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FEARLESSLY FORWARD

HARNESSING GENERATIVE AI FOR UNPRECEDENTED MARKETING SUCCESS

By Cathy McKnight
Chief Problem Solver
THE CONTENT ADVISORY

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An essential guide to successful adoption and implementation of generative AI tools, for marketers and content administrators

This guide is essential reading for marketers and content administrators who want to successfully adopt and execute generative AI tools in their practice. It covers the basics of generative AI and provides step-by-step instructions and valuable insights to ensure a smooth and effective start to your AI journey. This guide gives you the tools and knowledge to harness the power of generative AI while avoiding the pitfalls.

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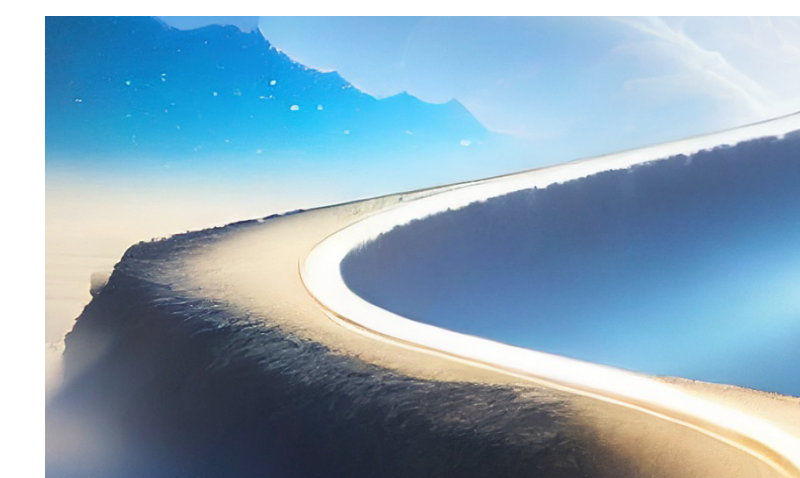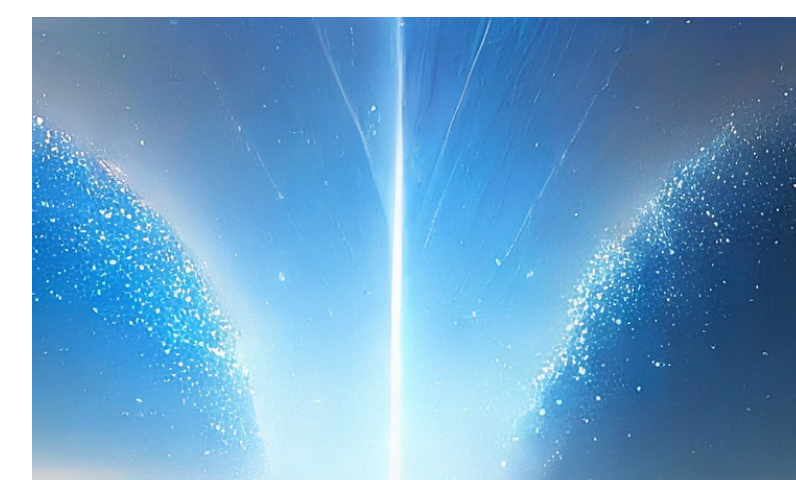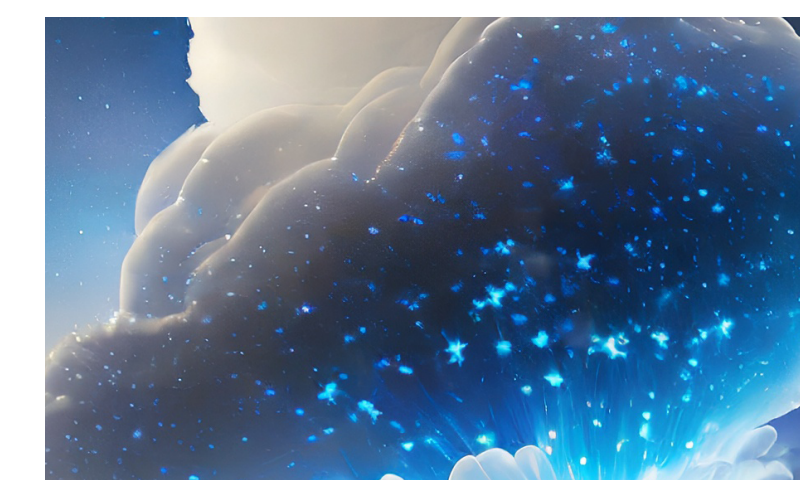
INTRODUCTION

Generative AI has taken the world by storm. No other technology in history has ramped up as quickly or as pervasively, making it a transformative force of the 21st century. Companies of all sizes are quickly seeing the immense potential benefits that generative AI brings to their operations, and marketing in particular. However, a countervailing force — fear — is dampening the excitement for many.

Generative AI-powered technologies promise to revolutionize traditional marketing strategies, unveil novel solutions, and provide businesses the chance to thrive like never before. But the fear of job displacement, intellectual property rights disputes, ethical dilemmas, and security breaches complicates adoption of these technologies.

With generative AI, marketing teams can create personalized, creative, and contextually relevant content on a massive scale, leading to increased customer engagement and conversion rates. Will there be fewer people to manage all that content? Perhaps, but the resulting automation and efficiency will enable and allow marketers to leverage their time and resources more effectively, enhancing overall productivity. Will the net result be an onslaught of "average" content? For some, yes, but for others, generative AI adoption could become a competitive advantage for organizations looking to stay ahead in the rapidly evolving marketing landscape. Research shows that marketers are equally excited and uneasy about all the promises being made. But businesses must overcome the fear, uncertainty, and doubt that accompany this new technology.

This eBook aims to help with that. As with all new technology, there are lessons to be learned, new lexicons to adopt, and processes to be amended – or better yet, overhauled – to successfully integrate generative AI's functionality into the way we work. This eBook provides marketers and business managers with pragmatic, must-know approaches to successfully, and safely, integrate generative AI technology into their organizations' marketing practices.

And it will show that human involvement is still imperative when using these technologies. So, fear not marketers, without you to insert and apply the originality, accuracy, and humanity needed to create engaging experiences, generative AI is just another tech in the stack.

DID YOU KNOW...

ChatGPT reached 1 million users within 5 days of launching. And that marketing and advertising teams have the highest adoption rate across industries.

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WHAT IS GENERATIVE AI AND HOW DOES IT WORK?

WHAT IS GENERATIVE AI?

Generative AI refers to a type of artificial intelligence that can respond to human input, aka prompts, by producing new content, such as images, text, videos, and audio, based on existing information, data, and other media.

Tools such as ChatGPT, DALL-E, Copy.ai, and others use generative models that learn the structure and patterns of the existing data and content being referenced to generate new content with similar characteristics.

However, it is important to note that while generative AI can assist in producing new ideas and content, human input and oversight are still crucial to ensure quality and accuracy and to maintain brand integrity. Moreover, it is vital to establish responsible and ethical approaches to the use of generative AI, including transparency, fairness, data security, and privacy safeguards.

DID YOU KNOW...

That in a recent survey 67% of salespeople say their employer doesn't provide generative AI training.

HOW DOES IT WORK?

The foundation of generative AI lies in a prompt, which can be any input that the AI system can interpret and process such as text, images, videos, code, or designs.

Leveraging large language models that learn by predicting the next word in a text, generative AI tools analyze a data for context on various topics and languages. Consuming this content teaches the models how humans speak, write, and create. When the user adds prompts or context, the AI models generate output based on the prompt or request. This output can then be further refined through subsequent prompts until the output satisfies the user's requirements.

Generative AI relies on two main models: natural language processing (NLP) and artificial neural networks (ANN). Like the human brain, NLP models learn from existing text using rules, akin to human experiences and knowledge, and ANNs create new connections between elements using data, the way people come up with new and innovative ideas.

These two heavy-lifting worker models free up the human team to focus on the value-add and creative aspects of marketing efforts.

3
GETTING YOUR DATA IN ORDER

It all starts, and ends, with data. Generative AI tools — stand alone, or those build into other martech stack solutions — are nothing without the data they use to respond to prompts.

Preparing company data for use in a generative AI tool is an integral part of today's successful marketing strategies.

Proper collection, organization, integration, and validation of data sources used in generative AI tools are critical for unlocking valuable insights, optimizing marketing efforts, and driving business growth.

STEPS FOR PREPARING DATA FOR SUCCESS WITH GENERATIVE AI TOOLS

1. Determine the purpose and domain

Identify use cases - Understand the specific task or topic you want your generative AI model to focus on, such as text and/or image generation, or perhaps music composition.

2. Data collection/ Data retrieval

Identify and collect relevant, non-copyright protected, data sources. These can include text documents, images, audio files, or any other type of data that is suitable for the task at hand. Data can be sourced from private collections, crowdsourcing, precleaned/prepackaged packets, site scraping, and other automated methods.

3. Data cleaning

Once data is collected, it is important to clean it by deleting incomplete data, correcting errors, and removing duplicate or irrelevant data. Data cleansing and dimensionality reduction helps improve the quality of the data used to train the machine learning model. Feature selection is also done at this stage.

4. Data preprocessing

Data preprocessing includes data normalization, data standardization, categorical variable coding, and outlier handling. These steps help prepare the data so that it can be processed by the machine learning model.
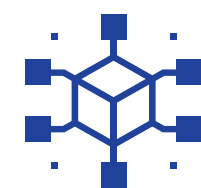
5. Data augmentation (optional)

Consider augmenting your dataset to increase its diversity and size. Data augmentation techniques can include image transformations (rotation, scaling, cropping), text variations (synonym replacement, paraphrasing), or audio modifications (noise addition, pitch shifting).

6. Data transformation

Divide your dataset into separate subsets for training, validation, and testing. The training set is used to train the generative AI model, the validation set is used to fine-tune model hyperparameters, and the testing set is used to evaluate the final performance of the model. These steps help reduce data noise and improve the machine learning model's ability to make accurate predictions.

4

LAYING A STRONG FOUNDATION: ROLES, PROCESSES, AND SKILLS
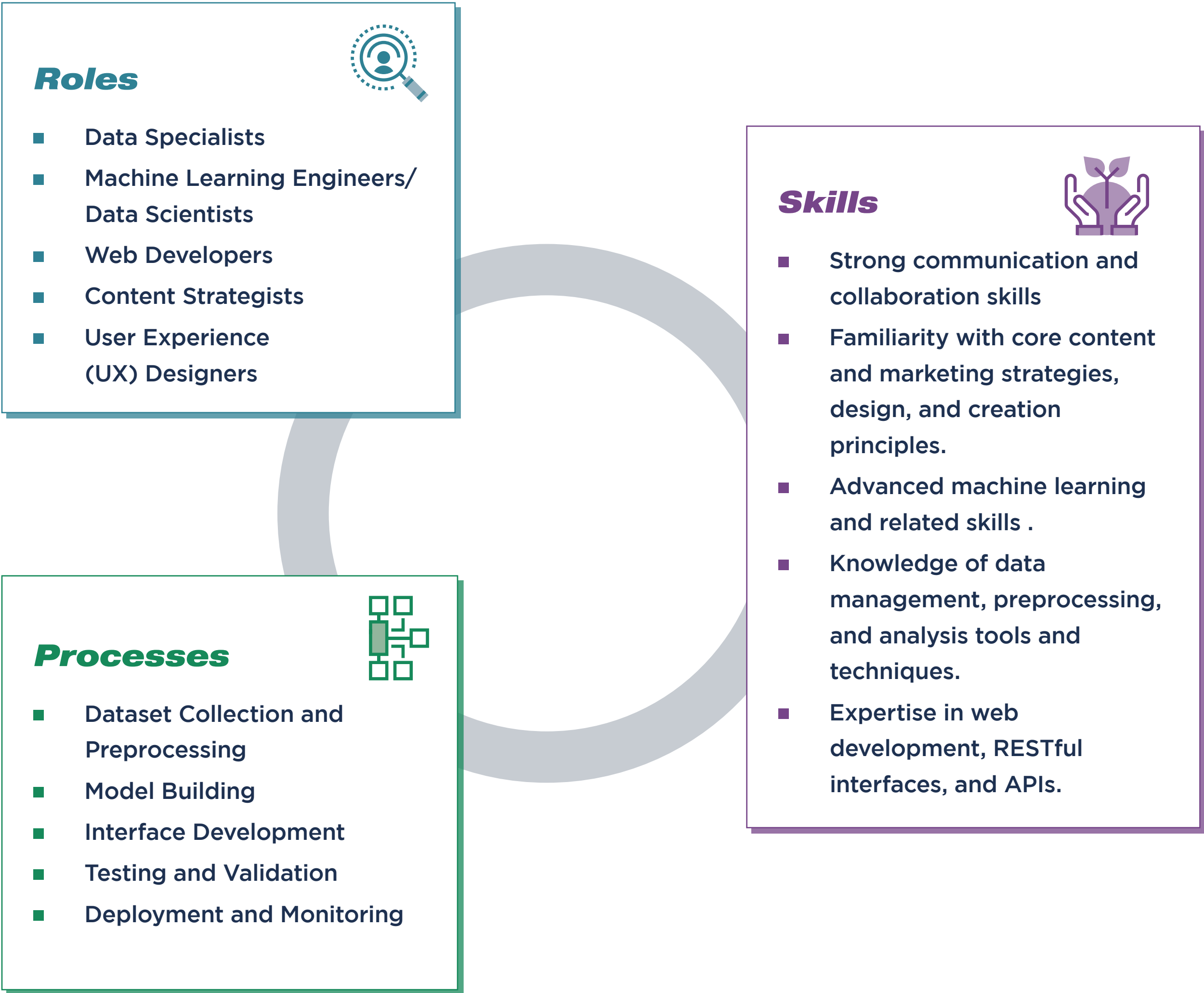
The frenzied adoption of generative AI tools has led to claims that Prompt Engineer is the next hot job. While this might hold some truth, there are many other skills, processes, and roles that are required to enable teams to unlock and unleash the powers of these new tools.

Building a solid foundation and successfully implementing generative AI tools requires a blend of technical expertise, domain knowledge, and creative thinking, coupled with a structured approach to problem-solving and iteration.

Strategy and administrative leadership are essential to optimize how these skills and processes are applied, managed, and optimized. Companies will need to assign ownership of these to ensure accountability, drive execution, and empower growth.

A generative AI marketing team requires a variety of marketing, IT, and operational roles, processes, and skills to develop effective applications. This doesn't mean expanding the team exponentially – the existing team likely has many of the necessary skills necessary, particularly if leveraging the generative AI capabilities build into the technology stack already in play.

Roles, processes, and skills required for generative AI in marketing teams may differ based on the application, domain, and target audience. The following listed here are a sample that common across many functions and industries.

Roles

- Data Specialists
- Machine Learning Engineers/ Data Scientists
- Web Developers
- Content Strategists
- User Experience (UX) Designers

Processes

- Dataset Collection and Preprocessing
- Model Building
- Interface Development
- Testing and Validation
- Deployment and Monitoring

Skills

- Strong communication and collaboration skills
- Familiarity with core content and marketing strategies, design, and creation principles.
- Advanced machine learning and related skills .
- Knowledge of data management, preprocessing, and analysis tools and techniques.
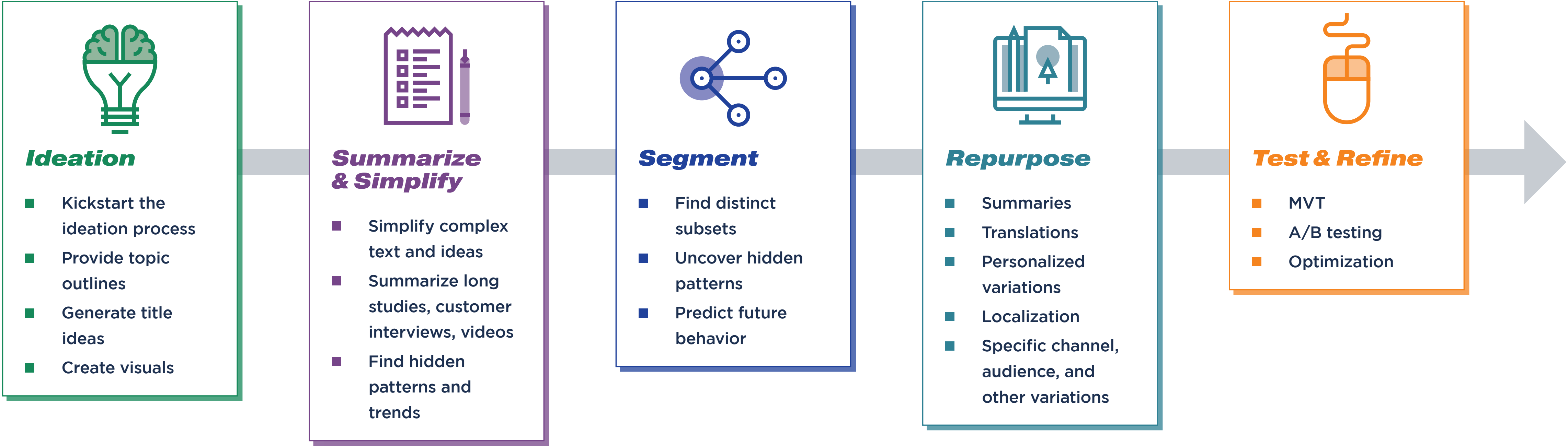- Expertise in web development, RESTful interfaces, and APIs.

5
START SIMPLE ... STARTING IS THE IMPORTANT PART

Generative AI is showing up just about everywhere across all business disciplines, with marketing and advertising being the most eager adopters. With so many possible applications, deciding where to start can be overwhelming and downright scary. Despite this fear, it is important to take the first step and begin exploring the possibilities offered by this revolutionizing technology.

Some simple ways to ease the power of generative AI into marketing practices could include the following:

Ideation

- Kickstart the ideation process
- Provide topic outlines
- Generate title ideas
- Create visuals

Summarize & Simplify

- Simplify complex text and ideas
- Summarize long studies, customer interviews, videos
- Find hidden patterns and trends

Segment

- Find distinct subsets
- Uncover hidden patterns
- Predict future behavior

Repurpose

- Summaries
- Translations
- Personalized variations
- Localization
- Specific channel, audience, and other variations

Test & Refine

- MVT
- A/B testing
- Optimization

Wherever you decide to jump in, you must establish protocols to ensure trust and security within the tools. Security protocols ensure that the data being used is kept safe and secure, while trust protocols ensure that the AI is working accurately and efficiently. By taking the necessary steps to ensure trust and security, teams across the organization can leverage potential benefits of generative AI tools such as increased efficiency, creativity, and accuracy.

GENERATIVE AI TRUST CHECKLIST*

Data quality and bias

Transparency

Human-in-the-loop

Error processing

Ethical use

Zero retention policy

Accountability and compliance
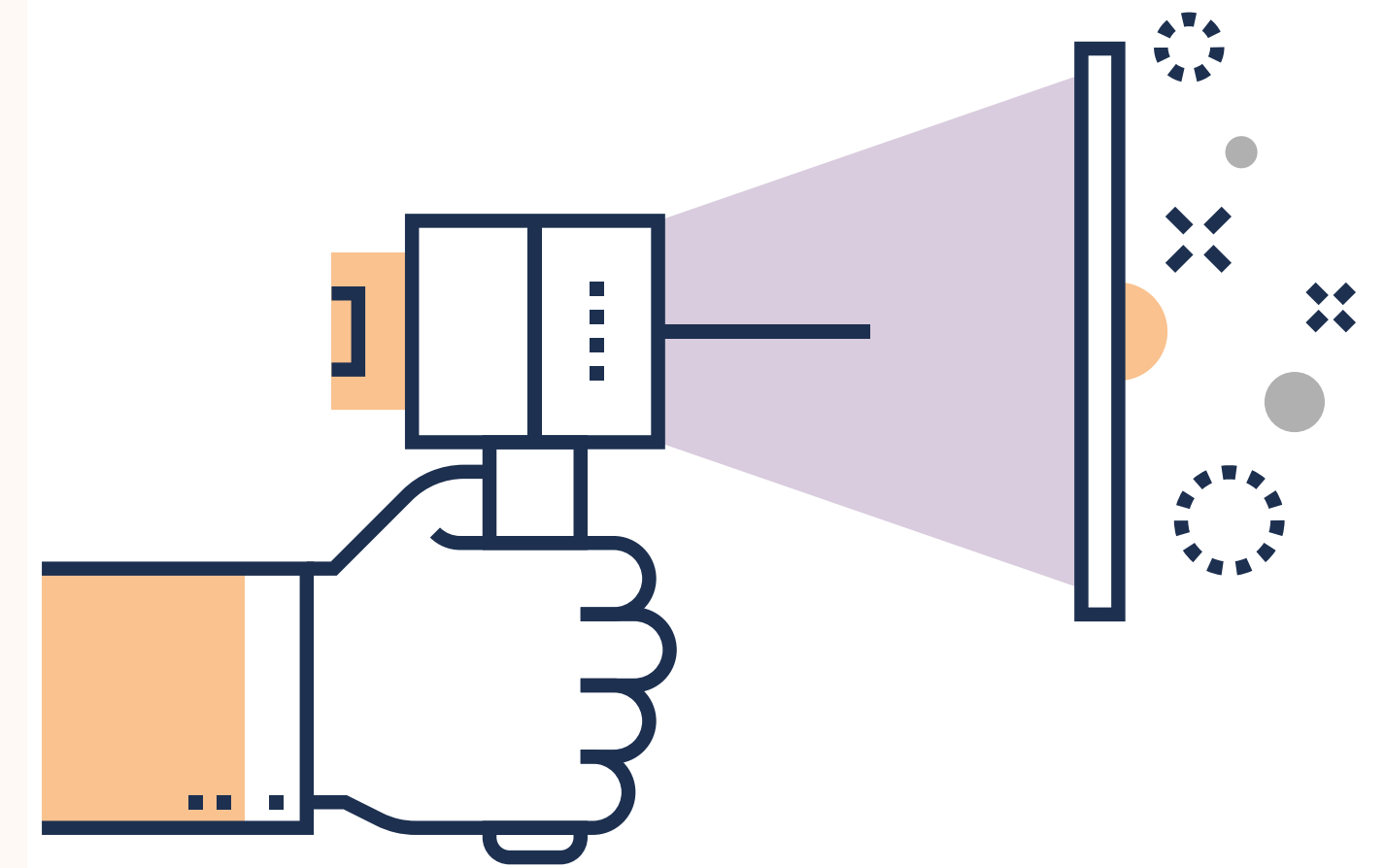
GENERATIVE AI SECURITY CHECKLIST*

Data protection

Access controls

Encryption

Monitoring

Compliance

DID YOU KNOW...

That in a recent survey 71% of marketers feel that generative AI will eliminate busy work.

* These checklists serve as starting points. It is important that trust and security protocols are in place, and shared, BEFORE starting to use generative AI tools.

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WORDS OF WARNING – AI HAS LIMITATIONS AND BIAS, SO BEWARE

If you are thinking "This is all too good to be true," you're right.

Generative AI is not the panacea for all things marketing. Like all technologies, and teams, there are limitations to what it can do and inherent biases deep within its code and capabilities.

Generative AI can do a lot of things. Here are examples of what it can't do (yet):

Originality

AI output is based on what already exists. It cannot generate original ideas, research, or analysis.

Quality

Output can have errors and inconsistencies depending on the quality of the data used/available.

Accuracy

AI has no ability to distinguish facts from folklore, so marketers and others must review all AI-generated content.

Humanity

Not being sentient, AI cannot generate content based on ethics, lived experiences and feelings, which are essential elements to engaging content.

These limitations are compounded by biases that emerge due to the technology's inherent lack of conscience, moral compass, or ability to apply societal context filters for things like tone, stereotyping, and discrimination. But all is not lost. These pitfalls can be mostly avoided by:

- **Ensuring that diverse and representative data is used to train the tool.**
- **Performing regular bias audits.Maintaining interdisciplinary collaboration between stakeholders, teams, industries, and communities.**

Humans are another essential factor in mitigating generative AI bias. The messaging around adoption must emphasize these key points:

- **Educating users about bias and how to prompt in ethical, non-biased, non-malicious ways.**
- **Leveraging AI – generative, predictive, etc. – is there with the intent to facilitate and enable users, not replace them.**

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NOW WHAT?
GET READY TO EMBRACE THE POWER OF AI!

Rolling out generative AI to an already busy team and into an established tech stack takes planning, strategy, and clarity of purpose. Here are some steps to get you started on that journey:

1

Understand Current State: Audit and evaluate current content-related processes to understand how different work (campaigns, audience segmentation, content creation, etc.) is actually getting done, versus how it is supposed to be done.

2

Identify Use Cases: Determine the teams and/or marketing tasks that would benefit from generative AI. These could be content creation, social media management, or email marketing, among others. Consider the potential time, cost, and efficiency gains from using AI in these areas, then choose a starting point.

3

Coordinate and Collaborate with Stakeholders: Ensure that the marketing, content, and IT teams are aligned with the vision of how generative AI will be used and that the necessary infrastructure and resources are in place to support the implementation
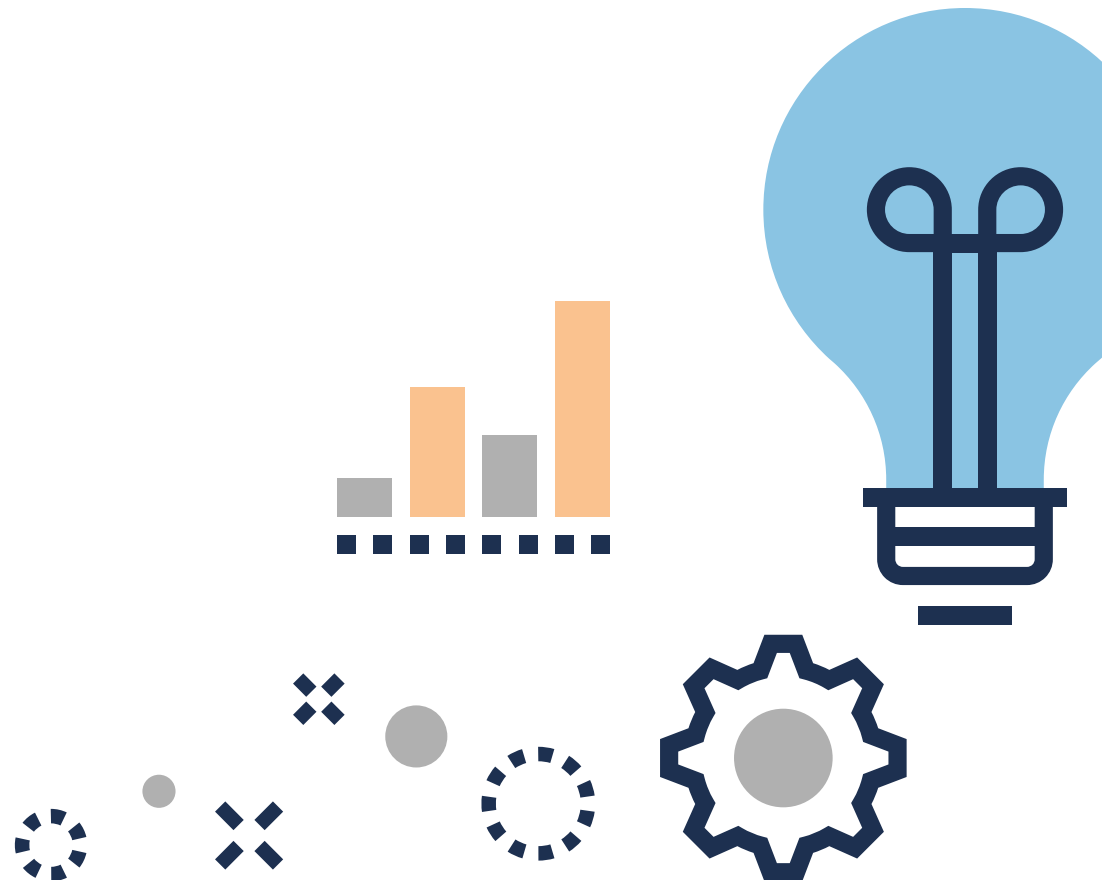
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Select the Right Tool/Provider: Look to your existing stack to see what generative AI capabilities are available or on the roadmap and validate that they can support the targeted use cases and identified business needs. Consider other tools as well. Evaluate each based on cost, ease of integration, and the level of support provided.

5

Integrate into Existing Processes and Workflows: Implement a pilot program that integrates generative AI with your existing marketing processes and workflows, allowing you to establish its effectiveness and identify potential issues. Be as agile as possible to continuously iterate, resolve, and improve as users' generative AI maturity grows.

6

Train the Team: Provide training to team members on how to use the generative AI tool effectively. This includes helping them understand how the tool works, its limitations and biases, security, and trust protocols, what data sources the tool uses, and how to analyze its outputs.

7

Evaluate and Optimize: Once generative AI is fully integrated into your marketing processes, monitor its performance and evaluate its impact. Identify performance gaps and optimize the tool based on feedback from your marketing team and customer interactions.

Implementing generative AI with your marketing team is a significant undertaking that requires careful consideration and planning. By following these steps, you can ensure a successful implementation that helps improve your marketing operations and achieve your business goals.

8
BUCKLE UP
– THIS IS JUST THE BEGINNING OF THE JOURNEY

Generative AI has emerged as a powerful tool across functions and industries. Marketers have jumped into the deep end excited by the unique opportunities it provides to facilitate personalized and creative content generation.

This technology has the potential to revolutionize how organizations engage with customers, create impactful marketing campaigns, and drive business growth. However, to realize this potential successfully and fully as it continues to evolve over time requires strategic planning and purposeful implementation.

It's crucial to understand that **generative AI does not replace human creativity and intuition**. While the technology can assist in generating new ideas and content, human input and oversight remain essential for ensuring quality and accuracy and maintaining brand integrity.

As organizations explore the potential of generative AI in marketing, they must establish a responsible and ethical approach. This means being transparent about the use of AI, promoting fairness and inclusivity, and safeguarding consumer privacy. It includes setting up the right layers of security and trust, including data masking and applying toxicity detection protocols, and never, ever, letting the technology take the lead on the journey.

Generative AI holds immense promise. By leveraging this technology effectively and responsibly, organizations can continue to enhance their marketing efforts, deliver impactful experiences to customers, and foster strong relationships that drive long-term success.

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GLOSSARY OF GENERATIVE AI TERMS

Key Term	Definition
Artificial Neural Network (ANN)	ANN is a subset of machine learning and a key component of deep learning algorithms. It takes inspiration from the structure and functioning of the human brain, where interconnected nodes simulate the behavior of neurons. ANNs are used to model and solve various artificial intelligence (AI) problems by representing connections between nodes as weights, with positive weights indicating excitatory connections and negative weights representing inhibitory connections. By modifying and summing inputs based on these weights, ANNs can understand and process data inputs to produce desired outputs.
Autoencoder	An autoencoder is an unsupervised learning technique for neural networks that learns efficient data representations (encoding) by training the network to ignore non-relevant data or "noise."
Data Masking	Data masking is when a system hides data from an AI tool so that it cannot be used to generate the prompt response. It serves as a privacy and security measure to ensure that sensitive data is shielded from unauthorized access and usage.
Data Retrieval	Data retrieval involves accessing and extracting relevant information from different sources to inform the creation of AI-generated content. This process helps to provide context and enhance the accuracy and relevance of the prompted outputs.

Key Term	Definition
Dimension/ Dimensionality Reduction	Dimension reduction is used to reduce the number of features, or attributes, in the data. This step can be useful when you have a lot of data but are resource constrained, such as with machine learning model processing time.
Feature Selection	Feature selection is used to select the most important features of the data. This step can be useful when you have many features but want to use only a subset of them to train the machine learning model.
Generative AI	Generative AI is a technology that can create new and original content like art, music, software code, and writing. When users enter a prompt, artificial intelligence generates responses based on what it has learned from existing examples on the internet, or from the dataset it is being trained on, often producing unique and creative results.
Machine Learning	Machine learning (ML) is a branch of artificial intelligence (AI) that focuses on the use of data and algorithms to imitate the way humans learn, gradually improving accuracy over time. It was first defined in the 1950s as "the field of study that gives computers the ability to learn without explicitly being programmed" by Arthur Samuel, a computer scientist and AI innovator.

Key Term	Definition
Large Language Model (LLM)	A large language model (LLM) is a deep learning algorithm that can perform a variety of natural language processing (NLP) tasks. Large language models use transformer models and are trained using massive datasets — hence, large. This enables them to recognize, translate, predict, or generate text or other content.
Natural Language Processing (NLP)	NLP is a field of computer science that focuses on teaching computers to understand and communicate in human language. It involves developing techniques and algorithms for tasks like translation, sentiment analysis, voice assistants, and chatbots. NLP enables machines to process and respond to text or speech in a way that mimics human communication.
Neural Networks	A neural network is a type of machine learning algorithm that can learn from data to make predictions or generate outputs. It does this by using a network of interconnected nodes that represent artificial neurons. These nodes process input data and produce an output in a different form. Neural networks are inspired by the way the human brain operates. They learn by adjusting the weights and biases of the connections between nodes, which allows them to recognize complex patterns and relationships in data.
Prompt	Prompts are information or questions that a user or program provides to an LLM AI to get a desired response. Prompts can be in the form of sentences, questions, code snippets, or commands. The format of the prompt depends on the specific task and domain being addressed.

Key Term	Definition
Test Set	The test set is used to evaluate the performance of the machine learning model after training.
Toxicity Detection	Toxicity detection is the process of automatically identifying and categorizing content or behavior that is considered toxic, offensive, or harmful. It uses techniques like natural language processing and machine learning to analyze and categorize text, images, or user interactions for toxic elements.
Training Set	The training set contains the data that the machine learning model will use to learn the relationships useful for the prediction; it is used to train the model.
Validation Set	The validation set is used to evaluate the performance of the machine learning model during training and to test its hyperparameters.
Zero Retention	Zero retention is when all prompts and data used are immediately deleted after the prompt transaction is completed.

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COMMON GENERATIVE AI ROLES AND RESPONSIBILITIES

Key Term	Definition
AI Persona Designer:	Creates distinct chatbot personalities that align with an organization's branding and cater to various customer preferences.
Control Models Specialist	Develops systems to validate human-AI interactions, detect biases, and ensure adherence to privacy and security regulations.
Data Engineer for Generative AI	Facilitates user interactions with company systems by integrating AI systems with internal databases and APIs.
Generative AI Architect:	Oversees the entire system, ensuring smooth functionality and interactions between all components.
Generative AI Business Analyst:	Understands industry-specific regulations and requirements, ensuring the chatbot operates within legal boundaries.
Generative AI Cybersecurity Engineer	Monitors and secures the system from potential threats and malicious activity.
Generative AI Engineer:	Integrates the chatbot with the organization's internal services, such as inventory and reservation systems for a hotel, for example.

Key Term	Definition
Generic Models Expert	Works with generative AI models like ChatGPT and MidJourney to provide detailed prompts that generate high-quality results. Also, develops meta-prompts, which define the AI's "personality" and guide its behavior throughout a conversation.
Meta-Prompt Engineer:	Designs the chatbot's conversational structure, objectives, and behavior.
Prompt Engineer	Specializes in crafting effective prompts or instructions to communicate with and guide generative AI systems, ensuring optimal results and performance.
Specific Models Developer	Creates customized models that serve a company's unique use cases, enabling AI systems to provide customized interactions. As more companies adopt generative AI, the demand for specific model developers will rise.

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ABOUT SALESFORCE AND THE CONTENT ADVISORY

ABOUT
SALESFORCE

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ABOUT
CATHY MCKNIGHT &
THE CONTENT ADVISORY

Founded in 2010, The Content Advisory (TCA) is the leading content strategy consulting, research, advisory, and education company. Our clients rely on us for valuable insights on content strategy, marketing, digital transformation, data privacy, and customer experience. Since our launch, we've worked with more than 500 organizations, including 15 of the Fortune 100. We've consulted directly with organizations such as Adidas, Anthem Insurance, Capital One, NASA, Microsoft, LinkedIn, Facebook, CVS Health, 3M, Hilton, and The Bill & Melinda Gates Foundation.

TCA provides strategic content, marketing, and business insights, advice, and tools through customized consulting, training, coaching, and research engagements.

Cathy McKnight is the Chief Problem Solver and Lead Analyst for TCA – and as such, is responsible for the organization's strategic advisory, education, research, and consulting services.

Email: info@contentadvisory.net

Twitter: @TCAdvisory

Web: www.contentadvisory.net