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Trends in Advertising: How the Rise in Artificial Intelligence May Influence the Field of Content Strategy

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A thesis

presented to

the faculty of the Department of Media and Communication

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Master of Arts in Brand and Media Strategy

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by

Joel Eaton

May 2020

Dr. Melanie Richards, Committee Chair

Dr. Susan Waters

Dr. Stephen Marshall

Keywords: Artificial Intelligence, AI, Content Strategy, Ideation, Copywriting, Future

ABSTRACT

Trends in Advertising: How the Rise in Artificial Intelligence May Influence the Field of Content Strategy

by

Joel Eaton

Whereas prior research on artificial intelligence has dealt with automation in fields like medicine, engineering, and computer science, this research study seeks to answer the question, "To what extent can AI be creative in the context of content strategy?" To answer this, this study employs content analysis using 16 online news and blog articles from primarily marketing organizations to identify and explain key variables surrounding the relationship between the computer and the creative professional. This study has found that the core belief that AI will play the future role of creative assistant in the context of content strategy is shared among many online marketing publications. As AI becomes increasingly capable of taking on lower level creative tasks such as content organization, ideation, basic copywriting, and photo editing, many believe this will open up more time for content strategy professionals to accomplish more creatively demanding, big picture tasks.

DEDICATION

I dedicate this thesis to my grandmother, Clara Jo Scott, who encouraged me to pursue writing in my education and career, and whose prayers have sustained my faith.

ACKNOWLEDGMENTS

There are several individuals to whom I owe a debt of gratitude. These include my mother for her wisdom and love, my father for his encouragement, Dr. Melanie Richards for her ability to bring simplicity to a complex subject, Dr. Susan Waters for her warmth and brilliance in giving counsel, Dr. Stephen Marshall for his insight and professional expertise, Mrs. Megan Fannon for her help in understanding coding, and Dr. Anthony Mitchell for the role he played in guiding me through some of the early stages of brainstorming and planning.

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TABLE OF CONTENTS Page

ABSTRACT…….……...2

DEDICATION……3

ACKNOWLEDGMENTS…….……..4

Chapter

1. INTRODUCTION……...8

The Rationale for Research on AI……..……..……...……..…8

The Rationale for Research on Content Strategy. ……..…….……9

Foundational Theories for the Study of AI and Content Strategy…….……10

Labeling and Understanding This Study's Foundational Research Questions……..12

2. LITERATURE REVIEW……..13

Defining Terms and Understanding Concepts……..…….13

A History of Artificial Intelligence……..……..…16

AI—Where Are We Now? ……..……..20

AI in Digital Marketing……..……22

AI and Copywriting……..……..25

AI in Advertising….……..…….26

The Purpose of Content Strategy……..…..……28

Idea Generation and Automated Creativity……..……..29

Can AI Write Great Copy? ……..……..31

The Media's Role in Setting the AI Agenda……..……33

Limited Capacity Model and AI in Advertising……..……..36

3. METHOD. ……..……..40

Method and Procedure……..…….40

Content Analysis……..……..……40

Grounded Theory Methods……..……..……41

Sampling Strategy……..……44

Description of Materials……..……..……44

Keywords and Search Results……..……..……...45

Final Sample Selection……..……..…….……45

4. ANALYSIS AND FINDINGS……..……..48

Open Coding…….……..……48

Axial Coding and Variables…….……...……..48

Variables…….……..49

Selective Coding……..58

5. RESULTS……..……..59

Initial Observations..…….……..……59

Selective Coding Results……...……..59

AI and the Personalization of Digital Experiences……..64

AI and the Need for Scalable Content……66

6. DISCUSSION……..……68

Answering This Study's Primary Research Question (RQ1)……..68

What New Theory Came of This Study?...……..68

Will AI Replace Content Strategy Jobs?..……..…….……69

Augmenting—Not Replacing—Human Creativity…...…….……..71

Guiding Theories……...…….……..73

Agenda Setting Media Theory……...73

Limited Capacity Model……74

Study Strength: Internal Consistency……..…….……74

Limitations and Future Directions…….……...76

Limitations…….76

Future Directions……...76

Conclusion……..……...77

REFERENCES…….……79

APPENDICES…….…….97

APPENDIX A: Axial Coding Variable Table……..97

APPENDIX B: Original Sources……..98

VITA…….……..……..99

CHAPTER 1

INTRODUCTION

The Rationale for Research on AI

It is no secret that artificial intelligence has become a hot topic of late (Zhang, & Dafoe, 2019. The term "AI" is now being used all over the Internet to describe a new kind of technology that has a multitude of different applications across an enormous variety of disciplines. But is AI simply the latest fad for computer engineering, or might there be some promise in the use of AI technology for content strategy? To answer this, this study must first examine the pace of AI growth in other sectors of the economy to more accurately gauge its role. In meteorology, AI is being used for making key decisions based on weather patterns (McGovern et al., 2017). In medicine, AI is now being used to diagnose diseases like lung cancer (Ardila, 2019). In corporate finance, AI is being used for fraud detection (Krausz & Colthart, 2018). AI is also being used heavily in digital marketing domains such as web design, chatbots, and analytics, and new AI innovations are even starting to incorporate elements of software that synthesize aspects of the creative process (Hall, 2019). Although there is an ocean of research on artificial intelligence across many different subjects, the current available literature says almost nothing in the way of describing recent innovations within AI that offer benefits to the creative process in advertising. We know very well what AI is capable of when it comes to medical advances, but we do not yet have much of a scientific basis for claims on AI's growth in the creative process of content strategy. The research in this area still needs further development. It was out of this finding that came the rationale for the development and submission of this thesis. While AI in the real world does look markedly different from its depiction in pop culture media such as movies, TV, and

books, there are plenty of examples of innovation in a variety of areas that have resulted in improved technology and improved quality of life.

The Rationale for Research on Content Strategy

Those who stand to benefit most from the publication of new research on the prospective future impact of AI on content strategy, copywriting, and idea generation include copywriters, digital content planners, creative directors, digital media managers, social media strategists, marketing managers, and brand managers—essentially, anyone whose primary job responsibilities involve the creation of new content used for the purpose of growing one's company or brand; however, despite the fact that content strategy is becoming more necessary for businesses in the digital age, there is still very little research on the subject (Müller and Christandl, 2019).

In 2016, the World Economic Forum predicted that more than five million jobs would be lost to automation and robots by 2020 (World, 2016). As machines continue to transform the workforce, AI has more significant economic and social implications than ever before. Creative industries, such as advertising, are left wondering whether computers will soon automate the creative process that was once thought unique to the human brain (Pecherskiy, 2017). Is AI really capable of becoming the driving force behind new ideas?

Data is quickly growing from "big" to "gargantuan" in terms of its importance in digital marketing. Software apps like Hootsuite, Adobe Analytics, and Google Analytics have become must-haves for the modern digital marketer. But acquiring accurate and compelling data is only part of the process. The next step after acquiring the data is using it to drive content strategy.

It is now a well-known fact that data is key in creating great content; this much is now obvious—but what of the creative process? Is the same AI software that can write songs, produce

paintings, and make complex decisions capable also of doing the job of those humans whose ambition it is to create the great advertisements and the great content pieces of our world? There are several articles that have been published on the Internet that loosely cover the subject of the creative process and AI, but there is not yet a solid body of academic research that can help content strategists, copywriters, and creative directors to better understand how AI can be utilized in these disciplines. It is in light of these deficits in the literature that this present study was conceived. If this study is able to bring some order to the wide array of information available online about content strategy and AI—and thereby in some way help offer some insight and guidance to prospective and current creatives in the space of advertising and content strategy—it would be taken as a sign of success.

Foundational Theories for the Study of AI and Content Strategy

There are two media theories that have particular applicability to the subject of AI and content strategy—agenda setting media theory and limited capacity model. These two media theories relate to this study's foundational research question in that they lay the groundwork for a productive discussion on how AI is influenced by societal factors and why content strategy is a valuable subject to invest in via future research.

Agenda setting media theory, first proposed by McCombs and Shaw (1972), proposes that the media play an agenda setting role in deciding which content to publish. For instance, a news station will tend to present information to the public that matches with the news station's own interest (the interest of its subscribers or viewers), public interest, or perhaps on ethical reasons; either way, the news station is still playing a role in deciding what content to air—and therefore deciding what content the general public will automatically deem most important. This has certainly been a factor when it comes to public perception of the importance of artificial

intelligence. Due to the agenda setting role of the media, excessive hype has periodically dominated the media landscape, leading to periods of overindulgence in AI narratives (Car et al., 2019) along with periods where the public becomes disenchanted with the promise of better AI technology (called AI winters) (Crevier, 1993; Yang, 2006). Since public perception of the value and role of AI may be distorted by media metanarratives (via the agenda setting role of the media), the construction of new academic studies that assess the true value of AI pertaining to creative endeavors such as content strategy and copywriting would be a welcome addition to the literature.

While not a true media "theory," the limited capacity model comes with fascinating assumptions that greatly enhance our perspective on the importance of content strategy for modern brands (Lang, 2000). The limited capacity model views media through the lens of people's inherent limited capacity for information processing, governed by the proceses of memory, feedback, encoding, and retrieval (Baddeley, 1997). With the media landscape always flooded with seemingly endless quantities of messages, today's content strategy must be more defined, consistent, and consumer-driven than ever before. Brands must now overcommunicate in order to be heard, and to do that, they must produce a large volumes of engaging content for their consumers. In the context of AI and content strategy, because of our limited capacity for information processing, consumers of media content pay the most attention to areas highlighted by the media according to agenda setting theory. This present study examines how the public agenda in regard to content strategy and influence of AI is being constructed.

Labeling and Understanding This Study's Foundational Research Questions

This present study will primarily be concerned with the question of the extent to which artificial intelligence is capable of carrying out the creative processes of ideation and copywriting in the profession of content strategy. This first and central question will be designated by the term "RQ1." The second question this study seeks to address is the extent to which AI may or may not be capable of taking over the jobs of content strategists in the near future. This second question will be designated as "RQ2." These questions are related questions in that if AI is indeed capable of carrying out the tasks normally given to content strategists, it is worth considering the likelihood that machines may take over their jobs as they have other creative jobs (Quest, 2019).

CHAPTER 2

LITERATURE REVIEW

Defining Terms and Understanding Concepts

Before a full discussion can be meaningful regarding artificial intelligence and content strategy, certain key terms and foundational concepts must first be properly defined to allow for consistent usage of otherwise ambiguous language.

To begin, the term "artificial intelligence," as defined by the Oxford dictionary through Lexico.com, refers to "the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages" (Artificial Intelligence, 2019, para. 1). As such, this definition implies that there are several distinct fields that lie within the overarching field of artificial intelligence, such as speech recognition and visual perception. These and other sub-fields within the overall field of artificial intelligence will be discussed in the following paragraphs.

There are three more well-known fields for which "artificial intelligence" may be called an umbrella term: machine learning, deep learning, and natural language processing (NLP) (Jarek & Mazurek, 2019). The term "machine learning" concerns "the capacity of a computer to learn from experience, i.e. to modify its processing on the basis of newly acquired information," as defined by the Oxford-powered online dictionary Lexico.com (Machine, 2019, para. 1).

At the time of writing, the phrase "deep learning" is not a valid search in either the Merriam-Webster online dictionary or the Lexico.com (Oxford) online dictionary; rather than simply citing a dictionary for this term, those who wish to properly define this term must look to recent research. A computer equipped with deep learning capabilities can essentially think like a

human being in that it can use unstructured data—data that the computer is not preprogrammed to process—to accomplish its goals (Jarek & Mazurek, 2019).

Speaking more broadly, the literature generally recognizes two primary types of artificial intelligence: artificial narrow intelligence and artificial general intelligence. Artificial narrow intelligence is a type of intelligence that refers to a computer being able to work with a narrow (or limited) set of data. In artificial narrow intelligence, the computer is designed to process data within a predetermined set of guidelines but cannot take data and make decisions in the same way that a human being can (Jarek & Mazurek, 2019 & Shanahan, 2015). In contrast, artificial general intelligence is capable of a breadth of knowledge and data processing that functions more like a human brain (Sterne, 2017). This ability is becoming highly sought after; in fact, as many as 45 organizations worldwide are currently researching the potential benefits of effectively harnessing the power of artificial general intelligence (Baum & Seth, 2017).

Natural language processing (NLP) is perhaps the simplest to understand of the three primary sub-domains underlying artificial intelligence. Lexico.com (using Oxford's dictionary) defines natural language processing as "the application of computational techniques to the analysis and synthesis of natural language and speech" (Natural, 2019, para. 1). At its most basic form, NLP denotes a computerized synthesis of speech and language. Often, the aim of natural language processing software is to use a computer or software to produce written content that sounds like it was written by a human being.

Another key term to introduce is the term "creativity," since a significant portion of this literature review will be devoted to an analysis of the current available research surrounding the topic of creativity in content strategy. Setting the tone for further discussion on this point is pertinent. To be succinct, there is significant variance in the use of the term "creativity" as it

relates to advertising and content strategy. Though Merriam-Webster broadly defines the term itself so as to mean “the ability to create,” (Merriam-Webster, 2019), Smith and Yang (2004) noted a gap in the research when it comes to the precise definition of creativity—and suggested that creativity may be defined by a combination of convention and originality—two seemingly contradictory ideas. Some academic research recognizes creativity to be the ability to think divergently (Runco & Acar, 2012). The role creativity plays in content strategy is not necessarily linear, but it has been found that creative processes such as brainstorming contribute measurably and significantly to the quality of advertising (Mbah, Nwatu, & Okafor, 2018). For the purposes of this literature review and study, “creativity” will refer to the complex innovation process within the field of advertising that leads to original ideas that have real-world application. For the purposes of this study, therefore, the author will assume that creativity may be defined as the linkage of two or more previously unlinked pieces of information for the purpose of strategically creating something new and valuable. This is geared towards the two creative processes of copywriting and ideation, for the purposes of this study.

Merriam-Webster defines the term “advertising” as “the action of calling something to the attention of the public especially by paid announcements” (Advertising, 2019). Since the overarching concept that will be addressed throughout this paper is advertising creative, let the reader consider the blanket term "advertising” in the context of the creation of the ads and the creative and intelligent forces that govern their creation and usage.

The term “content strategy” differs from advertising fundamentally, since “advertising” denotes *paid* messaging, while content strategy refers to the planning, creation, and distribution of content. According to usability.gov, “The goal of content strategy is to create meaningful, cohesive, engaging, and sustainable content.” Content strategy also differs from the more

specific realm of copywriting in that "content not only includes the words on the page but also the images and multimedia that are used" (Content Strategy Basics, n.d.). The primary goal of content strategy is for organizations to connect with audiences of potential customers by crafting pieces of content that match with existing interests of potential future customers (Harris, 2019). Content strategy exists, then, to create customers out of information gatherers—and to do so in a strategic, systematic manner (Du Plessis, 2015). Although there are many different tasks that fall within the domain of content strategy, such as content planning, keyword analysis, photo selection, video selection, copywriting, idea generation, video production, etc., this thesis will focus on the subdomains of idea generation and copywriting.

A History of Artificial Intelligence

The concept of a machine that can behave and interact like a human being is no recent phenomenon. It has been the subject of human imagination for over two millennia, with the Greeks having come up with legends about automatons and thinking objects such as Talos and Pandora in the late 400s B.C. (McCorduck, 2004). One source claims that the Greeks imagined such things as robotic servants and self-moving automatons as early as Homer, who lived in the late 800s and the early 700s B.C. (Mayor, 2018). In contrast to these early fantasies of robots and demigods, Aristotle actually may have been the first to describe the theoretical basis for what is now called artificial intelligence in *The Organon*, where he theorized that deduction, or syllogism, forms the bedrock on which all other intellectual pursuits are predicated (Bringsjord & Arkoudas, 2007 & Giles, 2016). Many other philosophers and theorists followed this Greek line of thinking, each offering the contribution of his own culture and experience, but the field proper was not officially designated until the mid-twentieth century. By the mid-1900s,

technology was just beginning to catch up to what, until then, had only been considered science fiction.

In July 1945, Vannevar Bush published the paper “As We May Think,” in which he “proposed a system which amplifies people's own knowledge and understanding” (Bush, 1945 & Huang & Smith, 2016). In 1950, the Cambridge mathematician, logician, cryptanalyst, and computer scientist Alan Turing began a paper called *Computing Machinery and Artificial Intelligence* by saying, “I propose to consider the question, ‘Can machines think?’” (Turing, 1950). This question forms the basis for the entire field of artificial intelligence, and it is because of this and his subsequent inventions and research that Turing is now famously referred to as one of the founding fathers of AI (Lin & Hazelbaker, 2019).

In addition to the groundbreaking work of Alan Turing, well-known computer scientist John McCarthy asserted in the 1950s that computers could be best utilized by designing them to work alongside human counterparts to help process and compute information. According to a biographical article published in the journal *Resonance – Journal of Science Education,* “[McCarthy] was a life-long believer in using mathematical logic to describe knowledge, including commonsense knowledge, which led to the development of the subject of knowledge representation. He invented LISP (a programming language which has lived for over fifty years) to solve problems in Artificial Intelligence” (Rajariman, 2014, p. 198). This source also documents that McCarthy was the one who first coined the term “artificial intelligence” (Rajaraman, 2014, p. 201).

In 1941, prolific science fiction writer Isaac Asimov first used the term “robotics” in a short story (Jung, 2018). Asimov later introduced the three laws of robotics, which dealt with the ethics of robotics (Asimov, 1950). Asimov first introduced the three laws of robotics in the 1942

short story "Runaround." Asimov then published *Runaround* in a collection of several short stories in 1950 under the title *I, Robot,* which dealt with the ethics of AI in robotics (Asimov, 1942). The three laws of robotics are a vital component of the history of artificial intelligence because they provided a launching pad for important philosophical discussions regarding the potential benefits and dangers of artificial intelligence. Far from a flash in the pan, Asimov's three laws of robotics embodied a cultural wake-up call for both AI researchers and the general public by presenting a world dominated by robots that could think as humans do. The 2004 science fiction film *I, Robot* drew from the ethical considerations of Asimov's work in the 1940s (Wilson, 2016).

In the decades following, several pilot AI technologies were invented. Among these were the invention of the first chat bot, called Eliza, in 1965 (Shum & Di Li, 2018), the first autonomous vehicles in the 70s and 80s (Stentz, Thorpe, Moravec, Whittaker, & Kanade, 1985; Thorpe, Herbert, Kanade, & Shafer, 1991), the publication of Judea Pearl's foundational 1988 paper called "Probabilistic Reasoning and Intelligent Systems" which essentially invented the first AI computers capable of computing complex probability statistics (for which he was awarded the 2011 Turing Award (Press, 2016), and the first chess-playing computer by IBM, called Deep Blue, which famously beat then-world chess champion Gary Kasperov (Castelluccio, 1997; Seirrawan, 1997).

In the mid to late 1990s, following the invention of the Internet, artificial intelligence came to be much more widely used for personal computing applications. By 1998, the first paper was published on AI-generated page rankings on Internet search engines (Page, Brin, Motwani, & Winograd, 1998). The following year, in 1999, Cynthia Breazeal of MIT's AI Lab introduced the first emotional artificial intelligence, called KISMET (Whynott, 1999). By 2004, DARPA

introduced its first autonomous vehicle challenge in the Mojave Desert (Press, 2016). In 2009, Google officially began testing its self-driving cars on public roads under supervision (Teoh & Kidd, 2017).

In 2011, several key events happened that further incorporated artificial intelligence into everyday life. The first event was when IBM Watson, a supercomputer designed with natural language processing software, won the television show, *Jeopardy!*, defeating three Harvard business students (IBM's Watson, 2011). This demonstrated that computers are capable of matching and even exceeding human intelligence and memory. Also in 2011, Apple first began to incorporate Siri to its iOS for the iPhone 4S (Mutchler, 2017). Microsoft released a similar voice assistance product called Cortana, followed by Amazon's Alexa in 2014. These voice assistants are capable of a wide range of useful applications, including sending and receiving text messages, making phone calls, answering simple questions (such as "What is the weather?"), setting appointment reminders, controlling music and video playback, and even ordering Uber and Lyft rides (Lekach, 2011). By 2011, natural language processing software had introduced several meaningful solutions to real world problems. Due to the success of voice assistants like Alexa and Cortana, there is growing corporate interest in future applications of AI tech pieces that incorporate natural language processing (Goasduff, 2019). This revived interest in voice assistants has potential to open up more options for future research surrounding the topic of conversational AI (Ram et al., 2018).

In 2016, Google unveiled a new kind of artificial intelligence technology called AlphaGo. It beat the reigning world champion five out of five times in an ancient (but popular) Chinese board game called Go (Granter, Beck, & Papke, 2017). This represented a significant breakthrough in machine learning and deep learning AI technology. Although IBM's "Deep

Blue" was programmed to play chess, AlphaGo was not programmed to play Go. Instead, AlphaGo learned the game of Go on its own and effectively wrote its own software for winning at the boardgame (Gibney, 2016).

The *International Journal of Information Management* published an article in 2019 about the history and future of artificial intelligence. In the article, authors Edwards and Dwivedi (2019) write that AI seems to have made significant improvements in the past several years, such that AI is becoming a topic of increased cultural and scientific relevance. Throughout the history of artificial intelligence, there have been naysayers and alarmists. Due to lack of immediate progress, there have been several seasons of doubt about the entire field of artificial intelligence. Researchers call these periods "AI winters." Of the notion that AI is mostly in the rear view mirror Raymond Kurtzweil wrote, "there's this stupid myth out there that AI has failed, but AI is around you every second of the day" (Kurzweil 2005, p. 263). According to current available research, AI as a field will likely continue to progress as it has across the previous six decades, at a moderate pace.

AI – Where Are We Now?

In 2020, it is difficult to find a major sector of industry that has not in some way been touched by artificial intelligence. AI has recently been used in some surprising and helpful ways. For example, researchers are now looking into the possibility of using AI for United States military applications. Some topics the military is interested in include crowd-based modeling (McKenzie et al., 2008), surveillance and imagery technology (Keller, 2019), and assessing military readiness through aggregation of many data points (Strickland, Mariani, & Jenkins).

These technology upgrades will improve insights for the U.S. military significantly, which is likely to improve the functionality of future operations.

As referenced previously, AI is also starting to prove useful in fraud detection (Krausz, Schneider, & Colthart, 2018), and its relevance in corporate finance could be beginning to take shape as well, with one source predicting that banks that use AI may yield 34 percent more revenue and 14 percent more employment by 2022 (Realizing the full value, 2018). With more and more companies investing in AI products for the growing financial market, new research estimates productivity in the financial sector in Germany will skyrocket in the coming decades due to increased investment in AI technology (Bredt, 2019).

Perhaps the industry that has invested most heavily in research in artificial intelligence technology is the medical industry, with computers capable of improving patient care through machine learning-powered insights (Durant, 2019; Mincholé & Rodriguez, 2019). As of yet, AI simply functions medically as a useful tool for medical doctors and surgeons; it is nowhere near functioning on the level of a medical doctor, but it does promise faster computing time for decision-making processes and information grouping processes for human beings who work in the medical industry (Levine, 2019). Research is growing in the medical field around the topic of ethics in AI use (Matsuzaki, 2018; Whitaker, 2019).

In addition to its medical and mathematical achievements, studies all across the world confirm that artificial intelligence now possesses the ability to accurately perceive and judge human emotion, to the point that AI software is now capable of performing sentiment analysis on movie reviews (María et al., 2016). AI can also carry out the task of textual emotion mining using NLR (natural language processing) software (Chawla & Mehrotra, 2018). Well-known companies whose artificial technology is now integral in their businesses include Amazon, Tesla,

Cogito, Netflix, and Pandora (Adams, 2017). AI looks to be a valuable asset to business and economics; it can help accountants better identify and evaluate complex financial problems (Dirican, 2015; Ransbotham et al., 2018).

This summary provides a very brief overview of the kinds of industries artificial intelligence is capable of helping with so far. The goal of the subsequent sections is to support the methodology and the analysis of this study by preeminently grounding those sections in relevant, recent research and events in the field of digital marketing.

AI in Digital Marketing

Digital marketing as a field incorporates many different software and digital platforms. The primary digital marketing domains tend to include social media platforms such as Facebook, Twitter, and Instagram, websites, and search engines such as Google and Bing. Most digital marketers also utilize marketing data analytics software such as Adobe Analytics and Google Analytics to improve their website traffic and help them make strategic decisions to boost ROI, and search engines. The use of artificial intelligence is bringing about many changes to the field of digital marketing; many of these changes center around providing means to a better user experience, predictive customer behavior, and real-time customer support (Martin, 2018).

Perhaps the most obvious example of artificial intelligence in digital marketing would be with chatbots (Barker, 2019). Chatbots are software that use natural language processing (NLP) and natural language generation (NLG) software to communicate and interact with humans. This can be done through audio or text. Companies began using chatbots in the mid-2010s to affordably provide easily accessible information to their customers; even social media platforms such as Facebook are using chatbots to answer user queries (Conger, 2016). Many of these

chatbots use software powered by machine learning that can learn how a set of consumers behave and interact in order to optimize the user experience (Barker, 2019). Few studies have examined why consumers use chatbots, but one study reported that most people are more interested in their novelty, entertainment, and personal factors than in their ability to provide accurate information (Brandtzaeg & Følstad, 2017).

Another key AI-driven influence in the modern digital marketing landscape is in website design. Many of the popular website design host platforms use what is called artificial design intelligence (ADI) technology. Companies that use ADI include Wix, Bookmark, and Leia. Wix was the first cloud-based web design platform to incorporate ADI into its design in 2016 (Wix Launches, 2016). Websitebuilderexpert.com explains the emerging technology of ADI in layman terms: "Put simply, [ADI is] artificial intelligence that uses machine learning to identify and implement web design trends. Put simpler still, it's technology that can make websites on its own" (O'Brien, 2019). A company called B12 promises a fully functioning, overhauled, custom website by using web crawling bots in just one week using artificial intelligence (b12, 2020). ADI systems can analyze real websites designed by humans and replicate their coding automatically based on user activity. Rather than replacing human ingenuity entirely, most experts think ADI will play an augmenting role in the future of digital web design, allowing humans to be more creative and ultimately craft better user experiences (Chathurika, 2019).

A third area of digital marketing that has been impacted by the rise in AI is in analytics. In April 2019, The Innovation Summit organized a conference on predictive analytics. It featured distinguished speakers from top industry brands such as Amazon, LinkedIn, Spotify; the event was marketed as a "deep-dive into a new era of AI and data strategy" (Predictive Analytics, 2020). In May of 2019, the Data and Marketing Association (DMA) put on the 2019 Marketing

Analytics Conference in Atlanta, GA. It boasted numerous in-demand professionals from a wide variety of companies, including McCalister's Deli, UPS, Macy's, Sony Music, AMC, and Coca-Cola (Marketing Analytics, 2020). Yet another conference on analytics for marketing, the Marketing Analytics Summit, is currently scheduled for June of 2020 (Marketing Analytics Summit, 2020). Analytics is one of the most popular topics among professionals in business, data, marketing, and advertising. Every kind of company wants to better understand its consumers. They want to know what they like to do, where they like to go, what other brands they support, what products they use, which social media sites they frequent, and where they spend their money. Fortunately for large corporations, AI promises dividends for companies willing to invest in this new technology.

One such example of a software real companies are using to track consumer behavior and monitor campaign progress in real time is Adobe Sensei. Sensei is an AI powerhouse.

> "What makes [Adobe] Sensei so unique is Adobe is the only company in the industry that can marry [the] art of content and creative expression and science and data at a massive scale…if I can go all the way from how I create content in the creative tools and then have the ability to personalize it at scale to Adobe Experience Cloud, then have the ability to measure it to [Adobe] Analytics and feed the measurement back into the creative workflow, saying, 'Hey, these designs work better,' that actually is the holy grail in what customers tell us they want." Abhay Parensis, EVP and CTO for Adobe (Adobe, 2018).

Adobe Sensei also uses predictive analytics and ad spend optimization to help manage the creative workflow for digital marketing projects (Adobe, 2018). Large companies such as Chevron are using these kinds of AI-driven insights to save money through using AI to locate errors in cybersecurity and textual agreements (Ransbotham et al., 2018).

For advertising creatives who want to optimize their creative workflow, Adobe promises that AI will not overtake human creativity—instead, it will amplify it. Adobe promises insights through Adobe Sensei that can help dig through piles of data to find actionable insights, speed up creative workflows, and even use content-aware tools to help summarize or sort through lengthy text or image files (Adobe Enterprise Content Team, 2019; Adobe Experience Cloud, 2019; Martin, 2018).

It seems that AI is now predominantly being utilized by larger businesses that have more money to spend. In Adobe's 2019 Digital Trends report, Adobe researchers found that, among organizations included in the study whose annual revenue exceeded $195 million, the largest portion (41%) of organizations that were asked why they have not invested in artificial intelligence reported that their companies were not yet mature enough to leverage it. The second largest cluster of organizations (38%) who were asked this same question reported that they have not yet assessed the use of AI in their companies. While some of the top companies are investing heavily in automation, chatbots, and other AI tools, it seems that companies are still hesitant about incorporating AI into their organizations.

AI and Copywriting

Opinions vary on the subject of artificial intelligence and copywriting. Some believe AI poses a massive danger to human copywriters due to AI software outperforming human

copywriters in isolated A/B copywriting shootouts (Duffy, 2017), while others believe AI software will ultimately only offer assistance to human copywriters, streamlining their workflow. There is also some mention online of AI making A/B testing irrelevant and outdated (Brenner, 2018). This topic is not significantly developed in the literature, however.

An excellent example of a company that currently utilizes AI to optimize and even write headlines and marketing copy is Persado. Persado has worked with clients such as Comcast, Citi, Chase, Dell, Expedia, and Hotels.com with the goal of "reinventing marketing creative by applying mathematical certainty to words, the foundational DNA of marketing" (Persado, 2020, p.1). According to the VP of Global Consumer and Business Development for Hotels.com Ben Blake, who has worked with Persado, "Through Persado, we've gained invaluable insight around the power that language, particularly the emotional components, can have to engage customers. Persado's machine learning algorithms understand how people react to what they're reading, and in that understanding, can lead to far higher levels of engagement" (Persado, 2018, p.1).

AI in Advertising

AI has made incredible advances in engineering and science-based fields, but recent research and practice has also demonstrated that AI may also be capable of shaping the creative process of advertising, too.

In his well-known book on advertising *Hey Whipple, Squeeze This,* Luke Sullivan compares the process of writing an ad to washing a pig (Sullivan, 2016). This is to illustrate the complex and often frustrating process of coming up with new, creative ideas in advertising. Fortunately for advertising professionals such as copywriters and content strategists, there is a growing market for AI-powered advertising solutions. For instance, AI can be used to write and

personalize emotional ads (Mogaji, Olaleye, & Dandison, 2020). The ability for marketers to personalize ads at scale and utilize tailored audience preferences on social media has also opened up more possibilities when it comes to targeting ads on Facebook, as Facebook allows for targeting ads based on the way its users interact with content on Facebook (Tran, 2017).

Using AI with analytics is already an established trend. AI can incorporate large amounts of data and use that information to predict customer buying preferences in advance—and at scale (Davenport et al., 2020). This is possible because of "in-depth semantic analysis and real-time user interactions [that can] predict the probability that a consumer will accept a creative idea in the forseeable future" (Li, 2019, p. 333). While the idea of AI assisting with media buying and audience analytics may be old news, researchers are now seeking to determine whether AI may be able to take over some of the more creative advertising work as well. One study published last year by the Journal of Advertising provided evidence in support of integrating AI analytics with AI creative (Chen et al., 2019). This came as a result of the consideration that creative tasks demand a great deal of time and resources, both for companies and for creative professionals. While AI has helped in analytics, there seems to still be a need for creative applications of AI to assist advertisers and content strategists in the creative process.

The most apparent and accessible solution for those wishing to align advertising analytics with advertising creative is Adobe Advertising Cloud. Adobe Advertising Cloud is a demand-side advertising platform designed to improve return on advertising spend (ROAS) through detailed audience analytics, and it also allows for creative asset management (Adobe Advertising Cloud, 2020). Adobe Advertising Cloud promotes itself as a creative management tool for advertisers who use all forms of media.

The recent, industry-wide shift from traditional media formats to digital, mass-scale advertising has amounted to a dramatic change in the ad industry. Some in the advertising industry view this shift to automated advertising negatively. A 2017 article published by *Marketing Week* suggested that the quality of advertising has dropped in general as a result of the rise in branded content on the Internet. In fact, this article quotes Dan Izbicki, creative excellence director at Unilever, who argued that the increased ability of nearly all businesses to advertise online has led to a lower overall quality in advertising online—something that he believes is a result of the widespread use of AI-based software (Bacon, 2017).

While the use of AI in advertising for analytical purposes has been generally helpful in providing higher quality data instantly, creative applications so far have been very limited.

The Purpose of Content Strategy

Since there is very little academic research on content strategy, there is need to incorporate more professional sources for this section. Most publications on the subject are indeed from professional sources, and in fact, as recently as 2016, there were only two peer-reviewed sources that even touched the subject (Clark, 2016). In Erin Kissane's book, *The Elements of Content Strategy*, Kissane quotes Rachel Lovinger, who does content planning for the media development company Razorfish (now Publicis Sapient); Lovinger is quoted as saying, "Content strategy is to copywriting as information architecture is to design" (Kissane, 2011, p. 1). In other words, just as information architecture informs design, so content strategy informs copywriting.

Also, Julia McCoy of Search Engine Journal explains that there is a difference between content marketing and content strategy. According to McCoy, content strategy has more to do

with audience selection and media planning, whereas content marketing has to do with actually producing content for brands. So, while content strategy and content marketing may be two different processes, they are both part of the same overall process of strategically using content to attract new leads and delight existing customers.

Marketing Week published an article in December 2019 that claimed there are more than twice as many jobs in content marketing (5,091 jobs) than there are in search engine optimization (2,224 jobs); in addition, almost two out of every three search engine optimization jobs require skills in content strategy ("The five trends," 2019). However, although there is much to be gained from proper utilization of content strategy for brands, there are some pitfalls of using content strategy that often occur. When companies become too engaged in short term goals to recognize the value created by having a solid content strategy, when departments within the company have competing goals, or when creating content is viewed as a luxurious expense rather than a vital investment for a brand, content strategy can be hindered (Forster, 2019).

Idea Generation and Automated Creativity

White published an article in 1972 with the *Journal of Advertising* called Creativity: The X Factor in Advertising Theory. Ideation—the process of creating the ideas that drive campaigns and digital content—is highly valued in the marketplace. Companies must be constantly engaging their customers with fresh, relevant, high quality content if they are expected to maintain their relevance in today's media-driven landscape. Given the importance of consistently creating new, quality content, answering the question of how one can manage the creative process most efficiently is clearly of the utmost importance. The more time one spends staring at a blank page, the less new content is being generated. The less new content is being generated,

the less relevant the brand will be in search engine optimization, and the fewer leads will be funneled all the way through, creating lifetime brand advocates and customers. Sometimes these periods of unproductivity may lead to gobsmacking ideas—but this is not always the case. What can be done to improve ideation for copywriters, social media strategists, and content creators? Given that more and more content is being produced than has ever been before, this brings about the question of whether software that employs AI can add value not just in the realm of data analytics—but of creative ideation as well.

Ideation (or "idea generation") is an important part of the process of producing good content. In order to know what a social media post should look like in terms of its layout, its copy, and its core message, one must first begin by considering key audience insights and working with those to determine the kind of person the brand should target with its content as well as the messaging the person should use. When it comes to understanding creativity as it relates to good advertising or good content, one is quickly confronted with a vast array of different definitions of creativity. While some view creativity as a nonlinear spark that just happens to people, others view it as a process. Either way, it is understood that creativity is a highly valuable factor when it comes to creating great content. Whereas it has been taken for granted for many years that machines are machines and humans are humans, such that machines are inherently incapable of making creative decisions equivalent to human decisions, researchers and professionals alike have been surprised to learn that this assumption now seems to contradict recent innovation. To be clear, machines cannot yet employ the full spectrum of human thought and emotion (this would require the far more complex deep learning—not just machine learning); however, while approximating human-like cognition may be a distant fantasy, there

are areas where software powered by AI might offer some assistance to the creatives that work in content strategy initiatives in the near future.

In 1940, James Webb Young published the classic book "A Technique for Producing Ideas." In this book, Young's thesis on ideation was that "An idea is nothing more or less than a new combination of old elements" (Young, 2009, p. 12). Young was pointing out that, contrary to the assumption many make that creativity is a mysterious, unfathomable "spark" that comes and goes like the wind, creativity is actually a discrete process with identifiable characteristics and quantifiable mechanics. It is, in essence, the simple combination of already-present facts or bits of information. This ties in neatly with the overall point of this thesis, which is to examine whether emerging AI technology is now able to assist in the creative process when it comes to producing content for brands.

This conversation about the process of ideation is especially important for content strategists going into 2020 and beyond because it encourages a healthy view of the role AI may play in the future of copywriting and ideation, and it helps inform academics and professionals of the value AI could have on the field of content strategy in the future. If creativity is indeed a linear process which primarily consists of the merging of existing facts or pieces of information, it could be that artificial intelligence may be very capable of assisting copywriters, creative directors, and social media content writers alike, changing the way they produce their ideas in the near future.

Can AI Write Great Copy?

It is a busy world, and it is only getting busier. In today's information age, it seems that new information has quickly become an asset worth streamlining for efficiency. In the words of

the digital news source Digiday, “Every day, brands and marketers are demanding more and more speed and more and more ideas from their “creative” agencies” (Duffy, 2017, para. 18). Given the necessity of publishing new articles in real time with ever-increasing efficiency in conversions and lead generation, many agencies have turned their attention toward developing new AI software that can write copy automatically. The kind of emerging technology that can write articles automatically might seem like a pipe dream for some, but it is actually already a reality.

Although AI software cannot yet write novels, it can indeed write body copy and headlines for blogs, emails, and articles—an increasingly valuable asset. It can—and it has. At the 2016 Rio Olympics, The Washington Post used an AI software called Heliograf to write news articles on 300 different events. According to “These robot-generated articles were published alongside ones written by humans. Crucially, no-one spotted the difference.” “The paper now regularly uses Heliograf for sports reports like the one below and the same software is used under license by news organizations around the world” (Henson, 2017, para. 5). The same source reports that a software called Phrasee that writes email subject lines can not only write headlines, but it can also outperform human copywriters and write more quickly than human copywriters. “95% of [Phrasee’s] AI-generated subject lines outperform those written by humans” (Henson, 2017, para. 25). Mark Duffy wrote an article in 2017 for Digiday which argued that AI and machine learning would replace copywriters in the near future because of its superior copywriting ability (Duffy, 2017).

The U.S.’s largest bank, JPMorgan Chase, recently started using Persado, a digital marketing agency that uses AI to intricately craft words in its marketing copywriting (Persado, 2019). “Persado’s technology is incredibly promising. It rewrote copy and headlines that a

marketer, using subjective judgment and their experience, likely wouldn't have. And they worked" (DiStefano, 2019, para. 6).

Persado has worked with clients such as Comcast, Citi, Chase, Dell, Expedia, and Hotels.com with the goal of "reinventing marketing creative by applying mathematical certainty to words, the foundational DNA of marketing" (Persado, 2020, p. 1). According to the VP of Global Consumer and Business Development for Hotels.com Ben Blake, who has worked with Persado, "Through Persado, we've gained invaluable insight around the power that language, particularly the emotional components, can have to engage customers. Persado's machine learning algorithms understand how people react to what they're reading, and in that understanding, can lead to far higher levels of engagement" (Persado, 2018, p. 1). These AI-driven software companies promote themselves very often as leaders in the field and typically report higher levels of engagement from their AI-derived copy. This has been mainly seen regarding email and web copywriting. The literature on this particular topic is still underdeveloped, so further research is needed on this to form a more scientific basis for claims as to the effectiveness of AI copywriting in the real world.

The Media's Role in Setting the AI Agenda

The media have played a significant role in guiding the general public's opinion on the overall impact of AI on various fields over the past several decades. This section will explain what agenda setting media theory is and why it is an important theory to consider when it comes to considering the future of artificial intelligence and content strategy.

The agenda setting media theory provides an important theoretical rationalization for the way in which the media influence public opinion. The agenda setting approach suggests that the media set the mental agenda for the public—they decide what topics are on the public's mind.

Proponents of the agenda setting media theory hold that, by their coverage of certain topics and individuals (as well as attributes of those topics and individuals), the media actually serve the function of deciding both what issues the public thinks about and also how the public thinks about them (McCombs & Shaw, 1972).

The term "agenda setting" was first coined in reference to media theory by Maxwell McCombs and Donald Shaw as part of a research study published in 1972, but its origins lie with the late Walter Lippmann. Lippmann published his famous work titled *Public Opinion* in 1922. *Public Opinion* introduces the notion that the public is separated from reality by the media (Lippmann, 1922, p. 2). Building on this framework, McCombs and Shaw published their famous "Chapel Hill study" in 1972. McCombs and Shaw conducted the Chapel Hill study at the University of North Carolina at Chapel Hill in 1968 and published the results in a paper in 1972. The study reports that, during the time leading up to the 1968 election, the media "appear to have exerted a considerable impact on voters' judgments of what they considered the major issues of the campaign" (McCombs & Shaw, 1972, p. 180). In plain terms, the research McCombs and Shaw documented that news media *can* influence voters' perceptions of political candidates through the topics they choose to report on. The Chapel Hill study was the foundational study in agenda setting theory—a theory that has since led to hundreds of research studies.

In 1963, Bernard Cohen famously stated that, while the media may not be effective in telling readers what to think, the media is "stunningly successful in telling its readers what to think about" (Cohen, 1963). The public may be capable of deciding what they believe about the news, but even in having an opinion they are still thinking about the news—and it is still leaving an impression in the minds of its viewers. In this way, the news media are involved in shaping the public agenda. Agenda setting theorists argue that, in selecting which news to cover, the

media by default decide which issues to thrust into the public eye. McCombs explains that this process is “not a deliberate, premeditated influence—as in the expression ’to have an agenda’—but rather an inadvertent influence resulting from the necessity of the news media to select and highlight a few topics in their reports about the most salient news of the moment” (McCombs, Shaw & Weaver, 2014, p. 2). Rather than theorizing a media conspiracy, agenda setting theory states that the media simply do not have time to cover every news story, so they must prioritize for the audience—and it is in this prioritization that the media then set the agenda for the public. There is some research being published the acknowledges the affect of social media on agenda setting media theory. A 2017 study found that issue salience was higher among individuals who had been shown certain political messages on Facebook (Feezell, 2017). Clearly, even in the digital age of social media and the Internet, the agenda setting theory still holds sway over the public.

The point this brings us to in our discussion of the future trends of artificial intelligence is simply to understand that, from a historical perspective, public interest in AI has always waxed and waned. Since AI’s infancy in the 1950s, there have been periods of almost unbelievable growth as well as periods where “the hype far exceeded AI's accomplishments” (Yang, 2006, p. 17), causing widespread disregard for the topic altogether; however, all the while, consistent scientific breakthroughs have allowed slow advances in AI that have changed society—in many ways, for the better. BBC News recently published a news article by Sam Shead suggesting the possibility that the world may be getting ready for another “AI winter” (Shead, 2020). Citing various media crazes over new AI labs, faster supercomputers, and other advancements in the 10s, the article ultimately reminds researchers of the importance of maintaining a long-term perspective when considering matters such as artificial intelligence. When discussing the merits

of the application of artificial intelligence to the field of advertising and content strategy, it is vital to take a broad, historical perspective. In years past, it is true that the media have set the AI agenda for the public through the publication of books and the production of blockbuster films which glorify AI and overexaggerate the pace of its growth; however, it is important to remember that there has been a decades-long, steady growth in progress of AI technology and software that has helped guide society to the point where it is today. Thus, while the media may have played an agenda setting role in causing excess "hype" about AI in various ways, a moderate view of the topic—and one that encompasses both previous failures and successes—is most likely to be consistent with future trends regarding the role AI may play in facilitating content strategy.

Limited Capacity Model and AI in Advertising

While the limited capacity model is indeed a model and not a true media theory, it offers an interesting and helpful perspective on media from the consumer's point of view in that it highlights the importance of considering newer approaches of producing content for media publication. Each time someone views a billboard advertisement or hears a radio commercial he or she must decide whether to pay attention. With the increasingly vast amount of media information simultaneously competing for the attention of its users, the question of humans' ability to accurately perceive, interpret, and fully absorb media content is an interesting and very relevant point to bring up in regard to the subject of the application of artificial intelligence to content strategy in advertising.

The limited capacity model proposes to view media consumption through the lens of a consumer's limited capacity for information processing. As a theoretical perspective, the limited

capacity model may enhance media professionals' understanding of how consumers think and behave—a highly valuable asset, given that entire advertising industry exists to change the minds and behavior of consumers in targeted ways.

Although Annie Lang first hypothesized the limited capacity model in the year 2000, its conceptual roots stretch back to the 1970s. Neisser, Brunswick, and Gibson's early research on certain topics within cognitive psychology speak of ideas such as memory, feedback, encoding, and retrieval (Baddeley, 1997). These topics are important concepts underpinning the limited capacity theory. Since its founding, Lang and other researchers have performed several more studies on the limited capacity model. While it is still a young theory, the limited capacity model shows promise in its direct applicability to the world of mass media and its drawing from older theories.

Ready to apply her new theory to a real-world project, Lang published a second study in 2006, just six years following her original publication that dealt with effective messaging for cancer awareness and prevention. While Lang's study does ultimately call for further research on the application of the limited capacity model, she did find support in her study to demonstrate the existence of two types of motivation: the appetitive and the aversive. The appetitive motivation would govern people's desire to obtain or consume information, while the aversive would cause consumers to seek to avoid an unpleasant experience (Lang, 2006, p. 1). Lang has recently done research that confirms the essential components of her original theory, including the two different automatic resource allocation mechanisms and the three-step process of encoding, storing, and retrieval of information (Lang, 2017). Notably, other recent research has confirmed the value of limited capacity model in merging biology, psychology, and communication

research for the purpose of better understanding of the way the mind perceives and judges messages (Fisher et al., 2018).

In her paper, The Limited Capacity Model of Mediated Message Processing, Lang hypothesizes that media users have a limited means of processing messages. The limited capacity model is designed to increase communicators' understanding of "how the content and structure of messages interact with a viewer's information-processing system to determine which parts and how much of a communication message is remembered" (Lang, 2000, 1). Lang attempts to firmly ground her limited capacity model into the current body of literature on communication and media theory. With this attempt to ground her new theoretical model in the wealth of available research, Lang sidesteps potential issues that may have otherwise come up that contradict with what is known from the existing, accepted theories.

Lang explains that her goal in setting forth a new model of communication was to illustrate the mechanisms that lie beneath some of the more well-known theories (Lang, 2000). Thus, an important distinction between the limited capacity model and most media effects theories of the twentieth century is that the limited capacity model emphasizes the processes that take place in the mind during communication rather than the short or long-term effects of media content. In a research article Lang et al. explains that Lasswell's 1948 question, "Who says what, in which channel, to whom, and with what effect?" is unanswerable apart from the mental processes that govern consumers' choices (Lang et al., 2003).

Lang's model reminds content strategists that it is becoming increasingly necessary for high-performing brands to have access to tools that allow them to engage consumers with immediacy, clarity of message, and precision in formatting. Having highlighted the vast sum of information available online and the necessity of brands becoming content producers, the

purpose of this thesis—to determine how AI may influence the content production process—now necessitates a close look into the insights of working professionals in the advertising and content management spaces.

CHAPTER 3

METHOD

Method and Procedure

Content Analysis

This study employs content analysis as its method. The term "content analysis" is defined in an article published in 2016 in the journal *NursingPlus Open*: "The purpose of content analysis is to organize and elicit meaning from the data collected and to draw realistic conclusions from it" (Bengtsson, 2016, p. 8). Klaus Krippendorff writes that content strategy essentially exists for the purpose of developing a meaningful understanding of a topic by inferring meaning through context (Krippendorff, 2004). Content analysis once consisted of cutting out and organizing newspaper clippings to understand the media messages being conveyed. In the age of the Internet, the methodology of content analysis has certainly diversified; yet, its core of seeking a deep, meaningful understanding of content and literature remains unchanged. Content analysis may be either quantitative or qualitative, but because its basis is in the interpretation of language, which is inherently subjective, there is a sense in which all content analysis begins and ends qualitatively. Numbers, Krippendorff writes in his often-cited work *Content Analysis: An Introduction to Its Methodology*, are merely "convenient" ways of keeping track of the ideas one notices in the content being analyzed (Krippendorff, 2004, p. 87).

While there are various methods to choose from, the important function of any method used for this study is that which is likely to provide the most accurate picture of how AI is influencing the field of content strategy. As stated by Bengtsson, "No matter what chosen

method, the process of analysis reduces the volume of text collected, identifies and groups categories together and seeks some understanding of it" (Bengtsson, 2016, p. 8). No method of research is flawless; nevertheless, large amounts of error are unlikely to accompany a research design that flows naturally from a thoughtful and honest consideration of the topic and available literature and seeks to define the terms of the study apart from one's own biases, as this one does.

The present study used content analysis to determine the extent to which artificial intelligence can currently reproduce human thought and creativity in content strategy; specifically, it looked at concept generation/ideation and copywriting as two important markers for creative application of AI—thereby addressing the primary research question. Just as Alan Turing's 1950 paper began with the research question, "Can machines think?" (Turing, 1950, p. 433) this study began with the question, "Can machines be creative [regarding content strategy]?" The goal of this study is to highlight the areas in content strategy that are experiencing the most growth to both inform industry leaders on current and future trends and guide future research endeavors in the area of artificial intelligence and content strategy.

Grounded Theory Methods

Grounded theory methods was initially developed by researchers Glaser and Strauss in 1967 (Glaser & Strauss, 1967). Due to their contemporaries' prioritization of testing existing theory rather than on developing new theories, Glaser and Strauss wanted to begin utilizing a methodology that allowed its practitioners to develop new ideas and new theories based on context and inference from data (Timonen, Foley, & Conlon, 2018). According to *Grounded Theory and Grounded Theorizing: Pragmatism in Research Practice*, during the 1950s and 1960s, quantitative research had become more respected than qualitative research among

academics and researchers. This was at roughly the same time as when people began to view the social sciences (such as language arts and music) as inferior to that of the "hard sciences" (such as math and science). Glaser and Strauss wanted grounded theory to provide a more disciplined, structured way of conducting qualitative research to allow researchers who wanted to incorporate qualitative research into their methodology to be able to do so in a more systematic manner (Bryant, 2017). Ultimately, Glaser and Strauss saw the benefit of qualitative research in drawing out new theory from existing text or content.

Over fifty years later, there is now a wide variety of research that incorporates various strands of grounded theory methods. While not necessarily simple, its intuitive format seeks to let the text inform the development of new theory; this makes grounded theory methods attractive even for "novice researchers," since it is a structural framework for identifying and linking complex variables derived from large quantities of data (Tie, Birks, & Francis, 2019, para. 3). Grounded theory methods may be used qualitatively or quantitatively; in this case, the author opted to use a qualitative approach. Grounded theory methods may be especially helpful "when little is known about a phenomenon" (Tie et al., 2019, pp. 1-2), and it is nearly always used to help craft a new theory to aid in understanding the relationships between many different variables (Glaser & Strauss, 1967).

Grounded theory methods was originally developed following the meeting of the two researchers Glaser and Strauss during the mid-1960s. The pair worked together first on a research undertaking called *Awareness of Dying*, in which they employed some of the methods of modern grounded theory to their 1965 study of dying patients and the relationships and variables surrounding the fact that they were aware that they were dying. In 1967, just three years later, Glaser and Strauss wrote *The Discovery of Grounded Theory: Strategies for*

Qualitative Research (Glaser & Strauss, 1967). The overall approach of grounded theory helps researchers see through large quantities of information to find an overarching theme that may not be best explained by current theories.

The author chose to use grounded theory methods for his study on artificial intelligence and content strategy on the grounds that the existing research on the subject was quite scant. The author felt that using grounded theory methods would give this study more weight in the academic realm due to the systematic coding process required of this approach. As a new researcher on this subject, the author also was privileged by the added benefit of not already personally adhering to any existing theories on creativity, AI, or content strategy. This was helpful in allowing the author to focus more on what the data said avoid basing research findings on any apparent presuppositions. A conscious effort to avoid bias also has helped keep this research study from unnecessary bias.

The author approached content analysis using grounded theory methods as his specific analytical technique. The author used grounded theory methods because it is a qualitative approach that uses inductive methodology and reasoning. Rather than simply searching through a sample of data for discrete terminology (based on a biased assumption of what is important), this study surveys a wide range of publications that reference content strategy topics like ideation and copywriting to find information on the relationship between AI and content strategy—a subject that has not yet been researched or widely covered in the media. More specifically, this study employed content analysis on several news articles and blog articles available online to the public to determine common themes that run throughout what various authors and brands have been reporting online about the subject of AI and content strategy. Alongside this goal was the

purpose of constructing variables to present an accurate picture of what these news articles and blogs brought up topically in a way that makes sense and is consistent internally and externally.

Sampling Strategy

Description of Materials

For this study, 78 total advertising and marketing news publications were gathered via Google. The search terms used to find each one were recorded, and the publications were broken down into four main categories: general publications, marketing-related publications, tech-related publications, and blogs. The goal of using these four categories was to gather a representative sample of recent news and discussion surrounding the topic of recent innovations in AI and content strategy.

Initial sources were chosen based on a few criteria. First, they were chosen based on their date of publication. Since this research study is intended to be prospective in nature and not simply an analysis of current literature, only sources published within the past two years were selected. Second, source selection was based on the sources' ranking in Google's search engine. In general, for each term, the author looked at the first three or four search result pages. Past that point, the relevant research started to diminish in quality to the point of being off topic, too old, or pertaining to a category irrelevant to this study (such as blog or website publications from internet digital marketing agencies that sell AI-powered copywriting). Third, sources were selected based on their relevance to content strategy—and specifically to copywriting and ideation. A few sources were not selected because they were off topic by pertaining primarily to web design rather than copy or ideation. Blogs were used sparingly—and only when they

presented new information; in addition, blog sources that appeared driven by sales alone and not a true understanding of the issues were not considered.

Keywords and Search Results

The search results for this study presented different findings than anticipated. While the author expected that there would be a somewhat equal distribution of sources from each of the four categories (marketing, general, technology, and blog publications), the vast majority of relevant search results came from blog publications and marketing publications, with around 30 coming from both marketing publications and blogs. A moderate number of sources—14—came from general publications. The most surprising finding regarding the search results was that only two sources came from technology-based publications. Since artificial intelligence is a technology-intensive entity, the author expected more sources to come from technology-related publications. This assumption proved incorrect.

Final Sample Selection

During this research study, the author gathered 31 articles from marketing publications, 14 articles from general publications, two articles from technology publications, and 31 articles from blogs (both personal and company), making up a total universe of 78 articles (See Appendix B). This study only considered sources from the past two years—2018 and 2019. Bias was limited by choosing professional and news-related sources over more biased sources such as businesses selling their own AI copywriting packages online. By focusing primarily on only news media and professional sources while excluding out-of-date sources and sources whose motives for publishing their content might be tied to their own company's products, the study

limited bias and achieved a more accurate picture of what online news publications were collectively saying about AI and content strategy throughout 2018 and 2019.

When gathering the source titles, the author recorded the keywords that were typed into Google's search engine to find the article. Examples of keywords used to find data during this research study include "ai news copywriting," "artificial intelligence content creation," "2019 ai and copywriting," and "journal advertising ai content strategy." The keywords that yielded the best results were "journal advertising ai content strategy," "artificial intelligence content creation," "2019 ai and copywriting," and "research ai content strategy" (See Appendix B for a complete list of search terms and articles).

In addition, during the source selection process, the author specifically looked for sources that presented new information that had not been previously addressed in a separate source. While some sources duplicated some pieces of information, and while there was certainly some consensus on certain key themes pertaining to AI and content strategy (which will be addressed later in this paper), each source presented a unique perspective. The result of this careful process was, the author feels, a balanced array of perspectives from online news media and blog publications. While many articles provided similar information, the articles selected for coding and in-depth research analysis were the ones that provided new details which were not present in other materials. For example, there were more than eight different articles written on JPMorgan's acquisition of an AI software that can write copy that outperforms copy written by human copywriters (Cheng, 2019). When searching for general terms such as "ai" and "copywriting," many of these articles appeared on the first page of the search results; however, in order to maintain topical balance and not skew the findings toward this particular story, only one such story was incorporated into the final coding process. While it is certainly worth noting that this

topic was of considerable interest to many different news sources, using several similar sources would have hindered the research process by detracting from other new and pertinent news on AI and content strategy.

Some emphasis was placed on offering an inclusive variety of perspectives on the value of artificial intelligence to the field of content strategy as well, but not so much as to dilute the opinions available from the organic search results. The author also felt it was important to prefer sources with established levels of trustworthiness over other sources where possible, even if they were published by organizations with corporate interests. There are academic research studies that exist as a result of corporate funding, yet even academic research must be judged based on its methodology, relevance, and consistency with other sources. The use of sources that appeared to have some corporate interest was permitted only in the case that the organization was a thought leader on the subject of content strategy or AI. An article published by HubSpot was selected on this basis; however, even this article by HubSpot presented numerical data from external sources (Lee, 2018).

Overall, this approach worked favorably. My observation was that the articles published by established marketing or advertising websites tended to present more relevant and detailed information, adding to the clarity of this study's results and discussion. As an important additional note, the process of inspecting and selecting the articles was only done after the articles were collected—not before—in order to prevent my own potential biases from influencing the overall pool of research. The goal of this sampling strategy was to achieve a balanced view of the latest corporate and private innovations in the field of artificial intelligence and content strategy.

CHAPTER 4

ANALYSIS & FINDINGS

Open Coding

The first phase of grounded theory methods is called open coding. In this process, the researcher closely examines the texts to find key themes and relationships between various factors, conditions, and ways of thinking about the subject being researched. The author accomplished this via making notes in the margins of the texts. These notes may be simple summaries of larger portions of text, or they may be questions or observations about the content of the research. The ultimate purpose of open coding is to come up with "concepts that fit the data" in order to find the overarching themes and relationships that make up the collective data (Strauss 1987, 28).

In order to code these articles, the author transferred the text of the articles into a document in Microsoft Word and made notes in the margins about the concepts that were introduced. This research used inductive reasoning to identify the main points the author of each article was attempting to convey. These notes included any position(s) taken by the author(s), noted any key perspectives and opinions provided by the post or article, and highlighted any consistent references and themes that were brought up with any measure of repetition.

Axial Coding and Variables

Axial coding is the second step of content analysis in grounded theory. It takes place immediately after the literature or research is coded for themes, patterns, and findings. Axial coding is meant to yield an organized view of the research, and it is a process oriented toward

locating variables in the research and identifying relationships between these variables that may give rise to a deeper understanding of the topic—and potentially present themes that may be applicable beyond the immediate context in which they were observed (Strauss, 1987). Appendix A of this paper contains a chart of all seven variables identified as a part of this study.

Variables

The first variable was AI's relationship to the copywriter in future years. While some anticipate that AI will play the role of sole creator of content in the near future, most seem to believe AI will act only as a creative assistant for copywriters and content creators—and therefore will not threaten to replace human jobs, but rather facilitate the human creative process. An example of the first view, AI as sole creator, JPMorgan Chase found that Persado's AI bots could write better marketing copy than JPMorgan Chase's own in-house copywriters. JPMorgan Chase now uses Persado for ideation in display ad campaigns (Cheng, 2019). In the article titled, "How and why creatives can make use of artificial intelligence projects," the author states, "AI in the creative industry might have people scared that their jobs will be taken over by robots, but, in reality, it'll be more of a collaborative, assistive relationship" (Clickatell, n.d., p. 14).

The second variable constructed during this study was "Benefits of Using AI for Creative Tasks." The first benefit for this variable provided by this study is that artificial intelligence does not have humanoid preferences. AI is a machine—not a person. It does not need lunch breaks. It does not have needs or preferences as humans do, and so an AI bot will work harder than a human can, for longer—and it will make far fewer mistakes. It is worth noting, however, that this applies exclusively to very mundane areas of work, and not to creatively intensive activities, as will later be discussed. The second benefit within this variable is that AI provides a mathematical

basis for creative decisions. One of the research articles examined during this study reported that CEO and co-founder of the AI copywriting software company Persado, Alex Vratskides, explains, "'To the creative community, the marketing community, this brings accountability and data-driven insight,' he says. 'If you go to any marketing creative out there and you ask, "How did you come up with that, why did you use that word and not that word," they cannot actually answer. With Persado, there is a mathematical answer'" (Pasquarelli, 2019, para. 1). The third benefit outlined under this variable is that AI can now be used to create human-sounding content—particularly when it comes to voice-activated technologies such as Siri, Google Assistant, and Alexa. Consumers are warming up to these voice-activated technologies (Garvin, 2019). The fourth benefit of using AI for creative tasks is that AI is capable of amassing large amounts of data and acting on that information in intelligent ways. In the words of one of the sources in this study, "It's [AI is] increasingly capable of more complex functions and is available 24/7" (Garvin, 2019).

The third variable construct is "Challenges of Using AI for Content Strategy." One such challenge is the maintenance of privacy and trust between consumers and companies that employ AI technology as part of their services. The author's findings on this point were seemingly contradictory; consumers seemed to both value technologies that use AI while at the same time expressing distrust over the increasingly widespread use of AI software, particularly with voice-activated software such as Siri and Google Assistant. According to one source analyzed during this study, while "50% of respondents had used a voice assistant to make a purchase," "When it comes to voice-powered ecommerce, trust and privacy remain top concerns with consumers" (Garvin, 2019). Another challenge of using AI for content strategy, according to this study's research, was market resistance to AI-created material. The idea is that if AI writes much of the

material on the web, at some point users may tire of its homogeny. According to Martin Chuck, writing an online piece of online content for Business 2 Community, “There is such a thing as market resistance. Our current ads, slogans, and headlines may give people satiety, reading the same thing over and over again rendering the copies ineffective. Indeed, the market will eventually get tired of that urgency-inducing copies” (Chuck, 2019). As an important note, this concept of “AI-fatigue” was only observed in this article during this study, and no others. Still, it was included here to bring attention to a potentially valid notion that could lead to valuable future research in this area. The next challenge of using AI for content strategy is that, in ideation, AI is not yet useful in all the ways it could be. One article examined during this study reported IBM research manager John Smith as saying, “’It’s easy for AI to come up with something novel just randomly. But it’s very hard to come up with something that is novel and unexpected and useful’” (Quest, n.d.). Another challenge presented by the research is that company executives often overestimate—or simply misunderstand—what AI can do for them. An example of this is “the perception that AI can handle the job by itself.” Thus, a company’s “perception [of artificial intelligence] affects the success of AI projects” (Chuck, 2019). The next challenge that befalls content-related AI applications is that companies are not experiencing significant revenue increases from creativity-oriented applications. An article by BBC reported in May of 2019 that “over 40% of companies have yet to report any financial gain from AI use” (Costa, 2019). The final challenge for AI presently is its user-friendliness. There was some mention of smaller businesses not having any practical use for AI applications. One article in particular reported, Many merchants, and especially smaller ones, lack the marketing expertise or resources. We aim to solve this problem with easily-accessible and user-friendly technology” (Costa, 2019).

The fourth variable identified in this study was "Goals of Using Machine Learning for Content Strategists." There are many new companies and software completely dedicated to using AI for content strategy, so rather than stating each individual case, the author named three distinct categories that seem to make up most of the current applications of AI to content strategy. The first goal of using machine learning technology for content strategy is to save time. As expressed in one article, "With this innovative software, designers are no longer limited by their own imagination. Instead, they're collaborating with technology to co-create better products with less time used and less money spent on drawn-out brainstorming processes" (Clickatell, n.d., p. 4). It is becoming increasingly necessary to employ machines to accomplish the work normally done by humans. According to one article examined during this study, "Elliott Sedegah, senior product marketing manager at Adobe, claims that thanks to mounting consumer expectations, brands will be faced with increasing pressures to quickly create 'personalized and relevant digital experiences.' The kind of experiences that are only possible with a little help from AI" (Ismail, 2018, para. 3). The second general goal of content strategy is to save money. One source says, "Juniper research estimates that AI will save as much as $8bn [$8 billion] a year by 2020, up from $20m [$20 million] in 2017" (Human Creativity, 2018, para. 1). The third goal of applying AI to content strategy is to sound more human. It appears that even humans are now having a hard time telling the difference between content created by humans and content created by machine learning software. ""Kristin Lemkau, chief marketing officer of JPMorgan Chase, noted that machine learning can actually help achieve more humanity in marketing. 'Persado's technology is incredibly promising,' she said in a statement. 'It rewrote copy and headlines that a marketer, using subjective judgment and their experience, likely wouldn't have'" (Chuck, 2019). As a side note, the company Persado appeared frequently in this study's research

due to its prominence in the media arising from the fact that the company was hired by JP Morgan Chase to replace its own in-house copywriters. There are other copywriting agencies that are based on AI software (such as Article Forge, Phrasee, and Articoolo), but Persado was referenced most often. All of these brands claim their products have a human touch that makes them capable of taking the place of human copywriters. Notably, there are still some issues with the software of some of these AI companies. Regarding the software Articoolo, Chuck (2019) reported having used it himself—with unsatisfactory results. “I did play around with the software a little longer, but by the time it produced an article on copywriting it was so far away from the original topic it was unusable” (Chuck, 2019). Perhaps not all of these software are fully applicable to each aspect of the creative process; nevertheless, these are the three most referenced uses of AI for content strategy.

The fifth variable that the author observed was that there were many specific applications of AI. The following are the primary categories with copywriting and ideation that are being discussed online currently: personalizing email marketing, writing copy for online advertising (such as PPC, or pay-per-click, ads), automating ad spending based on personalized audiences, using chatbots to improve the end user experience and answer customer questions quickly and efficiently, organizing and recommending content, and smart text editing (which consists of checking for errors in spelling, grammar, syntax, and vocabulary). Regarding the first category in this variable, personalizing email marketing, one source reports, “Retailers such as Lacoste are personalizing ads based on customer data. Lacoste [a French clothing and sportswear company] regularly switched up its creative during one programmatic ad campaign, generating 19,749,380 impressions and 2,290 sales across three markets” (Garvin, 2019). Another source reports, “AI makes it easier than ever to actually personalize email content based on the stuff subscribers care

about" (Lee, 2018). According to these sources, programmatic ad targeting is already generating meaningful results for the companies who are already using AI effectively. AI is also being used to write copy for online advertising—though less frequently than for online advertising automation purposes. "While the use of AI in advertising copywriting is still very niche, such automation is widely employed in the selling and distribution of digital ads, and increasingly, in journalism" (Costa, 2019). On this note, the third component of this variable is marketing automation. Many companies are already using some form of automation software for their marketing efforts. According to "How Artificial Intelligence Is Transforming Digital Marketing," a source used in this study, "With AI, businesses can optimize their return on investment by only placing ads in front of relevant viewers. Ads can be bought automatically, then personalized at scale. Many advertisers are already using this technology" (Hall, 2019). Chatbots are another component of this variable. Generally, chatbots seem to be a helpful part of many large companies' marketing plans. This is because "Chatbots are already on numerous websites, as they excel at answering customers' frequently asked questions" (Hall, 2019). Another source reports that chatbots have been particularly successful in their ability to "provide users with specific content, assist with customer service, and generate new leads." In my research on 16 articles, the author found 16 total uses of the word "chatbot." Fortunately, this gave me the opportunity to dig a little deeper on this point to try to discern the mechanism behind why chatbots are coming up so often. A third source in this study helped explain this conundrum by pointing out that chatbots should really be considered a part of the overall consumer experience. "The key fascination with chatbots is the impact they can have on the customer experience. For some businesses, there aren't enough employees or hours in the day to answer customer queries quickly. Chatbots allow customers to help themselves." In addition, the

same source (from Forbes) argues that AI-powered chatbots could be the future of lead generation. “In the future, I wouldn't be surprised to see smart chatbots engaging in sales prospecting, lead generation and customer service” (Hall, 2019). So—perhaps the data here imply that chatbots are most helpful when they make meaningful contributions to the customer experience (such as shorter wait times and improved quality of communication). This might be something worth researching further in a separate study, due to the thematic saturation on this topic and its significant potential for increasing customer retention by improving the user experience for companies’ digital profiles. The fifth theme within the topic of the application of AI to marketing goals lies in organizing and recommending content. The Content Marketing Institute referred to topic clusters as “one of the most effective content marketing strategies” and cited well known content strategy brand HubSpot as its original creator (Dopson, 2018). The ability of artificial intelligence software to assist in the creation of content may be a helpful future point of research. The final aspect of the variable of applications of AI the author noticed in the research was smart text editing. This includes software such as Grammarly that uses a unique combination of machine learning and natural language processing (NLP) to assist writers in coming up with more strategic vocabulary choices, more accurate grammar, and better sentence structure (Sherwood, 2019). According to a blog post by TechTalks (not part of the coded research in this study), “Grammarly might not employ the best AI scientists or the latest deep learning techniques developed at Google and OpenAI. But it has surely found a very good use for deep learning in text processing, one that recognizes the limits of current AI technologies and embraces their strengths” (Dickson, 2019). Consequently, it seems that wider applications of natural language processing (NLP) and natural language generation (NLG) are still out of reach—but they may nevertheless be a helpful topic for future research studies. For instance, if

Grammarly is just the beginning of these kinds of NLP software for marketing application, what can we expect the future of NLG in marketing to look like, both for brands and consumers? This may be a useful question prompting subsequent exploratory research.

The sixth variable identifies two different perspectives on specific copywriting software brought up by the articles in this research study. One perspective identifies some of the software as beneficial, often in the context of increasing revenue or saving time and money (as referenced by the third and fourth variables), while the other perspective identifies challenges of current uses of AI in copywriting. For this variable, copywriting was preferred over ideation, since the research examined seemed to indicate that copywriting as an AI application has made more progress than has ideation. Ideation may have great potential for future innovation and marketing strategy, according to these sources, but AI-powered copywriting has already produced documented results in meaningful, real-world environments. This was also demonstrated by the fact that it is much more difficult to locate quality online articles about ideation than about copywriting. None of the articles in this study seemed to be particularly pessimistic about the use of AI for copywriting; rather, most seemed to highlight some of the benefits of AI and point out areas of potential future growth. Regarding an AI-assisted email campaign for Virgin Holidays, one source quoted Phrasee chief executive Parry Malm as saying, "'Ongoing testing resulted in a revenue increase of several million pounds for their email campaigns - which Virgin Holidays has confirmed was a direct result of using Phrasee's AI technology for email marketing'" (Costa, 2019). This is a great example of the benefits of using AI for copywriting, particularly with email. As regards the many challenges of using AI in copywriting, a brand called Articoolo is being "promoted as a top AI-enhanced copywriting tool." In contrast to some of the other software tacked by this article, such as Article Forge, Acrolinx, and the HubSpot Content

Strategy Tool, when the article's author tried out Articoolo, it did not deliver the anticipated results. "I did play around with the software a little longer, but by the time it produced an article on copywriting it was so far away from the original topic it was unusable" (Sherwood, 2019). While not without its challenges, copywriting software seems to be headed in a positive direction. In the future, many look forward to AI copywriting software being able to provide a more efficient user experience and an upgraded level of personalization for consumers.

The seventh variable deals with the contrasting relationship between the increased demand for privacy and the increased expectation of personalized digital experiences. In January of 2020, a "landmark privacy law" took effect in California that gave consumers more ability to control how much of their data companies could use (California's, 2019). In November 2019, Senator Maria Cantwell proposed the Consumer Online Privacy Right Act, which would, among other things, restrict companies' ability to collect sensitive consumer data, protect consumers from hidden opt-in settings, and create a bureau of privacy under the Federal Trade Commission (Warzel, 2019). In addition, according to a Statista.com article published in October 2019, "Worldwide, 53 percent of online users are currently more concerned about their online privacy compared to a year ago" (Clement, 2019). While on the one hand, it is clear that demands for privacy are at a peak, users respond significantly better to personalized communication. Stated differently—on one hand, consumers fear the growing use of AI, but on the other hand, they prefer digital experiences that involve AI. This seems contradictory, at least on the surface. As stated by one of this study's articles, titled "Artificial Intelligence in Marketing is What Consumers Want," the author argues, "Many companies hesitate to use AI in their marketing because of how it may be perceived by their customers... However, that's the beauty of artificial intelligence. It's a computer or machine that simulates how humans think. As a result, it can

deliver customer experiences with a seemingly human touch, but with the scale and efficiency of a machine" (Garvin, 2019). This study's research has shed light on a number of important future issues in content strategy and artificial intelligence, but perhaps this issue of consumers' simultaneous demands for privacy and for AI-driven personalization must be further researched before any definitive statements may be made on the subject.

Selective Coding

Selective coding is the final stage of the coding process for grounded theory methods. The process of selective coding is that of finding the common thread within the data that ties them all together into an understandable storyline (Strauss, 1987). Often, according to Strauss, this process calls for sensitivity and attention to both detail and the overarching metanarrative in the text; done well, selective coding identifies this singular storyline and, in so doing, explains the complex relationships between each of the variables neatly. Findings from this study's selective coding process will be presented and reviewed in the next chapter.

CHAPTER 5

RESULTS

Initial Observations

After reviewing 78 news and blog articles via Google's Internet search engine (see Appendix B), there were a few main subjects in the research that were observed beyond the variables that seemed to reach a point of thematic saturation. The author noticed that many of the articles examined reported a growing demand for personalized digital experiences and an increased need for scalable content (made possible by AI). In addition, the author also noticed that most of the articles took the view that AI will likely be a helpful creative assistant in the near future—but will not become a sole creator of content, at least not for a while (Chuck, 2019; ; Clickatell, n.d.; Human, 2018; Ismail, 2018; Sherwood, 2019; Quest, 2019). These and other observations will be discussed in greater detail throughout this chapter.

Selective Coding Results

For this study, the overarching theme found in this research study was the relationship between the creative professional and the machine—between the copywriter and the artificial intelligence. This core concept ties together all other variables in a meaningful way that brings a central theme to the research. Variables such as "Functions of Copywriting-Based Software," "Benefits of Using AI for Creative Tasks," and "Goals of Using Machine Learning for Content Strategists" all point back to the main variable: the finding of "AI's Relationship to the Copywriter in Future Years." See Appendix A for a summary of each identified variable.

A large portion of the articles used for this study pertained to specific AI applications of new and existing software. Because of this, there was more fact-based information than expected—and therefore less variance in opinions. In general, though, the theme of AI's relationship to the copywriter seemed to permeate the research, connecting all the variables with one singular, overarching story. This is well exemplified by the first variable: AI's relationship to the copywriter in future years. The first polarity within this variable that has been identified is AI as creative assistant. In this capacity, AI is seen as helping the copywriter with the creative process by providing various services, such as checking for grammar usage and spelling errors, brainstorming a set of new creative ideas for a new marketing campaign from which the copywriter can choose, or classifying content for ease of use by the human copywriter. The other polarity is AI as the sole creator. While we don't currently see AI software writing award-winning advertising campaigns without the guidance and programming of human innovators, in the future, there is some speculation as to the extent to which AI could replace human content strategy jobs. The question of "whether AI has the potential to become a true creative partner or even the creator of solo works of art" (Quest, 2019) is a very valid question to ask in 2020, given the increasing ability of AI technologies to perform work that was once performed by a human being.

The other six variables include benefits of using AI for creative tasks, challenges of using AI for content strategy, goals of using machine learning for content strategists, top marketing applications of AI, perspectives on the value of copywriting software, and demand for privacy versus demand for personalized digital experiences. All these variables, in some form, relate back to the initial variable which deals with the relationship of AI to the copywriter. These variables allow for a deeper consideration of that single construct. For example, the variable

“benefits of using AI for creative tasks” matters only because, in order to know whether computers might replace human copywriters, one first needs to know what benefit(s) are offered by these computers. If the benefit(s) offered by machine learning-enabled computers align closely with the job responsibilities of the copywriter, this implies a scenario where the computer may be acquiring the same abilities that make copywriters stand out in the workplace.

These variables relate to each other to form a better view of what AI is like in the real world. For example, a comparison of the third and fourth variables, which deal with the challenges and goals of using AI, respectively, yields the understanding that, although there are several marked advantages of using AI for content strategy (saving time and money and sounding more human), these variables remain out of reach for many employers. This is a consequence of their misunderstanding of the nature and capabilities of AI. This misunderstanding of the uses of AI relates to another challenge of using AI which was identified in the third variable—that AI is not yet financially profitable for many corporations. Perhaps corporations might make more money from the application of AI to media curation and creation if there were more research on the subject that authoritatively identified the capabilities and applications of AI to media-related fields such as content strategy. Another link between two different variables in this study is that the second variable reports that computers lack preferences. How might this relate to the first variable: AI’s relationship to the copywriter in future years? It is no secret that creatives tend not to lack preferences. Since AI lacks creative preference, this could make AI an excellent creative partner. AI would provide the content strategist with ideas and content but not with contradictory opinions that detract from the creative professional’s own agenda. Another link between the variables is that, while it seems the sources in this study agree that artificial intelligence can make money for corporations via AI-enabled

copywriting software, as stated in the sixth variable, it is abundantly clear that even the highly successful copywriting function of AI can serve only as a help to the human being (in saving time and money, as identified in the fourth variable). In the context of the presence of these simultaneous variables, AI can be successfully applied in a creative setting such as content strategy by performing the iterative, generative, repetitive processes that come before a piece of content is edited, polished, and finished. AI may be capable of performing grunt work, but the true creative weight must still be shouldered by a creative human being—someone who can place the work of a computer in context with what his or her organization may need.

Fortunately for creative copywriters, content strategists, and creative directors, the entirety of the research in this study strongly indicated that computers possess only skills that can make existing copywriting and ideation processes more efficient—not skills that can generate completely new projects from scratch. In other words, a computer may be able to write and read words, but it cannot interpret those words in a broader sociocultural manner and meaningfully apply that information to a future ad campaign. Artificial intelligence may be used to identify topics as a part of a media planner's content strategy, but it cannot otherwise take over the job of the human media strategist. According to the articles examined in this study, this level of creative automation is almost certainly not possible in the coming years.

The primary research question that drove this study was "Is AI capable of carrying out the processes of ideation and copywriting?" This research question was effectively answered. The answer, of course, is not a definite "yes" or "no." Based on this study, it is reasonable to conclude that the most likely occurrence in the future for copywriters, content strategists, and creative directors is that various programs for copywriting and ideation will assist them in developing new creative concepts and digital content—but will not replace their jobs. People will

still be writing and editing articles for some time, but most of the articles in this study agree that the newest software available on the market could feasibly reduce the time spent by humans on some of the more mundane tasks like cropping and editing images or recommending creative images to accompany a campaign. Software like Phrasee and Grammarly can help speed up the workflow of copywriters and their work more accurate (Duffy, 2017), while software like Adobe Sensei can help content strategists produce higher volumes of content in shorter amounts of time with its AI-powered auto-crop, auto-tagging, and swatch creation (Adobe, 2018).. This would free up human content strategists to be more involved in creating new material (Chuck, 2019; Clickatell, n.d.; Human, 2018; Ismail, 2018; Sherwood, 2019; Quest, 2019).

Inside this question of whether AI can replace creative jobs in content strategy (RQ2) is the simpler question (RQ1): "Can AI be functionally creative in copywriting and ideation?" It is not enough to ask whether artificial intelligence is capable of taking over creative jobs without first understanding whether AI is capable of *functional* creativity—that is, creativity that can be applied to the workplace. The results of this study lead me to conclude that AI is indeed capable of functional creativity, but it is nowhere near so advanced that humans should fear AI robots taking over their jobs. AI advances in engineering did not eradicate the need for engineers—nor is it likely to in the near future ("Will Architects and Engineers," 2020). The work that really matters—the innovating, the creating—will remain the responsibility of humans for some time to come. There is currently significant fear among workers that AI may take over their jobs (Douglas, 2019). Even with this, however, it appears it is far more likely AI will replace tasks than that it will replace jobs (McKendrick, 2018). Perhaps at some point in the distant future it may become possible for computers and machine learning software to essentially perform the

tasks a human can perform, but for now this possibility does not seem likely, according to prevailing online opinion.

AI and the Personalization of Digital Experiences

One of the most singular findings of this study has been the repeated assertion that AI is expected to make the customer journey feel more personal. In the 16 articles examined during this study, the word “personalization” was mentioned eight times, and the word “personalize” was mentioned 22 times. Clearly, the idea of AI being used to personalize digital experiences permeates online news and blog content written about AI and content strategy.

For example, in the article “How AI is Transforming Copywriting” by CMSWire, Kaya Ismail writes, “Elliott Sedegah, senior product marketing manager at Adobe, claims that thanks to mounting consumer expectations, brands will be faced with increasing pressures to quickly create ‘personalized and relevant digital experiences.’ The kind of experiences that are only possible with a little help from AI” (Ismail, 2018, para. 3). This and other sources examined in this study seem to view AI as integral to creating the kind of scalable, personalized experiences that consumers are demanding.

As another example of the role personalization plays in the creation and distribution of online media content, one need not look beyond some of the world’s most popular online platforms. “Companies like Netflix, Amazon, and Spotify are raising the bar on consumer expectations for personalized experiences. These companies are using technologies like artificial intelligence (AI) to provide customized recommendations to subscribers and customers in real-time" (DeHard, 2019, p.1). Apparently, the *New York Times* is also cashing in on the value of AI by using “machine learning algorithms to deliver personalized newsletter content." The Times

uses machine learning to automatically recommend content based on articles users have already read. The result was that the likelihood of readers subscribing to the *Times'* free newsletters doubled (DeHard, 2019). It appears that AI may be capable of great feats not just in data-driven projects but in more creatively oriented ones as well.

Customers apparently seem to realize their own desire for personalized digital experiences. According to another source examined during this study, "Salesforce Research found that 84% of consumers said being treated like a person rather than a number was a priority to them. Respondents also doubled down on personalized engagement: 59% said specific communications built off past interactions were important, as were customized offers" (Garvin, 2019, para. 7; Salesforce, 2020, para. 8). Fortunately, companies like Adobe are putting resources into figuring out how to use AI to boost the personalization of ads. Speaking as a principal solutions consultant for Adobe, Richard Curtis explains, "the machine [AI] will continue to learn customer patterns that help you fine-tune your personalization even further...More personalization leads to more clicks" (Adobe Enterprise Content Team, 2019, para. 27).

Yet another source in this study reports that customers expect quality digital experiences "at all times, in all places, and on all platforms" (Adobe Enterprise Content Team, 2019). However, although the need for personalized media seems to be pervasive, another source suggests that one particular medium—email—may be the most valuable medium through which to implement an AI-driven approach. "Evergage and Researchscape International found that 70 percent of organizations surveyed said email was the most important marketing channel to personalize" (Lee, 2018, para. 39). In the years to come, it certainly will be interesting to see

what new software may be developed to fit this growing and ubiquitous need for personalized digital experiences.

AI and the Need for Scalable Content

The research examined in this study also indicated that a major area where AI could be beneficial in the future is in working with scalable content. The term "scalable content" means "content that's expandable and contractible within a moment's notice," for the purpose of being replicated and distributed across multiple media formats (Galileo Tech Media, 2019, para. 5). Along with producing the content, it is also important for companies to be able to easily distribute this content across a variety of media to engage with consumers.

One of this study's sources comments on what some companies are doing to address this problem. "Creating high-quality content, at scale, is a challenge that almost every organization faces. Larger budgets can help, but as the need for content grows, and as more channels emerge, brands are turning to artificial intelligence (AI) to help with the content creation process" (Ismail, 2018, para. 1). Adding to this sentiment, according to experts at Adobe, "47% of marketers say that producing content at scale is one of their biggest challenges" (Adobe Enterprise Content Team, 2019). This study's source material indicated at several points that AI likely would have the capability in the future of producing higher volumes of content at scale, allowing time for human employees to direct their processes to other endeavors with the goal of accomplishing a greater amount of work.

Another source reports, "AI enables ideas to scale, test and measure more easily and quickly, producing hundreds of possible iterations of an idea instantly, which a human never could" (Human Creativity, 2018). This scale can then be applied to numerous editing processes

to aid human content strategists. “When trained on very large amounts of data, deep-learning systems can identify objects in photos, recognize faces and facial expressions, describe the style or mood of an image, and perform any number of other humanlike tasks – all at high speed and at scale” (Adobe Enterprise Content Team, 2019). Given the growing demand for content and the growing media channels each piece of content must be formatted for, the ability of AI to assist humans by taking their ideas and transforming them into all the different necessary formats is becoming highly valuable in today’s media landscape (Hall, 2019). Though the research is clear that producing scalable content seems a promising new process for AI to renovate, only time will tell the extent to which AI will be capable of producing scalable content for content strategists in the coming years.

CHAPTER 6

DISCUSSION

Answering This Study's Primary Research Question (RQ1)

The primary research question (RQ1) this study seeks to answer is whether artificial intelligence is capable of the creative processes of ideation and copywriting as they apply to content strategy. Upon a systematic, careful review of the 16 sources examined during this study's coding process, it is clear that many online sources now take the viewpoint that AI is certainly capable of the creative processes of copywriting and ideation in content strategy. As to whether this conclusion may affect the day-to-day employment of content strategists and copywriters, this follow-up question (RQ2) will be examined in the next section.

What New Theory Came of This Study?

As previously stated, grounded theory methods exists to help researchers publish new theory to add meaningfully to an existing body of research through context-driven, inductive research. The principle question (RQ1) that initially drove this study's research was the question as to the extent of of the role AI would play in the near future regarding the creative work of copywriting and ideation. Along with this first question is the secondary question (RQ2) of the likelihood that AI could be capable in the near future of overtaking the jobs of content strategists and copywriters. The present and concluded study's selective coding process has yielded the new theory that AI's most likely future place in the creative processes of content strategy is not in the chair of the creative (as a replacement for the creative)—but beside creative as their assistant.

Will AI Replace Content Strategy Jobs (RQ2)?

AI has long been thought of as a futuristic replacement for human thinking and ingenuity, but just how far is AI capable of going in the coming years? Since AI is proving capable of creative tasks such as ideation and copywriting, this has led to the understandable fear that AI might take over creative jobs. In fact, CNBC published the results of a survey it conducted of Americans in the workforce in 2019. While 33 percent of insurance workers feared replacement by AI technology in the next five years, 35 percent of transportation and delivery workers feared replacement, the largest category of employees who feared AI replacement were in the category of "Advertising and marketing," with 45 percent of advertising and marketing employees expressing concern about the potential for their jobs to be replaced by artificial intelligence (Douglas, 2019). Clearly, the fear of AI replacing one's job is not bound to a single career field and is also not an isolated experience.

Apple co-founder and computer developer Steve Wozniak made some comments on this very issue in a February 2018 interview. In this interview, when asked about the prospect of artificial intelligence replacing human jobs, Wozniak replied, "No machine sits down and says; humm, what should I work on? Humans tell machines what to work on. Machines just do it well for us. We are building technology which will make things easier for us. Machines do just the grunge work billions of times faster, all so that we can apply our minds to other things" (Agarwal & Singh, 2018). This statement is in precise agreement with the findings of this study. A computer may process, but even deep learning—the most advanced form of artificial intelligence—is yet incapable of understanding the world in the same way as a human, and it is therefore not capable of taking the place of a human. AI must be programmed to accomplish

meaningful tasks. It is not yet capable of independent functionality, and the articles examined in this research are all agreed on this point.

This study has considered the creative tasks of copywriting and ideation to be two fundamental pillars of content strategy. Thus, the singular question that led to this study is this: “Can artificial intelligence replace creative jobs in content strategy?” While no one is capable of predicting future trends with complete inerrancy, the consensus of the data this study employs firmly suggests that AI will continue to make some significant advances to the fields of both copywriting and ideation in the coming years; however, fortunately for those whose daily jobs require either copywriting or ideation, it is highly unlikely that these new advances in AI described in this study will replace humans who work in these sectors of the job market. Rather, the current speculation of marketing sources, news sources, and blogs contend that AI’s most probable role in the creative aspect of content strategy would be one of a creative assistant (Chuck, 2019; Clickatell, n.d.; Human, 2018; Ismail, 2018; Sherwood, 2019; Quest, 2019).

In simple terms, the prevailing online opinion strongly suggests that, in the future, AI will probably assist humans in their creative work—not take over their jobs. As many as six out of the 16 articles examined during this study commented on this point specifically. Each had the same opinion on the question of AI replacing human content marketers. “I personally think that copywriters and artificial intelligence both have a place in the industry. They will share the work desk, helping each other complete their tasks” (Chuck, 2019). “AI-enabled copywriting tools are here to help but not replace human writers” (Sherwood, 2019). “This will not lead to the replacement of creatives, but will rather give rise to a new type of creative” (Clickatell, n.d., para. 8). “According to Christine Connor, managing director, Accenture Interactive UKI, AI will "not replace the creative process" because there will always be the need for "a moment of

intuition and a leap of faith, which is largely a human creative process...Rather, AI will enhance the existing process." (Human Creativity, 2018, para. 8). "And while it will never replace the human soul of creativity, AI can certainly offer many benefits serving as a smart, efficient and inspirational assistant" (The Quest, 2019, para. 18). "It is doubtful AI can ever replace the true creativity the human brain can...AI creativity can be used as inspiration and to improve the work of human artists, whether it's a collaboration or behind the scenes" (Aceyus, 2019, para. 5). From a qualitative standpoint, the notion that AI will likely act as creative assistant to content strategists in the years to come seems worthy of some repute, since a wide variety of popular marketing-related publications all agree on this point.

Augmenting—Not Replacing—Human Creativity

The question of AI replacing human jobs must be grounded in the larger societal discussion of what AI's role will be in the future in the context of creative, human jobs. Relating to this, the discussion concerning the role of AI was actually alive and well even before the age of the Internet. This section will provide a specific example of how a younger Steve Jobs addressed societal fears of AI taking over their livelihoods. This section will explain why the concept of AI functioning as a creative assistant for humans is not a new concept and why AI should be valued rather than feared in the workplace.

In a 1981 interview broadcasted on live television with Nightline's then host Ted Koppel, Apple founder Steve Jobs spoke with writer David Burnham about the potential dangers that might come with the rise of the personal computer. His remarks were almost prophetic in that, although he made his remarks nearly forty years ago, they still apply today—39 years later. When asked about these potential dangers that might come with the rise of personal computers,

Jobs explained that ultimately what computers would do for mankind was increase "man's ability as a toolmaker to fashion a tool to amplify an inherent ability that he has." In context, Jobs was saying that the computer, far from replacing man's work, would simply amplify man's creative ability to allow him to produce his work more efficiently and at a higher quality. In this interview, Jobs also said, "Right now we're [Apple is] at the mechanical part of intelligence, where one of these devices [contextually, an Apple personal computer] can free a person from many of the drudgeries of life and allow human to do what they do best, which is to work on a conceptual level—to work on a creative level" (Wealth, 2017, 3:32). This much is clear from the above statements: the notion of technology functioning as a creative assistant to humans was alive and well in the early 1980s. Times have certainly changed in many ways, but Steve Jobs' remarks remain striking in how applicable they are to today's discussion regarding the potential dangers artificial intelligence may pose to the public, both in terms of privacy and replacing jobs.

One source comments that AI will work beside content marketers rather than in their stead (Henson, 2017). Another source reports a similar view: "As AI provides opportunities for augmenting creativity, automation means creatives are free for more strategic thinking. In addition, AI enables ideas to scale, test and measure more easily and quickly, producing hundreds of possible iterations of an idea instantly, which a human never could" (Human Creativity, 2018, para. 9). Other online marketing sources published as recently as the past two years also consistently bear out this notion (Ismail, 2018; Sherwood, 2019; Clickatell, n.d.; Human, 2018; Chuck, 2019; Quest, 2019), further cementing the validity of this key finding.

Guiding Theories

This study's literature review included the mention of two media theories that are both helpful in guiding productive discussion on the subject of AI and content strategy.

Agenda Setting Media Theory

The first is agenda setting media theory, first proposed by researchers McCombs and Shaw (1972). As stated earlier in this paper, agenda setting media theory takes into account that the public's perception of media is generally formed by the decisions media outlets make regarding which news to cover. Those decisions play the vitally important role of setting the public's agenda, making up what the public views as important news versus what is unimportant news. In other words, the media decide what information to place on the public's radar. An example of how the media have set the public's agenda regarding the use of artificial intelligence is readily apparent when one considers the vast number of science fiction films which feature artificial intelligence technology either taking over the world or dominating mankind in some way. The media's massive influence in setting the public's agenda on the subject of artificial intelligence has certainly contributed to inappropriate levels of concern regarding the use of AI in general; it has also likely contributed to the general public's exaggeration of the ease with which AI might take over their jobs. The reality, of course, is that artificial intelligence is very different from what most science fiction movies depict. Although artificial intelligence may be the subject of considerable "hype," a moderate view of the progress researchers are making in AI is essential when attempting to elicit a productive, accurate discussion of the merits, dangers, and promises of AI for content strategists in the coming years.

Limited Capacity Model

The second media theory has not technically able to be defined as a full "theory," but it is nevertheless a helpful model for understanding the way consumers interact with media content. The limited capacity model, first developed by Annie Lang in 2000, views media content through the lens of human beings' limited capacity for information gathering, analysis, and comprehension (Lang, 2000). Viewing the discussion of artificial intelligence and content strategy through this lens helps to remind researchers and developers of new AI technologies that humans have a unique way of processing information. Lang's limited capacity model reminds researchers and content strategists that personalizing digital experiences is becoming essential in today's media landscape. In light of this, help from artificial intelligence could dramatically improve the field of content strategy, allowing companies to reach more people with personalized, human content than ever before.

Study Strength: Internal Consistency

It is important to ground the more definitive statements in this study in the internal agreement of its sources. This study does not rely on mass amounts of data for its conclusions; however, this is a strength rather than a weakness because it allows for the identification of topical themes and patterns that might otherwise remain hidden in the data. The following paragraphs explain why this study's greatest strength is its internal consistency.

The Encyclopedia of Research Design published an article in 2010 about internal reliability and consistency. In this article, the author argues that a work may be deemed internally consistent when it includes enough sources to fully saturate a topic. For narrow topics, this source reports that only a few items might be necessary to accomplish this (Salkind, 2010).

That is why the present study allowed topics to pass from the open coding process into the axial coding process only after each one achieved some meaningful level of thematic saturation. Topics that were only brought up in one or two insignificant instances were ignored, whereas topics that appeared consistently and throughout the sources were examined further in the axial coding process.

Each source should behave in relative harmony to the other sources in order to create a singular picture of the opinions of online news media and blog sources on the future of AI and content strategy. This accomplishes an important purpose: it adds credential to the overall study in that if multiple sources written from multiple, different viewpoints say the same thing about the same subject, this harmony of message may be deemed more trustworthy than if each article had presented separate opinions. For research so based on the various opinions of online news and blog writers, neither of which are known for their inherent credibility, it is of great importance that there is internal consistency among the sources. A high degree of internal consistency on a subject implies a consensus of opinion among these various authors—opinion that could result in the subsequent development of new theories that more focused research may later confirm.

A very high level of consistency was observed in the sixteen sources during this study. The author noted very little discord among the sources when it came to matters of fact (such as the degree to which humans are currently able to rely on AI to perform their various tasks and the various types of AI currently employed in content analysis). Though the sources as a whole did not disagree with each other per se, each source did have a slightly different focus (whether email copywriting, auto-text copywriting, copyediting, ideation for email headlines, ideation for campaign creative, etc.). The fact that each source came from a slightly different perspective,

with different goals, different writing styles, and coming from a different brand, demonstrates that the previously stated findings and results are worthy of a higher degree of trust. If only online websites for AI-powered copywriting software believed AI would assist humans in their jobs, while other sources disagreed, it would be obvious that their goal was simply to attract new business. The comparative variety of articles used in this study imply an absence of goal-related bias among the sources examined.

Limitations and Future Directions

Limitations

While the author of this study attempted to avoid bias by allowing the data to inform this study's research findings, no study is entirely without its limitations. One key limitation of this study lies in the fact that its findings are discrete and not generalizable. This is due to this study's reliance on relatively few sources. While this qualitative approach was highly beneficial in that it allowed for greater detail in textual analysis and the unearthing of key thematic elements and their complex relationships to each other, it is important to note that this approach has not yielded a high level of generalizability. Indeed, generalizability is not generally the goal of qualitative research, although qualitative research and generalizability are not necessarily mutually exclusive (Carminati, 2018). Another limitation of this study is that this study only reviewed online publications. As a result, it could be that material published across various other media might have yielded different findings. Perhaps the most significant limitation to this research study is that it seeks to answer an impossible question. No amount of devotion to one's research can produce an accurate prediction of the future. This study, therefore, does not proport to predict the future; instead, the author believes this present study is simply a fair and factual

estimate of the most popular and current online sentiment regarding the subject of the impact of artificial intelligence on content strategy.

Future Directions

This present study yielded specific results by looking qualitatively at a handful of sources; however, future research could achieve success by employing a significantly larger sample size and using a more quantitative methodology, thereby providing valuable information to the research community as well as corporations and content strategists. Since this study lacks generalizability, future studies about useful applications of AI for businesses and marketers could benefit a wide variety of consumers. Future research ideas could be borrowed from this study's axial coding process, which resulted in seven different variables, each with its own unique focus. Such a quantitative approach could be used to research the broader societal impressions, expectations, and hopes for artificial intelligence. This could be valuable to companies who invest their resources in AI. An example of a variable identified in this study that could be used to stimulate further research would be variable seven, which identifies a point of apparent inconsistency among the public's perception of AI. Variable seven deals with the public's need for privacy as well as its simultaneous expectation for personalized digital experiences that require the use of personal data. In addition, researchers could conduct quantitative research on the public's expectations and hopes for AI to create good digital content could prove helpful to companies who design user experience software. Some potentially helpful questions that could be addressed in future research include, "How would a company decide whether to invest in AI software?" or even, "Should small-to-mid-size businesses use copywriting software, or should they do their own in-house copywriting?" There are many similar questions that could yield highly valuable and meaningful results.

Conclusion

In conclusion, the primary coded variable discovered in this study was that of the relationship of the copywriter to the machine—whether the machine threatens the jobs of copywriters and content strategists (as many worry). This study also developed the new theory of AI and content strategy that the role of AI in the near future for content strategy will be one of creative assistant rather than creative director. Fortunately for copywriters and content strategists, it seems that AI likely poses no significant threat to those careers. In fact, it is actually expected by many marketers to boost the value of those careers through automating intricate and often time-consuming processes and acting as a creative assistant to the creative professional, allowing more time for the complex creative processes that are so inherent in their jobs.

The author agrees with the late English mathematician, logician, and computer scientist Alan Turing who concluded his seminal paper "Computing Machinery and Intelligence" by saying, "We can only see a short distance ahead, but we can see plenty there that needs to be done" (Turing, 1950, p. 460). There is indeed plenty of room for growth in understanding in the area of artificial intelligence and content strategy. It is the author's hope that more research will be done on this subject in the future—both for the edification of content strategists and for the purpose of discovering the creative boundaries of artificial intelligence.

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APPENDICES

Appendix A: Axial Coding Variable Table

This table represents all seven variables identified during this study's axial coding process.

Variable #	Variable	Variable Type	Categories/Dimentions
1	AI's Relationship to Copywriter in Future Years	Continuous	AI as sole creator, AI as creative assistant
2	Benefits of Using AI for Creative Tasks	Categorical	AI does not have human preferences, AI provides a mathematical basis for making creative decisions, AI can create human-sounding content, AI can act intelligently on large quantities of data
3	Challenges of Using AI for Content Strategy	Categorical	Maintaining privacy and trust between consumers and corporations that use AI, market resistance to AI-created material (AI fatigue), user-friendliness
4	Goals of Using Machine Learning for Content Strategists	Categorical	Saving time, saving money, generating human-sounding content
5	Specific Applications of AI	Categorical	Personalizing email marketing, writing copy for online advertising, automating ad spend based on personalized audiences, using chatbots to improve user experience, organizing and recommending content, smart text editing
6	Perspectives on Copywriting Software	Continuous	Copywriting software is beneficial, copywriting software presents challenges
7	Contradicting Demand for Privacy and Personalization	Continuous	Increased demand for privacy, increased demand for personalization of digital experiences

Appendix B: Original Sources

These four tables are the original 78 sources gathered for this study. They are taken from four primary categories: marketing publications, general publications, technology publications, and blog articles.

Marketing Publications

1	Column1	Date	Title	URL	Publication	Search Term
2						
3	Marketing Pubs	Sep-19	No, Artificial Intelligence Isn't Coming After Copywriting Jobs	https://www.adweek.com/creativity/no-artificial-intelligence-isnt-coming-after-copy	AdWeek	2019 ai and copywriting
4		Sep-19	Will Artificial Intelligence Replace Copywriters?	https://www.awai.com/2019/09/will-artificial-intelligence-replace-copywriters/	American Writers & Artists Room, Inc.	2019 ai and copywriting
5		Nov-18	How AI is Transforming Copywriting	https://www.cmswire.com/digital-marketing/how-ai-is-transforming-copywriting/	CMSwire	2019 ai and copywriting
6		Aug-19	JPMorgan Chase has an AI copywriter that writes better ads than humans can	https://qz.com/work/1682579/jpmorgan-chase-chooses-ai-copywriter-persado-to-wr	Quartz at Work	2019 ai and copywriting
7		Jul-19	CHASE COMMITS TO AI AFTER MACHINES OUTPERFORM HUMANS IN COPYWRITING TRIALS	https://adage.com/article/cmo-strategy/chase-commits-ai-after-machines-outperform	Ad Age	2019 ai and copywriting
8		Mar-19	The top 6 AI-enabled copywriting tools	https://www.theukdomain.uk/the-top-6-ai-enabled-copywriting-tools/	The UK	2019 ai and copywriting
9			Will AI really take over copywriting – and if so, what can we do about it?	https://www.breakthroughmarketingsecrets.com/blog/will-ai-really-take-over-copyw	Breakthrough Marketing Secrets	2019 ai and copywriting
10		Sep-18	Artificial Intelligence in Advertising: How Marketers Can Leverage Artificial Intelligence Along the Con	https://www.researchgate.net/publication/327500836_Artificial_Intelligence_in_Ad	Journal of Advertising	journal of advertising ai content strategy
11		Sep-18	What the Heck Is AI and How Can It Transform Content?	https://www.convinceandconvert.com/podcasts/episodes/what-the-heck-is-ai-and-h	Convince and Convert	content strategy ai
12		Nov-19	A Review of Artificial Intelligence Adoptions in the Media Industry	https://www.tandfonline.com/doi/abs/10.1080/14241277.2019.1695619?journalC	International Journal on Media Management	journal of advertising ai content strategy
13		Sep-19	The Impact of AI on the Advertising Process: The Chinese Experience	https://www.tandfonline.com/doi/abs/10.1080/00913367.2019.1652122?src=recs	Journal of Advertising	journal of advertising ai content strategy
14						
15		Oct-19	3 Ways Publishers Are Using AI to Meet Reader Expectations	https://www.pubexec.com/post/publishers-using-ai-to-meet-reader-expectations/	Publishing Executive	journal of advertising ai content strategy
16		Aug-19	This A.I. Bot Writes Such Convincing Ads, Chase Just 'Hired' It to Write Marketing Copy	https://www.inc.com/betsy-mikel/this-ai-bot-writes-such-convincing-ads-chase-just-h	inc.com	journal of advertising ai content strategy
17		Sep-19	How to Use AI for Content Success [Research]	https://www.marketingaiinstitute.com/blog/research-on-ai-in-content-marketing	Marketing AI Institute	research ai content strategy
18		Jan-19	Opportunities for AI in Content Marketing Easily Explained	https://contentmarketinginstitute.com/2019/01/artificial-intelligence-content-mark	Content Marketing Institute	research ai content strategy
19		2019	Artificial Intelligence in Marketing Is What Customers Want	https://www.salesforce.com/products/marketing-cloud/best-practices/artificial-intel	SalesForce	research ai content strategy
20		2019	AI Needs Content Strategy More Than Ever	http://www.econtentmag.com/Articles/Column/Natural-Content-Practices/AI-Needs	Econtent Magazine	research ai content strategy
21		Aug-19	Marketing's Holy Grail is Within Reach with AI-Driven Market Research	http://www.econtentmag.com/Articles/Editorial/Industry-Insights/Marketings-Holy-(	Econtent Magazine	research ai content strategy
22		Aug-19	Artificial Intelligence for Content Marketing and Content Creation	https://emerj.com/ai-podcast-interviews/artificial-intelligence-for-content-marketing	Emerj	artificial intelligence content creation
23		Nov-18	What Future Does AI Have In Content Creation?	https://digitalagencynetwork.com/future-of-ai-in-content-creation/	Digital Agency Network	artificial intelligence content creation
24		2019	AI Marketing: How to Leverage New Technology to Maximize Results?	https://thekeenfolks.com/keensights/artificial-intelligence-marketing/	thekeenfolks	artificial intelligence content creation
25		Aug-19	How Is Artificial Intelligence Changing Content Marketing?	https://www.palmbeachcontentco.com/blog/2019/8/artificial-intelligence-marketin	Palm Beach Content Company	artificial intelligence content creation
26		Oct-18	AI-powered copywriting for Facebook has arrived	https://www.thedrum.com/industryinsights/2018/10/02/ai-powered-copywriting-fa	The Drum	ai news copywriting
27		Aug-19	JP Morgan Chase taps AI copywriting tech	https://www.warc.com/newsandopinion/news/jp_morgan_chase_taps_ai_copywritir	WARP	ai news copywriting
28		2019	How and why creatives can make use of artificial intelligence projects	https://www.clickatell.com/articles/technology/creative-artificial-intelligence-projec	Clickatell	ai news idea creation ideation
29		Aug-18	Prototyping a collaborative tool for human-machine ideation	https://becominghuman.ai/prototyping-a-collaborative-tool-for-human-machine-ide	Becoming Human: Artificial Intelligence Magazin	ai news idea creation ideation
30		Jun-18	Human creativity v machine creativity: when artificial intelligence gets creative	https://www.campaignlive.co.uk/article/human-creativity-v-machine-creativity-wher	Campaign Live	ai news idea creation ideation
31		Jan-18	How Machine Learning Boosts Your Digital Creativity	https://theblog.adobe.com/machine-learning-boosts-digital-creativity/	Adobe Blog	ai news idea creation ideation
32		? (2019)	Human Creativity in the Age of Artificial Intelligence	https://www.adobe.com/content/dam/acom/en/sensei/pdfs/human-creativity-in-the	Adobe	adobe artificial intelligence ideation
33		Dec-19	Back to the Future? 90 Content Marketing Predictions for 2020	https://contentmarketinginstitute.com/2019/12/content-marketing-predictions-202	Content Marketing Institute	content strategy future

General Publications

43	General Pubs	Sep-19	Automated Copywriting And Other Recent Trends In Marketing	https://www.forbes.com/sites/forbestechcouncil/2019/09/09/automated-copywriti	Forbes	2019 ai and copywriting
44		Oct-19	AI powered copywriting arrives for Facebook	https://www.fanaticalfuturist.com/2019/10/ai-powered-copywriting-arrives-for-face	Fanatical Futurist	2019 ai and copywriting
45		Jul-19	JPMorgan Chase Taps AI to Make Marketing Messages More Powerful	https://www.wsj.com/articles/jpmorgan-chase-taps-ai-to-make-marketing-messages-r	Wall Street Journal	journal of advertising ai content strategy
46		May-18	AI in Broadcast & Media – SnapShot	http://theiabm.org/ai-broadcast-media-snapshot/	IABM	journal of advertising ai content strategy
47		Aug-19	How Artificial Intelligence Is Transforming Digital Marketing	https://www.forbes.com/sites/forbesagencycouncil/2019/08/21/how-artificial-intell	Forbes	journal of advertising ai content strategy
48		2018	AI in China's Advertising industry: How is AI changing the future of advertising |Daxue Consulting	https://daxueconsulting.com/ai-china-advertising-industry/	Daxue Consulting	journal of advertising ai content strategy
49		Jan-19	How Alphabet's AI Robot Is Helping The New York Times Replace Its Public Editor	https://www.thedrum.com/opinion/2019/01/22/neural-storytelling-how-ai-attempt	The Drum	artificial intelligence content creation
50		Mar-19	Artificial Intelligence Can Now Write Amazing Content – What Does That Mean For Humans?	https://www.forbes.com/sites/bernardmarr/2019/03/29/artificial-intelligence-can-n	Forbes	artificial intelligence content creation
51		Jun-19	The Rise Of AI Powered Content	https://medium.com/quick-code/the-rise-of-ai-powered-content-9cdf2c5b10f7	Medium	artificial intelligence content creation
52		2019	How to Create Effective Content With the Help of Artificial Intelligence	https://www.allbusiness.com/how-to-create-content-artificial-intelligence-116778-1	All Business	artificial intelligence content creation
53		May-19	The pun-loving computer programs that write adverts	https://www.bbc.com/news/business-47944276	BBC	ai news copywriting
54		Oct-19	When Copywriters Drank Spoiled Milk Due to Artificial Intelligence	https://www.business2community.com/marketing/when-copywriters-drank-spoiled-	business2community.com	ai news copywriting
55		Aug-19	The Role Of Design Thinking In Building Transformative AI	https://www.forbes.com/sites/forbestechcouncil/2019/08/15/the-role-of-design-thi	Forbes	ai news idea creation ideation
56		Jul-18	Five Ways To Boost Your Online Content Strategy Right Now	https://www.forbes.com/sites/forbesagencycouncil/2018/07/16/five-ways-to-boost-	Forbes	content strategy future

Technology Publications

69	Tech Pubs	-2019	The quest for AI creativity	https://www.ibm.com/watson/advantage-reports/future-of-artificial-intelligence/ai-c	IBM	ai news idea creation ideation
70		Jul-19	Top 10 Content Marketing Trends Impacting your 2020 Content Experience Strategy	https://www.martechadvisor.com/articles/content-experience/top-10-content-mark	MarTech Advisor	content strategy future

Blog Articles

84	Blogs	Apr-19	AI copywriting: An overview	https://econsultancy.com/ai-automated-copywriting-marketing-overview/	Ecoconsultancy	2019 ai and copywriting
85		Oct-19	How the Wall Street Journal is using deep learning to inform content strategy	https://medium.com/the-wall-street-journal/how-the-wall-street-journal-is-using-dee	Wall Street Journal Blog	journal of advertising ai content strategy
86		Oct-18	AI and Content Marketing: How Machine Learning Can Shape Your Strategy	http://blog.cmglocalsolutions.com/ai-and-content-marketing-how-machine-learning	Local Solutions	journal of advertising ai content strategy
87		18-Feb	AI in Content Marketing: 3 Frequently Asked Questions	https://www.searchenginejournal.com/artificial-intelligence-in-content-marketing/2	Search Engine Journal	journal of advertising ai content strategy
88		Jun-19	5 Ways AI Has Changed Ecommerce	https://www.searchenginejournal.com/atomic-reach-ai-changed-ecommerce/310145	Search Engine Journal	journal of advertising ai content strategy
89		Mar-19	6 Ways Artificial Intelligence is Impacting Advertising Sales in Media Companies	https://www.advendio.com/artificial-intelligence-impacting-advertising-sales-media-	Advendio blog	journal of advertising ai content strategy
90		Dec-19	9 Applications Of Artificial Intelligence In Digital Marketing That Will Revolutionize Your Business	https://blog.adext.com/applications-artificial-intelligence-ai-digital-marketing/	Adtext	journal of advertising ai content strategy
91			How Artificial Intelligence is Changing Content Marketing	http://www.curata.com/blog/artificial-intelligence-content-marketing/	Curata blog	journal of advertising ai content strategy
92		2019	How To Unlock More Profitable Content With AI	http://www.curata.com/blog/how-to-unlock-more-profitable-content-with-ai/	Curata blog	journal of advertising ai content strategy
93		Jul-19	22 Digital Marketing Trends You Can't Ignore Going Into 2020	https://www.singlegrain.com/digital-marketing/digital-marketing-trends-2020/	Single Grain	journal of advertising ai content strategy
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