accurate as well as truthful information to both internal and external audiences in a timely manner (NATO Agreed) (NATO, 2023, Lex-8). In the US, military public affairs officers lay the foundation for partnerships (Patterson, 2022). As for the US Army Public Affairs, it consists of soldiers/officers skilled at planning as well as executing a commander's communication strategy via corporate communication, media and stakeholder engagements and community outreach activities oriented towards both external and internal publics with interest in the Department of Defense (U.S. Army, n.d. a).

Information Operations (Info Ops)

Info Ops consists of a staff function to analyse, plan, assess as well as integrate information activities to create desired effects on the will, understanding and capability of adversaries, potential adversaries, and audiences in favour of mission objectives (NATO Agreed) (NATO, 2023, Lex-7).

Psychological Operations (PsyOps)

Psychological Operations (PSYOP) experts utilise special communication skills as well as unconventional tactics to support US Army objectives (U.S. Army, n.d. b). Psy Ops are planned activities employing methods of communication as well as other means intended for approved audiences to influence perceptions, attitudes and behaviours affecting the achievement of political/military objectives (NATO Agreed) (NATO, 2023, Lex-9).

Psy Ops were subordinated to the US Army Special Operations Command following its establishment in December 1989. Military information support operations (MISO) are carried out by Psy Ops forces. In simple terms, MISO is designed to develop as well as carry messages, and develop actions to influence selected foreign groups in addition to promoting themes to alter not only the attitudes but also the behaviours of those groups (Curris, 2023).

Comparative Analysis: Strategic Communications in Business and Politics

A brief comparative analysis now follows regarding strategic communications in the context of business and politics alike.

In a business context, communicating strategically needs a special set of skills. Thus, leaders are required to think like an analyst to assess the context, visualise similarly to a craftsman to fashion strategy, perform like an elite commando to implement strategy, and agitate as a talk-show host to prompt dialogue. Given that only a few people possess all these skills; finding an effective leader is quite challenging.

Further, evidence suggests that leaders frequently approach the task of communicating on a tactical as opposed to a strategic level. Admittedly, leaders can give exciting speeches, write inspiring newsletter columns or even create clever slogans—but the question that must be answered is how such activities turn into a

meaningful coordinated strategy (Clampitt, Berk & Williams, 2002). Large corporations maintain specialised sections responsible for crafting and implementing their communication strategy in full alignment with the objectives of the corporate's business strategy.

In a political context, particularly in the UK, government communicators aim to have the public grasp the vision and priorities of the government. These people inform individuals about public services, explain policies, encourage individuals to lead safe as well as healthy lives, counter mis- and disinformation, and promote the country's interests globally. At the core of this work lies strategic communication (Government Communication Service, 2021, p. 4).

Specifically, strategic communicators provide the campaign plan to effectively communicate a public policy or service. They shape the policy, come up with ideas, commission research to obtain insight, develop realistic goals and bring together the means required to implement these goals as part of a plan. They reach agreement on the means of delivery that will work, guide its implementation and assess its impact to check whether the objectives or ends have been attained (Government Communication Service, 2021, p. 3).

In terms of the value of the strategy, communication absent of a plan is merely noise. To bring the discussion back to the commercial context by illustrating with an example from the business world, the reason why @KFC follows the Spice Girls and six guys called Herb is beyond just humour. It constitutes a simple strategic approach, carried on for decades, revolving around the secret combination of eleven herbs as well as spices in Colonel Sanders' fried chicken recipe.

In the context of government communication, it is not possible to act on every request and there is therefore a need to manage as well as prioritise demands for which a communication strategy makes the best ally (Government Communication Service, 2021, p. 15). Having read this, the similarities of strategic communications in both business and political environments become evident.

Political Marketing/Communication: *Bridging Business (marketing) and Politics*⁶

A number of studies in business and politics alike have tried to investigate how to market a message (Antoniades, 2020), with numerous studies demonstrating the connection between marketing and politics (Antoniades & Mohr, 2019). Other studies—such as the one by Antoniades and Haan (2019)—aim to upgrade political marketing theory. Political marketing entails a marriage between politics and marketing. It comprises a dynamic and relatively young (under-researched) field which, despite the present rise in academic research, remains still at an embryonic stage (Kocaman & Coşgun, 2024). Yet, political marketing is steadily proving itself to be a well-established science (Mitidiero, 2017).

Political elites must be more responsive to the general public, as citizens increasingly demand a say in political procedures and want to feel politically empowered. As political marketing has become a fundamental part of political practice, politicians have employed marketing strategy, market-orientation and branding concepts to design political products to match market demand. Further, new technology has facilitated interactive communication between a politician and a voter on a mass level, with politicians having used marketing tools from business to not only better understand, but also respond to the electorate (Lees-Marshment, 2013).

In the commercial context, the market orientation strategy entails the identification of customer needs and the utilisation of this information as a foundation to create products. Put differently, market orientation constitutes an advertising strategy wherein a company analyses consumer needs and generates new products

⁶ In terms of strategic political communication, research on strategic political communication in election campaigns remains a quite fragmented field—even with its long tradition. In essence, election campaigns constitute nothing but political communication (Strömbäck & Kioussis, 2014).

based on them. A market-oriented approach to business may aid a firm in gaining both the trust and loyalty of its customers. Given that customers can trust a brand more when it explicitly meets their needs—any business that treats its customers well and works to serve their needs can experience a lot more loyalty from its customers as they select the brand over its competitors (Quinn, 2023).

The results in the study of O’Cass (2001) highlight unique dimensions and relationships of marketing in politics. In the study a survey and in-depth interviews were carried out to explore issues pertinent to the application of market orientation and its relationship to the marketing concept in political marketing. Politicians are in the business of selling hope to people, with this hope being related to convincing individuals that it is this specific politician (or political party) that secures successful management of national security, social stability as well as economic growth on behalf of the electorate. Seen from this perspective, the key challenge to political marketing is to connect the words and actions in addition to the vision of a politician into a realistic transformation of the dreams and aspirations of the electorate (Newman et al., 2022).⁷

Political Marketing in Action: The Case of Turkey’s StratCom Against Cyprus

The United States and the EU have both reacted strongly by rejecting Turkish President Recep Tayyip Erdogan’s proposal for a two-state solution—that is, a breakaway Turkish Cypriot state—in Cyprus, while the Prime Minister of Greece, Kyriakos Mitsotakis called for a Republic (Euractiv.com with AFP, 2021; Sky News, 2024). However, it appears that Erdogan prefers to be in the business of promoting an imperialistic and revisionist idea to his supporters, rather than returning to a dialogue over the Cyprus Question by considering a non-divisive alternative avenue as a basis for negotiations. Additional details on the vision of Turkey for a two-state settlement regarding the Cyprus issue are provided later.

Turkey’s regime is obviously attempting to convey its political position and narrative for a two-state solution both internally, to the Turkish people, and externally to the international context. This effort employs all the strands of critical geopolitics—formal, practical and popular—aiming at forming a new geopolitical knowledge and, in the end, a novel geopolitical imagination adopted by the international community (Dittmer & Sharp, 2014; O’Tuathail, 2003, 2006). Thus, Turkey’s political leaders constantly promote their posture towards Cyprus by the use of relevant discourse adopted by academics and policy makers within the state apparatus. In addition, mass media, TV series, movies, etc. all advance this perspective, either directly or indirectly.

Turkey’s discourse about the two-state solution in Cyprus becomes an enabler for the relevant persons in charge to act towards this direction. Thus, their iterative acts eventually produce the envisioned geopolitical knowledge aspired to by Turkey’s leaders—a two-state solution. Based on the major premise of critical geopolitics, that geography is not fixed but rather is constructed through the various understandings and renditions of each agent in accordance with their knowledge and ideologies (O’Tuathail & Dalby, 1998), Turkey’s political apparatus aims at forming a new geographical map that serves its political objectives. As its proposal for Cyprus is considered of great importance for its vital national interests, Turkey’s efforts are towards the formation and establishment of a new geopolitical knowledge which in turn will eventually consolidate an alternative geopolitical imagination supporting its aspirations.

The introduction to schools of the Blue Homeland’s idea reinforces the aforementioned thesis as regards the comprehensive efforts towards the formation of a new geopolitical knowledge. As a result of this, the next generations of young Turks are likely to be open to indoctrination, and this exact idea will be deeply embedded in their minds and hearts. They will consider almost the entire Eastern Mediterranean Sea as a Turkish basin.

⁷ For more info: Newman, B.I. (1999) *The Mass Marketing of Politics: Democracy in an Age of Manufactured Images* (Thousand Oaks: Sage).

The continuous dissemination of this idea not only internally but also to the international community through geographical maps, narratives, in general discourses that include also acts by the Turkish statecraft attempt to transform this perspective into normality through repeated communication. This corroborates the direct relation between geopolitical knowledge and power, where the beliefs and renditions of the agents empower them to act accordingly, towards the eventual establishment of their perceptions in reality.

In this regard, the employment of all the strands of critical geopolitics is deemed crucial for the purpose of Turkey's statecraft. Strategic communication along with the use of fake news and disinformation are useful tools in the hands of the Turkish political apparatus towards their ends. It seems that there is a complete understanding of the theory behind the implementation of their strategic plans as regards the imposition of a new geopolitical imagination which in turn will eventually serve Turkey's national interests. Thus, the instrumental incorporation and combination of facts and apparently fake news along with the utilisation of both ethical and unethical means that refer to acts of hybrid warfare, including both narratives and acts (noted as discourses according to critical geopolitics) contribute very significantly to the creation of the expected geopolitical knowledge and ultimately to the required geopolitical imagination.

A question which arises is how the Republic of Cyprus can counter Turkey's efforts towards the establishment of a new political reality dominating the international community in conflict with international law and to Cyprus' position. Effective strategic communication needs the close cooperation and coordination of all the relevant state stakeholders in order to be able to tackle such a massive aggressive effort by Turkey. The existence of the Press and Information Office (PIO) which is the responsible authority for informing and communicating the political postures of the Cypriot state both internally and externally constitutes a foundation for the creation of comprehensive information architecture, however there is a lot still to be done. A number of other state entities have already been involved in this endeavour, but nonetheless, there is an absence of coordination and even cooperation between them in order to achieve the best result. The Presidency, the Ministry of Foreign Affairs, the Ministry of Defence, the Deputy Ministry of European Affairs and the Cyprus Intelligence Service are institutions that are constantly engaged in the dissemination of key messages both to Cypriot citizens and to the international community. Hence, a permanent committee should exist, comprised of persons from these agencies, whilst any other agency could be represented depending on the special topic in question.

In addition, strategic communication and the way the key messages are disseminated should be adapted to and take advantage of the latest technological advancements. The immense inequality of resources between Turkey and Cyprus should be countered by the use of cutting-edge technology, both for production and dissemination purposes. In addition, the adoption of fake news and disinformation campaigns by Turkey dictates the continuous development of both trainers and trainees in new techniques in parallel with the employment of new tools. Therefore, a rigorous and diligent effort is needed by all the stakeholders aiming to tackle the Turkish discourse against the vested interests of the Republic of Cyprus.

Hybrid Warfare

Jens Stoltenberg, the previous NATO Secretary General, stated that hybrid warfare is nothing new; it is as old as the Trojan horse and we have seen it before (Lasconjarias & Larsen, 2015, p. 1; NATO, 2015).⁸ In recent times, the recipients of Turkey's hybrid warfare have included not only Cyprus, but also Greece and other neighbouring countries (Nicolaidou & Constantinou, 2023). Hybrid methods of warfare include propaganda, deception, sabotage as well as other non-military tactics. Although they have long been employed to destabilise adversaries, the difference today regarding the recent attacks comprises their speed, magnitude and intensity, accelerated by rapid technological change in addition to worldwide interconnectivity (NATO, 2024b).

⁸ NATO Secretary General Jens Stoltenberg (23 March 2015) 'Zero-Sum? Russia, Power Politics, and the post-Cold War Era', Brussels Forum. Available at: https://www.nato.int/cps/en/natohq/opinions_118347.htm (Accessed: 29 August 2024).

Hybrid Threats

The European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE, n.d.) characterises hybrid threats as (1) Coordinated and synchronised action that deliberately targets democratic states' and institutions' systemic vulnerabilities via a wide range of means; (2) Activities that exploit the thresholds of detection and attribution, in addition to the different interfaces (war-peace, internal-external security, local-state, as well as national-international); and (3) Activities intended to influence different forms of decision-making at the local (regional), state or institutional level, and designed to further and/or fulfil the agent's strategic goals, while undermining and/or hurting the target.⁹

Turkey's Hybrid Warfare Against Cyprus: The Weaponisation of Migrants

When the Belarusian regime illegally channelled migration flows into EU states such as Lithuania, Poland and Latvia, the victim-states and Brussels characterised the situation as a form of hybrid warfare by Belarus. However, Turkey has been conducting a hybrid attack against Cyprus for years now, using illegal immigration as a tool to erode economic as well as social capabilities, and, primarily, to change (or replace) the demography of the free part of Cyprus (Bulut, 2024; Mavrides, 2023).¹⁰ It is imperative that the Republic of Cyprus takes all necessary measures to prevent such hybrid threats from reappearing in the future.¹¹ Recently, the establishment of the Deputy Ministry of Migration and International Protection contributed to a coordinated and effective reaction against Turkey's actions that included strategic communication and information campaigns targeted at the migrants' countries of origin.

Propaganda¹²

Propaganda entails the dissemination of information (i.e., facts, rumours, arguments, half-truths or lies) to influence public opinion. Although the principles of propaganda (manipulating the dissemination of information and utilising symbols to influence public opinion) has been used by humans for thousands of years,¹³ the term propaganda—taken in this sense—only came into use in the seventeenth century. Propaganda may be employed in various areas—from commercial advertising and public relations (PR) to diplomatic negotiations and political campaigns, to name but a few. Further, propaganda may be targeted toward groups of different size and at the local, national or international level (Smith, 2024).

Put another way, the aim of propaganda can be described as the 'disruption of the enemy's will and power to fight on'. At the beginning of the Second World War, black propaganda from Britain never indicated its origins, but frequently made the impression that it originated from resistance groups. In contrast, grey propaganda was more ambiguous.¹⁴ It is worth mentioning that both black and grey propaganda were distinguished from

⁹ For additional insights on hybrid warfare, see Nicolaidou and Constantinou (2023).

¹⁰ The EU recognised in 2022 the instrumentalisation or 'weaponisation' of illegal migration by Turkey via the 'Green Line', which divides the free and occupied parts of the Republic of Cyprus (Bulut, 2024; Christou, 2022).

¹¹ Importantly, the government has recently created a new deputy ministry for migration, after being voted into law in parliament, to deal with the influx of arrivals. Dr Nicholas A. Ioannides has been appointed as Cyprus' first Deputy Minister of Migration and International Protection (Christou, 2024).

¹² In the 1950s, the distinction between propaganda and political marketing became more apparent—with political marketing having generally developed into a more positive term (Mitidiero, 2017).

¹³ For more details on the origins of the practice of propaganda, which can be found in the ancient world, see Baines and O'Shaughnessy (2014).

¹⁴ Black propaganda encompasses lying and dishonesty, that is, it goes beyond hiding the identity of the source of the message to falsely attributing it to a different entity. Grey propaganda entails communication from an unattributed or hidden source—i.e. the messenger may be known, however, the true source of the message is not (Bradford, 2023).

white¹⁵ in that ‘they purport to be something which they are not, and can be disavowed by Her Majesty’s Government’ (NLS, 2006). In the following pages we examine Turkey’s propagandistic narrative before presenting specific examples (case studies) for a more in-depth analysis, which will implicitly connect the facts laid down with StratCom practices.

***Turkish Propaganda, Fake News, Dis-/Misinformation Campaigns and Beyond*¹⁶**

In the context of Hezbollah’s recent threat to Cyprus, the Turkish Foreign Minister, Hakan Fidan has told Cyprus—i.e., the EU member country that is closest in proximity to Lebanon—to “stay away” from the conflict, given that Turkey had intelligence reports that disclosed that Cyprus had become a base for “certain countries” armed forces as well as reconnaissance flights over Gaza (Reuters, 2024). Adding to this, the Turkish-Cypriot leader, Ersin Tatar, also criticised the Republic of Cyprus, along with other Western nations, for becoming a logistical base for Israel, whilst pointing to heightened military activity by both the US and the UK in the Republic within the context of the Israel - Gaza war (Daily Sabah, 2024).

Officials from the Republic of Cyprus were quick to respond to the Hezbollah threats by underlining the state’s neutrality (Middle East Monitor, 2024). Specifically, the President of the Republic of Cyprus, Dr Nikos Christodoulides, when asked to comment on the threatening statements made against Cyprus by Hezbollah’s leader in Lebanon, Sayyed Hassan Nasrallah, highlighted that the Republic of Cyprus is not involved in any manner whatsoever in the war’s conflicts and activities (KNEWS, 2024). Additionally, the Minister of Defence of the Republic of Cyprus, Vasilis Palmas, stated, among other things, that international issues can only be resolved through political dialogue (alphanews.live, 2024). Further, the government spokesman of the Republic of Cyprus, Konstantinos Letymbiotis, also stated that claims regarding Cyprus being implicated in operations in support of Israel in its Gaza operations are “utterly baseless”. Letymbiotis was echoing previous statements made to the EU by Minister of Foreign Affairs, Dr. Constantinos Kombos, that Cyprus was “not part of the crisis but part of the solution” in the Middle East (Damaskinos, 2024). Next, specific cases will be analysed to add more depth to the discussion.

I. Turkey’s Blue Homeland doctrine

The Blue Homeland is an expansionist, legal and geopolitical doctrine which, it is understood, will be taught in secondary school geography classes (Norman, 2024)¹⁷. It envisions Turkish influence over enormous areas that extend from the Black Sea to the Aegean and the Mediterranean (Diakopoulos, 2022; Ellis, 2024).¹⁸ Specifically, the Blue Homeland strategy—or “Mavi Vatan” doctrine— developed by Turkey entails developing its navy and strengthening its ability to protect Turkish interests overseas. Besides envisaging Turkish influence expanding abroad, the doctrine in question also involves pursuing a plethora of Turkey’s domestic as well as financial interests (Colibasanu, 2021; Kostidis, 2024).

A new draft curriculum which constitutes part of the Education Model of the “Century of Turkey” (which originally appeared as a campaign promise that Erdogan made during 2023) has since been changed to a motto held by

¹⁵ White propaganda, which mostly consists of PR and publicity activities, includes communicating a message from a known source (Bradford, 2023).

¹⁶ Misinform(ation) involves giving false or inaccurate information to (*Concise Oxford English Dictionary*) (NATO, 2023, Lex-9).

¹⁷ More precisely, the Turkish Ministry of Education teaches millions of children as well as students regarding Turkey’s “Blue Homeland” doctrine (Vallianatos, 2024).

¹⁸ “Blue Homeland” stands for the present and envisioned Turkish maritime jurisdiction areas (Yaycı, 2022, p. xv). Note: Istanbul—place of publication—is also known as Constantinople (Ehrlich, 2024).

state institutions and it appears that it is being made known by the Turkish Ministry of Education. Particularly, this draft navigates numerous subjects, providing students with insight into Turkey's ethnic projects in the defence industry—including military drones in addition to warships. It goes into controversial geopolitical matters like the aggressive naval Blue Homeland doctrine under examination, whilst explaining the reason Turkey has not signed the UN Convention on the Law of the Sea (UNCLOS) (Kenez, 2024). All in all, the talk by the Turkish President Erdogan, and the other Turkish officials regarding a Blue Homeland forms propaganda while additionally violating international law (Vallianatos, 2024).

Further, the Blue Homeland doctrine has uplifted Turks who feel that Turkey has unjustly been deprived of its rightful claims to the sea, but at the same time has verified for rivals fears of reviving Turkish expansionism. Additionally, the Blue Homeland doctrine, prior to being commonly adopted by Turkish politicians, was viewed as reflecting the worldview of nationalists who resisted Turkey's positioning toward NATO, the US in addition to the EU, and supported closer links with Russia and China (Fahim, 2020).

It is worth noting, moreover, the statements about the Blue Homeland doctrine made by a Member of Parliament from the main opposition Republican People's Party (CHP), Namik Tan. Specifically, Tan referred to the Blue Homeland, while speaking in the Parliament, as a "fairy tale." It is noteworthy that Tan has served as an advisor to the CHP Chairman, is a retired ambassador to Washington (between 2010 and 2014) and has been an influential figure in foreign policy (Türkiye Today, 2024).

II. Turkey's Vision for a Two-State Solution

With regards to Hezbollah's threat against Cyprus, Turkish officials have requested Cyprus keep its distance from the conflict; that is, indirectly promoting two states in the context of the Hezbollah threats. The Turkish-Cypriot administered (occupied) area declared itself the "Turkish Republic of Northern Cyprus" (TRNC) in 1983. But the self-declared TRNC, which presents itself as a full-fledged independent state, is recognised solely by Turkey (Achiri & Klem, 2024; Athanasopoulos, 2022; Daily Sabah, 2024; Fahim, 2020; Pompei, 2023; Reuters, 2021; Stamouli, 2024; The World Factbook, 2024). The TRNC remains isolated to date, with the UK and other countries banning direct flights there, despite the fact that three-hundred thousand Turkish-Cypriots live in Britain (Maddox, 2024).

With respect to the Cyprus dispute, sources report that Erdogan reaffirmed Turkey's support for the Turkish-Cypriots concerning the Cyprus Question, saying that "Our national issue of Cyprus holds great significance for us, and we place particular emphasis on the two-state solution. To realise this vision, you have our unwavering support." (Philenews, 2024). In addition, Erdogan also stated that "We believe a federal solution is not possible in Cyprus," whilst adding that the Turkish occupied north is the "apple of Turkey's eye." (Stamouli, 2024). Further, the vision of Turkey for a two-state solution has become evident through Tatar, the so-called President of TRNC—alongside Erdogan (Financialmirror.com, 2021). He states that a two-state solution for Cyprus is 'inevitable' (Cetin, 2023; Hacaoglu, 2023; Hadjicostis, 2021; Squires, 2024; Stamouli, 2023), otherwise, the north will become more dependent on Turkey (Wintour, 2023). A two-state solution, however, would continue to violate UN resolutions and, in essence, end the possibility of the island being unified again (Hellas Journal, 2021).

To echo what has already been stated earlier in the analysis, some further details can be added. Despite the fact that Erdogan and Tatar have repeatedly stated their support for a two-state solution to the Cyprus issue, it is important to note that this has nonetheless been rejected in Nicosia, by the President of the Republic of Cyprus, Dr Nikos Christodoulides—who stated that, "Under no circumstances are we discussing a two-state solution." (Kades, 2024).

Finally, provided that Turkey continues to be overly focused on its unsatisfactory pretensions vis-à-vis a ‘two-state solution’, the imposition of new fait accomplis on the ground, in addition to its ongoing efforts to upgrade the global standing of the illegal secessionist entity in occupied Cyprus, it not only totally disregards the framework of the relevant UN Security Council Resolutions, but additionally significantly restricts any possible optimism as regards the Cyprus Question (Hellenic Republic – MFA, 2024). Nevertheless, Turkey sets long-term strategic objectives aiming to ultimately achieve its ends. Therefore, Turkey’s discourse is fully consistent with the goal of the two-state solution, whilst its narrative and acts seek to introduce a new geopolitical knowledge and form an alternative geopolitical imagination for this purpose.

III. Cyprus’ Need to Use Counter TV Series in Response to Turkey’s Propaganda

This example is linked with the previous matter. Considering how popular (or pop) culture may be within the context of a country’s foreign policy—in this case, Turkey—an occupied state like Cyprus must respond, lest historical facts are distorted. Particularly, Turkey has already been effectively exporting pop culture, propaganda and positive images of itself via the use of television (TV) shows. Specifically, prominent Turkish soap operas have been marketing its ancient glorious past, with these telenovelas forming a salient cultural product export for Turkey as they reach diverse and widespread audiences (Constantinou & Tziarras, 2018, cited in Hadjipavlis & Constantinou, 2023).

In a more recent context, and following the decision of Netflix to air the series ‘Famagusta’, the Greek-Cypriot production regarding the 1974 Turkish invasion of Cyprus, in 2024 (ekathimerini.com, 2024), Turkey’s foreign ministry issued a statement describing the series as “dark propaganda” which “distorted historical facts”. The Turkish-Cypriot leader Ersin Tatar stated that Turkey’s actions in 1974 in Cyprus saved the Turkish-Cypriots from genocide. Tatar also called for Turkish-Cypriots to “make a different series to tell our own story”, while adding “in return, we have to show the truth of the matter with a counter series”.

It is worth noting that a series was created in 2021, by Turkish public broadcaster TRT. The show that was aired was first called ‘Bir Zamanlar Kibris’ (Once Upon a Time in Cyprus) and then ‘Kibris: Zafere Dogru’ (Cyprus: Towards Victory). The series showed events on the Mediterranean island between 1963 and 1974, but nevertheless, was not generally well-received. For instance, *Halkin Sesi*—the newspaper founded by Cyprus’ first Vice-President Dr Fazil Kucuk—described the series as “disrespectful towards our leader and historical facts”, and Mehmet Kucuk (Kucuk’s son) stated that his father was “virtually ignored” in the series. In addition, the late Turkish-Cypriot leader Rauf Denktash’s daughter Ender Denktash Vangol also criticised the series by pointing out that EOKA leader George Grivas was not in Cyprus during much of the time wherein the series was set, meaning that the series contained massive misinformation. Besides viewing other parts of the series as incongruent with reality, she also criticised the series for portraying Turkish-Cypriots as “a community just waiting to be saved” by Turkey (Turner, 2024). It becomes evident that Cyprus should simply use counter TV series to restore the truth, by depicting accurate historical facts in response to the Turkish narrative. This constitutes very eloquently the use of popular geopolitics in action, with both sides aiming to establish their own perception and geopolitical imagination over that of the adversary.

Turkey’s Backlash as Regards Netflix’s ‘Famagusta’ TV series

At the time of writing this paper, the Supreme President of the American Hellenic Educational Progressive Association (AHEPA), Savas C. Tsivicos, had sent an open letter to Ted Sarandos, the co-CEO of the streaming giant, about Netflix’s decision to prohibit the broadcasting of the ‘Famagusta’ TV series outside of Greece (and, thereby, from being viewed by a global audience), after pressure from the Turkish authorities—specifically from the Turkish Radio and TV Supreme Council (RTUK). The AHEPA chief acknowledged that Netflix must

comply with censorship laws in every nation, but nonetheless stressed that Turkey must not dictate what is available on an international scale. Tsivicos also stated that by giving in to Turkish demands, Netflix is complicit in Turkey's downward spiral toward even further authoritarianism and amplifying its pro-government disinformation concerning its brutal illegal invasion of the Republic of Cyprus fifty years ago that 'Famagusta' promises to do justice to in remembrance (CBN, 2024; ekathimerini.com, 2024).

The Risk of Europe—Particularly the EU—Burying its Head in the Sand

It appears that when the interests of Turkey deviate from those of its NATO allies and the EU, it employs unilateral diplomatic and military initiatives (Diakopoulos, 2022). Given that Cyprus became a member of the EU on May 1, 2004 (Daalder, 2024; Hadjicostis, 2023, p. 244),¹⁹ it is in the EU's best interests to protect one of its Members States—especially, since Nicosia comprises the last divided capital in Europe (Pompei, 2023). Adding to this, the EU constitutes an essential partner for NATO, with NATO and the EU presently having twenty-three members in common (NATO, 2024c). However, Cyprus is not a member of NATO, with an almost certain Turkish veto concerning the likelihood of membership (Daalder, 2024). Even worse, Turkey's aggression extends also against another NATO state, Greece, which is also an EU Member State (NATO, 2024c; Vallianatos, 2024). Hence it is imperative that Europe, and the EU in particular, realises that just burying its head in the sand is far from being a panacea—unless the 'ever closer union' continues to be on hold (Valero, 2016).

It is remarkably impressive, while at the same time annoying, that the EU institutions and Member States show their unwavering support to Ukraine that was illegally invaded by Russia whilst there is no such reaction against Turkey. Critical geopolitics theory and particularly the existing geopolitical knowledge and imagination could largely explain the obvious existence of double standards, whilst strategic communication by Ukraine far outweighs that of Cyprus. Certainly, this may not be the only explanation, however a profound understanding of critical geopolitics theory that refers to and soundly employs tools such as strategic communication, is of significant importance.

Conclusion

In synopsis, the present article has demonstrated not merely the importance, but also the connection between strategic communications, geopolitics and hybrid warfare in the context of Turkey's activities in the Eastern Mediterranean region. Considering the degree to which public opinion can be affected by, for instance, propaganda, fake news and disinformation campaigns, it is crucial for the Republic of Cyprus to consider the creation of a strategic communications service in response to such—or similar—means used by Turkey to communicate its narrative to the public. Critical geopolitics as a discipline may, furthermore, sufficiently provide a solid theoretical foundation concerning different ways of public influence through various forms of strategic communication.

¹⁹ Cyprus comprises a member of both, the EU and the UN (Vallianatos, 2024). Specifically, as regards Cyprus' UN membership, the Republic of Cyprus became a Member of the UN a month after it had become an independent state, with the Republic becoming an independent state on August 16, 1960 (UN, 2024).

Next, the limitations of the current research are discussed, and direction for future research is provided.

Limitations of Study

There are certain limitations evident in our study that must be addressed before moving further, by providing some recommendations for future research. In-depth future research should also include interviews with research participants representing both Greek- and Turkish-Cypriot sides to gain valuable insights regarding the impact of the Turkish narrative. Additionally, interviews with experts and statecraft personages would have provided further insights. Due mainly to time and other limitations (e.g. on the extent of the article), this was not possible.

Practical Recommendations

The Ukraine Crisis Media Centre (UCMC), which is a non-governmental organisation (NGO), was created to back Ukraine's statehood as well as promote Ukraine abroad. Since its beginning, UCMC has evolved into a global strategic communications hub with an active outreach to audiences in Ukraine and abroad alike (Ukraine crisis media center, 2024). Further, NATO has supported the UCMC and Ukrainian media, while also training government officials in addition to civil society activists in communications. Alongside this, the Allies sent national communications experts to the Kyiv NATO Liaison Office (Bentzen, 2016, p. 3). In a similar manner, an NGO could be set up in Cyprus to safeguard its national interests in the worldwide information space. Or alternatively, an official crisis media and counter-propaganda centre could be set up as part of the public sector.

In the US, the Office of Strategic Communications and Outreach (SCO) supports the Bureau of International Security and Non-proliferation by directing as well as furthering its public diplomacy, public affairs, plus congressional outreach (U.S. Department of State, 2017–2021). Media relations comprise a key mission for the SCO that serves as the primary point of contact for all media inquiries and interview requests for the Bureau. In addition, the SCO works closely with the Bureau of Public Affairs and the Office of the Spokesperson to provide regular press releases, updates, in addition to information for Department press briefings (U.S. Department of State, 2009–2017). Similarly, a StratCom Office within the PIO of the Ministry of Interior or the Ministry of Foreign Affairs of the Republic of Cyprus could be set up to work closely with the intelligence service to ensure that a single anti-propaganda narrative countering that of Turkey's reaches the public. As such, any fake news would be quickly identified and addressed in addition to any other (e.g., cyber) threats, through the creation of a hybrid centre.

Recommendations for Future Research

A policy paper in the future could focus on the use of strategic communications in the recent Israel-Gaza war or the Russo-Ukrainian war. To that end, the study could also examine the role of countries such as the US and the UK. In addition, based on this policy paper, further research on the topic could be conducted in order to identify the exact means, tools and ways that Turkey employs, and also expand academic knowledge on the relationship between critical geopolitics, political marketing and strategic communication.

Within the context of political marketing, the CIS model (i.e., the capability to Create, Inform and Support),²⁰ shows that political actors must not only create a political product/service (that is, an idea/proposal), but, also, must inform the public about the product and support it (Antoniades, 2020; 2021; 2023).²¹ Thus, future

²⁰ The CIS Model is an award-winning model developed by Dr. Nicos Antoniades and presented at the 7th International Conference on Management and Education Innovation, University of Greenwich, London, UK (April 2019). Title: "Packaging Government Ideas to Achieve Citizen Satisfaction and Loyalty: Creating, Informing, and Supporting."

²¹ See Hadjipavlis and Constantinou (2024, p. 136) for additional details on Political Marketing.

research could examine whether increasing the politicians' use of the CIS strategy would strengthen the local/global awareness as regards the need for a StratCom service.

Considering the recent article by 'Politico' entitled 'Turning Cyprus from a problem into a solution' written by Ivo Daalder, a former US ambassador to NATO, among other things, Cyprus is introduced as the solution and not a problem as has long been the case. This is given the stability the island provides in an ever more turbulent part of the world (Daalder, 2024). Thus, the Republic of Cyprus should further invest and properly promote this idea by the use of strategic communication, linking this notion with the abnormality of the occupation of its northern part.

Within the context of political marketing and popular geopolitics, future research could also analyse the impact of Netflix's 'Famagusta' TV series at an international level, given the messages it indirectly passes in regard to the Turkish invasion of 1974. Finally, considering the fact that the field of political marketing remains at a nascent stage, as seen earlier, the authors invite the conducting of more pertinent academic studies to create a more far-reaching theoretical framework that will guide future research.

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Panayiotis Hadjipavlis is a defence and aviation specialist with more than 30 years of experience in defence strategic analysis, military aviation, airspace geopolitics and flight safety issues. He is characterised by a comprehensive and interdisciplinary approach to analysing political and security related issues, a virtue attributed to his diverse academic background. Panayiotis graduated as a jet pilot from the Hellenic Air Force Academy, where he also earned a BSc in Aviation Science. He also holds a BA in European Studies (European University Cyprus), an MBA (University of Sunderland, UK), an MSc in Aviation Safety Management (City University, UK), a Master II in Religions, Cultures and Politics in Modern and Contemporary Europe (École Pratique des Hautes Études, France) and a Professional Master in Superior Military Studies from the French War College. In July 2021, he earned a doctoral degree in Geopolitics of the Airspace from Newcastle University, UK.

Panayiotis is a visiting lecturer at the Centre for Security and Intelligence Studies (BUCSIS) of the University of Buckingham, UK, a Research Associate of the Centre for European and International Affairs of the University of Nicosia, a Research Fellow of the Defence and Security Research Institute (DSRI) of the University of Nicosia and a Research Fellow at CERIDES Research Centre of the European University Cyprus. At the same time, he has been an associate editor to several academic publications and has published several academic articles in various journals and books. Panayiotis' research interests include geopolitics of the airspace, techno-geopolitics, the geopolitics of the Eastern Mediterranean, Near East and Sahel regions, issues of state sovereignty and European defence cooperation.

As regards his professional career, Dr Panayiotis Hadjipavlis has been a Defence Director at the Cyprus Ministry of Defence since October 2023, head of the General Procurement and Defence Capabilities' Development. Under his remit among other issues, are the European Defence Agency affairs and all the Defence Capabilities' Developments within the EU, the development of the local Defence Industry and the research into and innovation of the Cyprus Armed Forces. As a retired Colonel, Dr Hadjipavlis has served in several critical posts at the Cyprus Ministry of Defence. In 2019 he was posted as a strategic analyst for the Sahel region in Africa at the EU Military Staff/ European External Action Service, while in August 2021 he assumed the post of the Head of the Africa Section of the EUMS Strategic Analysis Section.

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Polis Xinaris is a seasoned marketer who has been working in the field of marketing since 2002. With over a decade of experience in the retail market, he began teaching social media in 2012 and, in 2015, he created his own start-up providing social media and digital marketing services. In 2018, he set up P.A.X. Social Media Ltd., specialising in communication strategies on social media and other digital media. He has been approved as a trainer by the Cyprus Human Resource Development authorities and, among other activities, he trains people in the use of AI tools for marketing. He has been teaching at CIM-Cyprus Business School for the past three years, offering courses on marketing strategy, digital tools and content marketing.

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Sophie Hannah Eliades is a marketing strategist with close to ten years of experience working across the finance, payments, and iGaming industries. Her work sits at the intersection of content, communications and behavioural insight—developing strategies that help complex businesses communicate simply and credibly.

She is the founder of Just a Writer, a content agency focused on helping B2B brands cut through noise with smart, targeted messaging. Before launching the agency, Sophie held a senior marketing role at Praxis and worked in content and communications positions at companies including Tickmill, FXPRIMUS, and Orbex—gaining first-hand insight into the demands of fast-paced, highly regulated sectors.

Sophie's approach is grounded in evidence and empathy, combining hands-on industry knowledge with an academic background that spans both the sciences and marketing. She holds an MSc in Digital Marketing (UWL/CIM Masters Degree), as well as earlier degrees in Marine Biology and Conservation from the University of Liverpool. Her training in counselling and psychology continues to inform her understanding of audience behaviour and decision-making—particularly valuable in performance-driven marketing environments.

Her recent postgraduate research explores how AI is reshaping the skills and structures of modern marketing teams, but her day-to-day focus remains clear: helping businesses tell better stories, connect with their audiences, and make marketing efforts count.

She is based in Cyprus and works with clients globally.

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With almost two decades of experience as an international arbitrator in IP and technology disputes, Yotam resolves complex cases for Fortune 500 companies, international super brands, acclaimed artists and governmental organisations across EMEA jurisdictions. His arbitration practice spans patent disputes, trademark infringement, trade secrets, design rights and domain name conflicts in the fashion, technology and entertainment industries. In light of Yotam's global recognition and continued contribution to the advancement of IP education and scholarship, he has recently been selected as a member of ATRIP - the International Association for the Advancement of Teaching and Research in Intellectual Property.

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