Generative AI - Exploring the Issues of an Emerging Technology in Business

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ABSTRACT

Generative AI is transforming business and technology interactions largely by providing automated content generation in the form of text, images and video data. However, generative AI adoption is still at a very nascent stage and majority of the organizations are trying to find out the best possible use of generative AI. Employees at different levels of organizations have different perceptions related to the utility of Generative AI based on their experience and expectations. The research paper initially identifies the five factors from the 24 items related to Generative AI as Integration and Innovation, Trust and Reliability, Ease of Use, Content Generation and Privacy, Safety and Ownership. To understand the difference in the perception of B-level, C-level and V-level professionals in the organization, ANOVA test is executed. The results found a significant difference related to Trust and Reliability, Innovation and Integration, Privacy, Safety and Ownership. This research will help the organizations to understand the limitations of GenAI applications, improve the methodologies for GenAI usage and increase its usage in business for improving firm performance.

Keywords: Generative AI, Artificial Intelligence, Content Generation

INTRODUCTION

Generative Artificial Intelligence (Gen AI) includes algorithms like ChatGPT, Bard, DALL E and others to create new content including audio, video, code, images, text, simulations etc. These models use deep learning algorithms and neural networks to generate new and original content by creating patterns from the existing data. Generative AI is revolutionizing business and technology interactions to a great extent. Generative AI has opened new opportunities in all the domains of business and professionals that perform content creation. Some of these opportunities include automated content generation, improved content quality, increased content variety and personalized content. It can thus help to automate specific tasks and focus time, energy, and resources of organization for achieving better strategic objectives. This will lead to lower labor costs, increased operational efficiency and effective insights on business processes. Generative AI's impact on productivity could significantly increase global GDP. Banking, high tech, and life sciences sectors will be the witnessing the largest impact. Different reports are published with respect to GEN AI and their impact on different business.By 2025, generative AI is expected to produce 20% of the test and development data for consumer expectations and apps, or 10% of short-term information output. (McKinsey, 2023; JPMorgan, 2024; Gartner, 2023). Generative AI helps to improve users' performance by 66% and less-skilled workers have the greatest benefit (Nielsen, 2023) and 30% of the manufacturing sector will use generative AI in their process of developing new products by 2027 (RedBlink, 2023). Capgemini (2023) found effective result of Gen AI based on a global survey conducted of 1,000 organizations across industries and from various countries to understand the potential of generative AI for industry-specific use cases and comparing adoption rates across different industries.

Generative artificial intelligence (GAI) is a branch of AI systems that has emerge as a major force in the enterprise-wide adoption. It helps to generate content in the form of text, images, any many other type of data. The application can be predominantly observed in Chatbots, code for AI-based programming systems, generation of art and music. The common Generative AI softwaresinclude ChatGPT, DALL-E. Midjourney, Chatsonic, Jasper Chat,copy.ai, growth bar, chatflash, heyday, ghost, lamda and others (Dwivedi et al., 2023; Elias et al., 2023; Huh et al., 2023; Kunz & Wirtz, 2023; Paul et al., 2023; Peres et al., 2023; Polonsky &Rotman, 2023; Susarla et al., 2023). They are helpful in both innovative and non-innovativejobs and have extensive applications for the society. However, some of the researchers argue that these tools and models are generative as they develop results from prevailingdata and are not original and innovative. Researchers (Korinek, 2023; Hasan and Koning, 2019; Matz et al., 2019)

suggested methodologies that help writers to improve ideation, faster ways, and enhancement further to show significant effects on creativity with customization and personalization.

LITERATURE REVIEW

Today, business scenario is being altered by artificial intelligence and machine learning algorithms (Ma and Sun, 2022). Kar and Kushwaha (2023) focus on the use of AI to facilitate decisionmaking in the professional environment. With large language models, Generative AI has a potential to witness a lot of economic implications in order to improve firm performance on well-defined writing tasks by providing assistance, feedback, and advice, write better business text more quickly, including press releases, ad copy, consulting memos, and others (The White House, 2022; Agrawal et al.,2023; Eloundou et al., 2023; Hui et al., 2023; Brynjolfsson, Li, and Raymond, 2023; Noy and Zhang, 2023; Chen and Chan, 2023; Peng et al., 2023). However, Doshi and Hauser, (2023) expressed that the diversity of novel content has reduced drastically.

George et al. (2023) suggested that e-commerce businesses can utilize generative AI tool, chat bots to save money, enhance user experience, and promptly answer to consumer concerns. Additionally, generative AI can improve data collecting and customer involvement in digital marketing initiatives. While insurance firms can use it to expeditiously assess claims, financial organizations like banks can utilize it to allow consumers to log in, check their accounts, and receive personal services without having to visit a local location. LLM like GPT-4 impact 40% of all working hours considering that language tasks account for 62% of the total time, and productivity can be enhanced for at least 65% of that time using augmentation and automation (Accenture, 2023).

The role of Gen AI in marketing is obvious because it helps to understand customer demands, changes the process of customers search for information, improves customer service, automate content generation, provides fast translations, facilitate effective communication with customers, provide customized advertising campaigns, deliver customized services and experiences. (Brynjolfsson et al., 2023; Chen and Chan, 2023; Deloitte, 2023; Huang & Grady, 2022; Gursoy and Song, 2023; Strobel et al., 2024). Kshetri et al. (2024) explains the importance of Gen AI in increasing efficiency andimproving the lead generation process with reference to marketing activities. In the financial market, GenAI has been witnessed as a decision supportive tool for managing risk (Cao and Zhai, 2023).

The capabilities of gen AI have already proven valuable in software development. They have also transformed several other industries, such as art and culture, music, fashion, electronic markets and gaming. The Gen AI tools can also perform other tasks related to the data conversion like generating image from text, audio from text, 3D image from text, code from text, and others. Generative AI has started to transform the process of searching information and practice the resultant content in private and professional world. Generative AI can produce fresh writings, photos, or audio files that are becoming more and more like works of human craftsmanship. Consequently, generative AI can alter fields and sectors that depend on knowledge processing, creativity, and innovation (Feuerriegel et al., 2024).It can support, augment, and automate a wide range of operations and provide innovative services. Other researchers have investigated the use of Gen AI in different sectors for improving the speed and precision in 3D printing (Badini et al., 2023), to improve creative and artistic processes for improving image generation quality (Shi, 2022), to enhance scientific research methods and support the development of systematic literature reviews (Burger et al. 2023), generate unique artwork at low cost using Lensa, image editing app (Wong, 2023). Researchers (Haefner et al., 2021; Marianiand Dwivedi, 2024) have also systematically reviewed AI in innovation management research.

Generative AI develops human resource capabilities and persuades people with infusion of fresh ideas. These tools have drastically modified the process of interacting with technology and information. With the use of sophisticated visualization, it stimulates the creativity, and the generation of content that is beyond imagination. It saves time during the design phase and has significantly reduced the money needed for content creation, boost effectiveness by performing keyword research augmenting and automating, thereby increasing profitability (Ludik, 2022; McKinsey, 2023; DeBois, 2023; NDTV, 2023; JPMorgan, 2024). By utilizing GAI in businesses, employees can receive more support and chances for job augmentation and automation, which can result in new kinds of human-machine collaboration (Einola&Khoreva, 2023). Value co-creation has the potential to coexist with changes in human labor responsibilities, necessitating workforce adaptation across domains as generative AI may have an impact on a wide range of tasks (Brynjolfsson & McAfee, 2016). According to preliminary research on generative AI, generated content is viewed as less reliable, which makes created products unappealing (Rix and Hess, 2023).

In business models, GAI can be a powerful tool for automation and augmentation. This is achieved by integrating into product design and prototyping processes that can further help in effective management,

growth of business and achieving sales growth. Bouschery et al. (2023) demonstrated the use of language models that are based on transformers for enhancing human innovation teams. Bilgram and Laarmann (2023) discussed the use of large language models (LLMs) to illustrate the process of augmentation for exploration, ideation, and digital prototyping. compressing production time and costs.However, McKinsey Research (2023) suggested that GenAI can increase to developer speed but less for complex tasks.

Generative AI applications can offer enormous efficacy in output with the help of complementary and contextual data comprising of enterprise and public data e.g. ERP systems, internal documentation, libraries, internet and social media. Generative AI model such as VALL-E of Microsoft offers a user experience that is more engaging and personalized with the help of pragmatic voice modelling. Prompts can be used to specify melodies or genres for generation of unique music pieces that regard the novel intent (Wang et al., 2023; Agostinelli et al., 2023). Generative AI has been witnessed as very effective too and it can create synthetic data by using real data to identify patterns. Bove (2023) expressed that ChatGPT is the fastest growing technology since many years. However, it is important to consider the privacy protection laws, so that it cannot jeopardize the privacy of consumer information. Hence it becomes important to understand the copyright infringement and data security risks associated with the characteristic of generative AI to efficientlyutilize the benefits(Banh and Strobel, 2023; Chen and Chan, 2023). Lappeman et al. (2023) studied privacy issues with a specific focus on the convergence of banking marketing and technology. Mehrolia et al. (2023) investigated the decreasing impact of perceived risk, for understanding expectations of users and enhancing services. A recent survey by IBM IBV states that security, ethics privacy, regulation and economics are the key barriers to the effective deployment and use of generative AI.

JPMorgan (2024) emphasized on the copyright infringement and increase data security risks associated with Gen AI., or by as much as 10%. A recent survey by IBM IBV states that security, ethics privacy, regulation and economics are the key barriers to the effective deployment and use of generative AI. According to Thorp (2023) generative AI is capable of generating a typical and nonsensical results, like fake references and inadvertently skewed user inputs. False data produced by generative AI has the potential to cause significant losses in the financial sector by misleading decision makers, creating difficult model training, and so on. The failure to recognize the potential illegal goals of AI users can hasten the dissemination of misleading information by dishonest people using ChatGPT, which affects investor sentiment and decision-making, raises market uncertainty, and intensifies volatility (Zaremba and Demir, 2023).

Generative AI improves human resource capabilities and motivates staff members with infusion of fresh ideas. With the use of sophisticated visualization, it stimulates the growth of the imagination and the generation of ideas that go beyond the norm. By offering chances in the virtual environment during the invention process, generative AI helps organizations cut costs. In particular, it saves time during the design phase and when adding new features in response to employee feedback in the workflow process (Yikilmaz and Halis, 2023).

ChatGPT, the most widely used generative AI method, is changing how people use cutting-edge technology (George et al., 2023). Candelon et al. (2023) founded that generative AI adoption is a double-edged sword and it isn't obvious that when the new technology is (or is not) a good fit. Gen AI can also result in devastation if it is not used in the right way and for the wrong tasks.Gen AI models has a significant impact on different domains like marketing, software, design, entertainment, and other. However, presence of human involvement increases the ease and accessibility of software. This is because they can add their customized information and perform tailoring when, what, and how of an interaction (Davenport and Mittal, 2022).

Generative AI could regenerate the field of knowledge management and help in increases efficiency. Organizations can use GenAI to make new product recommendations based on the expectations of both internal and external customers. It creates comprehensive, relative and innovative content based on continuous evaluation of ideas, improving virtual and augmented reality technologies thereby allowing various stakeholders to participate in the innovation process. DALL-E 2 and other image generation tools are used in business. Heinz did the advertisement by showing how ketchup looks to AI. Nestle used Gen AI to sell one of its yogurt brands. Stitch Fix is creating visualizations related to clothing based on customer preferences for color, fabric, and style. Mattel is generating images for toy design and marketing. (Davenport and Mittal, 2022; Yikilmaz and Halis,2023). With applications in improving customer service, automating content generation, facilitating quick translations, and integrating into product design and prototyping processes, generative AI is transforming business and technology interactions (Deloitte, 2023).

To meet the advancements in process optimization and decision making, GAI offers new opportunities for automation and augmentation in the form of creative services and business models. For example, it can

help customer support staff members by suggesting suitable discussion starters. GAI's dynamic and ever-evolving environment necessitates a thorough conception of the necessary connections and skills to fully understand the phenomenon (Mondal et al., 2023; Brynjolfsson et al., 2023).Many entrepreneurs in low- and middle-income nations can benefit greatly from the efficient provision of individualized feedback provided by AI-based technologies. Generative AI may also increase the disparity between low- and high-performing companies. More generally, our results support the notion that AI and data can help billions of people and millions of businesses in developing nations (Choi et al., 2023). Otis et al. (2024) studied the impact of generative AI and productivity on business based on the activities employed by businesses and entrepreneurs. He found that the availability of generative AI had a negative influence on underperforming entrepreneurs and a positive impact on successful ones.

However, Naqbi, Bahroun and Ahmed (2024) stressed on the need for effective GAI design and strategic long-term planning across various professional fields. Gen AI presents challenges that must be fully understood, and potential risks must be mitigated. There are challenges regarding the design of the Generative AI based system for taking care of the privacy aspect while providing content which is personalized in nature. AI applications are seeing a paradigm change from discriminative to generative, which is opening novel use cases and exciting prospects across a range of industries, even ones that have historically been resistant to automation.There arises a need for control methods, when generative AI systems provide biased results that affect users' opinions and judgment. The development of strategies aimed at preventing, detecting, and mitigating biases is vital to secure users, uphold service quality, and preserve a company's reputation.

Generative AI can create synthetic data that complies with privacy protection laws by using real data to identify patterns and relationships. But, these artificial datasets can resemble the genuine data to some extent without jeopardizing the privacy of consumer information (Chen and Chan, 2023). Generative AI offers a perfect decision supportive tool for the managing risk in the financial markets (Cao and Zhai, 2023). Banh and Strobel (2023) expressed that the researchers and practitioners needs to understand the importance of risks associated with the inherent properties of generative AI to effectively leverage its potential. They considered five problems with Gen AI: bias, transparency, hallucinations, misuse, and societal impact. One method to control the quality of GAI models' outputs is through reinforcement learning based on user feedback.

Risk assessments and human-like explanations of financial models are two areas where generative AI shows great promise. For example, a lot of textual data is produced in credit risk management during the lending decision-making process. Owing to the data-driven nature of GAI, data quality is crucial to the functionality of GAI-based systems and, consequently, to the viability of their adoption in real-world business scenarios. GAI models are prone to bias, which can lead to discriminatory judgments, drawbacks, and bias (Schramowski et al., 2022).

The availability of GAI models gives criminals and abusers a place to start when creating new applications and business models, which they can then use to spread false information, influence politics and the media, or scam people and companies (Kreps et al., 2022; Mirsky and Lee, 2022). Access to realistic content creation tools based on GAI not only opens up new creative opportunities for businesses and users (such as innovative automation and prospects for innovation across multiple domains), but it can also be used maliciously to intentionally create risk and harm to society (Weidinger et al., 2022).

Generative AI is still at an infancy stage. Interpretability, or the ability of humans to comprehend the actions and decisions made by the AI system, is crucial, particularly for GAI-based systems used in extensive information systems that impact big user bases, such digital platforms and networked enterprises. In these situations, created content may have a negative effect on people and society (Hamon et al., 2020).Furthermore, generative AI can generate artificial intelligence-generated instances of dishonest transactions, which can enhance algorithms and improve their ability to distinguish between authentic and fraudulent patterns. Generative AI generates content that is more accurate and consistent while using a great deal less time and money than traditional techniques. For example, investors, who do not possess advanced analytical skills may consider the utility of Gen AI in selecting alternative investment projects. This is a contradiction with investors, who are more receptive and have effective information accessibility. When utilizing tailored services, users of generative AI may divulge private information, leaving them open to data breaches. For instance, banks may need to manage a lot of sensitive personal data when using generative AI to analyze client data, which could jeopardize user privacy if done incorrectly. Customer satisfaction and the bank's reputation may be impacted as a result. (Chen and Chan, 2023)

It seems that experience plays an essential role in using generative AI in the decision-making process in organizations. According to Venkatesh et al. (2003), younger users are more technologically enthusiasticand affable than older users and hence positive attitude can be a major factor to use GenAI

tools. Also, older users may restrict the quantity of information to be used in their decision-making and may be less inclined to utilizethe content generated by GenAI inthe decision-making process. In business environment, people working in organizations that are using generative AI may have knowledge related to operating procedures, manuals related to business document and handbooks containing information (Belanche et al., 2012; Newmanet al., 2022).Motwani et al. (2024) studied the role of human involvement in improving the business model improvement considering the different independent variables of generative AI namely Virtual Environment, Professed Security, Enormous efficacy, Supportive Access, Enhanced Personalization. Korznski et al. (2023) gave a new perspective for management theories and proposed that generative AI may influence managerial effort at three intensities: strategic, functional, and administrative. However, research related to Gen AI is regulated to the primary state of awareness on technology and none of the research has tried tounderstand the perception of different levels in the organization. According to Dencik et al. (2023), generative AI adoption is still at a very budding stage and most of the organizations want to understand the best utility of generative AI in their business process. Also, the biggest problem with Generative AI is that it may threaten jobs of many employees because of its automation characteristic. It hence becomes important to study the attitude towards Generative AI from the three different levels of the organization (V-level: Vice Presidents (VPs) and Senior Vice Presidents (SVPs), D-Level: Directors in various departments; and B-Level: Mid-Level Managers)

RESEARCH METHODOLOGY

The research study was undertaken to provide insight in measuring and comparing the effectiveness of professionals belonging to different levels (B-Level, D-Level and V-Level) in the organization. The review of literature indicated unavailability of appropriate instrument; hence, separate tool of 26 items was self-developed and administered. The indicators chosen were based on data available on social media, professionals through the interviews, together with an extensive study of websites and literature review. For determining the items associated with Generative AI, different articles available on websites were fetched using web scraping, consultancy reports available on internet and tweets from Twitter were used. With the help of twitter, comments of people based on their experience with Generative AI were extracted. Text Data Processing was done in Python for extracting and cleaning the data. The word cloud was created from the important words as shown in Annexure-1. It is evident from the figure that the words related to Generative AI include content, risk, security, integration, generation, marketing, idea, and others. The frequency of "Content" word is highest while the "innovative", "augmentation" seems to occur less number of times. Becausethe study incorporated tool that was new to research, further retesting of the tool was deemed necessary to assess robustness and to derive confidence in subsequent analysis.

In the study, item-total-correlation was calculated on data collected for 26 items, to determine significant items contributing towards measuring the factors contributing to the success of family business. After first iteration, 2 items showed correlation values less than 0.196 (standard coefficient of correlation value for 100 or more respondents) and were thus found insignificant and were not considered for the analysis. Over-all reliability was evaluated for the scale by assessing the internal consistency of the remaining 24 items using Cronbach's Alpha and was found to be 0.88 showing excellent reliability of the tool. The closer the alpha is to 1.00, the greater the internal consistency of items in the instrument being assessed. When a tool is developed for a particular situation and no other standardized instrument is available, the reliability index based on reliability coefficient can be taken as equivalent to validity of the tool. Since, the tool developed for the present study was unique in nature, the validity was taken to be reliability index.

The data was then tested for Kaiser-Meyer-Olkin Measure of sampling adequacy and Bartlett's test of Sphericity (Annexure-2). High value of KMO (0.816 >.05) indicates that sample is sufficient for factor analysis. The Bartlett's test of sphericity is .000 which is less than .05 indicating that there exists significant relationship among the variables. Therefore all 24 items were accepted for the final scale and subjected to Principal Component Method of Factor Analysis using Varimax Rotation.This resulted into five factors namely Trust and Reliability (% of Var. = 14.62), Integration and Innovation (% of Var. = 11), Privacy, Safety and Ownership(% of Var. = 10.62), Ease of Use (% of Var. = 9.53) and Content Generation (% of Var. = 9.4). The total percent of variance for factors was 55.17 % and the eigen values for each dimension was more than one (Annexure-3). To study the perception related to professionals belonging to different levels in organization, five different hypotheses were formulated based on the five factors. Thus,

H_1: There is a significant difference amongst perception of different levels of management related to the Integration and Innovation associated with Generative AI in Business.

H_2: There is a significant difference amongstperception of different levels of management related to the Trust and Reliabilityassociated with Generative AI in Business.

H_3: There is a significant difference amongst perception of different levels of management related to the Ease of Use associated with Generative AI in Business.

H_4: There is a significant difference amongst perception of different levels of management related to the Privacy, Safety and Ownership associated with Generative AI in Business.

H_5: There is a significant difference amongst perception of different levels of management related to the Content Generation associated with Generative AI in Business.

For testing the hypotheses, ANOVA was used. However, it is important that assumptions of normality and homogeneity is met. The skewness and kurtosis value of all the items were found to be in range -1 to +1 which imply that the data is normal and normality assumption is met. The assumption of homogeneity of variance states that all comparison groups have the same variance. If a violation occurs, it is likely that conducting the non-parametric equivalent of the analysis is more appropriate. The most common assessment for homogeneity of variance is Levene's test, the results indicate that this assumption was also met. The results of ANOVA and Tukey test for multiple comparisons are summarized in Annexure-4 and Annexure-5 respectively.

RESULTS AND DISCUSSIONS

The factors and their respective items with factor load along with the results after applying the ANOVA test are discussed as follows:

Integration and Innovation:Five items were involved in the factor which are - Knowledge Management and Integration(0.523), Distinguished Methodology for Efficient Planning (0.510), Recommendation of Innovative Solutions (0.571) and Integration with different business domains like prototyping process (0.536). Besides, as shown in Annexure 4,the p value is 0.023 which is lower than 0.10 therefore null hypothesis H_{01} is rejected at 10% levelof significance, which means there is a significantdifference in perception of respondentsbelonging todifferentlevels in organization.This is true since people belonging to differentlevels in organizationbecause theusagemaybedifferent at a great level. Hence, perception of users does vary regarding the Integration and Innovation factor of Generative AI. A detailed description of difference between the different levels in organization is shown using Tukey test (Annexure5). The result shows that the difference is prominent between the B-Level and V-Level; B-Level and D-Level with respect to Integration and Innovation. However, no significant difference was observed between D-Level and V-Level.

Ease of Use:Ease of Use is comprised of the following 6 items: Effective Functional Navigation (0.516), Fast Automation (0.64), Friendly User-Interface (0.79), Cost-Effective (0.62), Technological Affable (0.581), Quick and Easy Accessibility (0.691). As shown in Annexure-4, p valueis higher than 0.05therefore null hypothesis H_{03} is notrejected at 10% level of significance, which means there is no significant difference between theperception of professionals belonging to different levels in organization with the "Easeof Use"factor of Generative AI. This seems to be true since the software's developed for Generative AI are user friendly and can be used by all, regardless of the experience.

Privacy, Safety and Ownership: Five different items involved in the factor are Legal Issues (0.712), Ethical Concerns (0.671), Risk Measurement(0.734), Privacy Assurance (0.771) and Recoverability(0.619). Asshown in Annexure- 4, p valueis less than 0.10 therefore null hypothesis H_{04} is not accepted at 10%level of significance, which means there is a significant difference between the perception ofprofessional belonging to different levels in organization regarding the Privacy, Safety and Ownership factor of Generative AI. A detailed description of difference between the different levels in organization is shown using Tukey test(Annexure-5).The result shows that the difference is prominent between the B-Level and V-Level; B-Level and D-Level with respect toPrivacy, Safety and Ownership.However, no significant difference was observed between D-Level and V-Level.

Trust and Reliability: Trust and Reliability is comprised of the following 4 items: Effective Augmentation(0.526), Accuracy in Content (0.812), Quality of Content(0.64) and Relevant Information (0.78). It was found that there is a significant difference between the perception of professionals belonging to different levels in organization since the p value was less than 0.10 and the hypothesis H_2 is rejected. However, it is evident from the Tukey test that there is a difference only between B-Level and V-Level. The difference might exist due to the different type of expectations and experience from the different levels.

Content Generation: 4 items are involved in the factor: Automated Content Creation (0.718), Variety in Content(0.693), Improved Flexibility(0.741) and Effective Translation(0.709). As shown in Annexure- 4, the p value is higher than 0.10 therefore null hypothesis H_5 is not rejected at 10% level of significance, which means there is no significant difference between the perception of professionals belonging to different levels in organization with respect to Content Generation. This seems to be true because the process of content generation remains the same from all the software's and because it is designed by the software developers. Further, the basic utility of Generative AI is content generation and hence all the people might be using it in the same manner. A detailed description of difference between the different

levels in organizationisshownusingTukeytest(Annexure-5) which also shows no different between two different levels in the Organization.

CONCLUSION AND RECOMMENDATIONS

The study finds that generative AI will play a huge role in the future. As more organizations will incorporate automation, generative AI seems to be play a major role. The applications of GenAI and use cases will grow as the technology continues to grow. Generative AI can easily be made more extensive and applied to different business operations. However, Generative AI may not seem to be providing a benefit in professions which includes human touch and care like doctors, nurses, therapists, and other healthcare professionals will continue to play a vital role in providing care and in domain where human creativity is involved for content creation like art, design, writing, and entertainment. In health care industries, a human involvement for realizing the benefits like improving the drug discovery process, development of effective treatments, reducing side effects and others.

While generative AI offer immense benefits to any business, but has its own limitations related to improvement. It seems that the effective realization of advantages of Gen AI will take more time, and business leaders still needs to address significant challenges related to Gen AI. These include managing the risks inherent in generative AI, determining the requirements of workforce and rethinking core business processes by developing new skills.

The study understands the perception of professionals belonging to different levels in the organization. Generative AI offer immense benefits to any business, but has its own limitations related to the usage and improvement. It seems that the full realization of advantages of the technology's benefits will take time, and senior executives still needs more time to address significant challenges related to Gen AI. It is important to provide support to the V-Level for the formulation of strategies because generative AI can assist with data analysis, generate suggestions for effective evaluations and facilitating them to make better judgments through educated reasoning, introduction of laws, policies, and regulatory frameworks. It is important to build level of trustworthiness in Generative AI systems. It is important for senior executives to understand the impact of generative AI on their organizations, exploit opportunities and manage challenges. Generative AI and other applications of Large Language Models are easily available, and organizations can customize the different models, by using their own data and perform refinement, for effective utilization and making it beneficial for the organization. It can assist in developing strategic planning models for conducting complex predictive analytics and generating insights that are not achievable through human analysis alone. For effective results, it becomes important for the organizations to create guidelines related to the expectations and standards related to the use of Gen AI in the organization. If the Generative AI is given access to reliable data sources and enormous information, effective patterns can be identified for synthesizing new data. This will further help to significantly improve the quality and speed of the generated content and transformingthose insights into strategic planning models.

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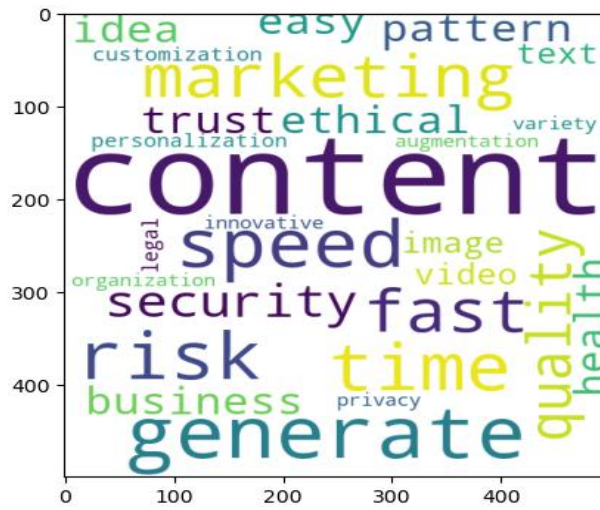
Annexure 1: Key words related to Generative AI

Annexure 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.816
Bartlett's Test of Sphericity	Approx. Chi-Square	1.697E3
	Df	276
	Sig.	.000

Annexure 3: Factor Analysis

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.479	26.996	26.996	6.47	27	27	3.51	14.62	14.62
2	2.414	10.058	37.054	2.41	10.06	37.1	2.64	11	25.62
3	1.693	7.052	44.106	1.69	7.052	44.1	2.55	10.62	36.24
4	1.48	6.167	50.273	1.48	6.167	50.3	2.29	9.53	45.77
5	1.174	4.893	55.166	1.17	4.893	55.2	2.26	9.4	55.17

Annexure 4: ANOVA test

		MeanSquare	F	Sig.
Integration and Innovation	BetweenGroups	1.826	4.135	.017
	WithinGroups	.442		
	Total			
Content Generation	BetweenGroups	.730	1.852	.158
	WithinGroups	.394		
	Total			
Ease of Use	Between Groups	.449	.930	.395
	Within Groups	.482		
	Total			
Privacy, Safety and Ownership	Between Groups	2.440	4.378	.013
	Within Groups	.557		

	Total			
Trust and Reliability	Between Groups	.948	2.487	.084
	Within Groups	.381		
	Total			

Annexure 5: Multiple Comparisons using Tukey Test

DependentVariable	(I)age	(J)age	MeanDifference(I-J)	Std.Error	Sig.
Integration and Innovation	B-Level	D-Level	-.19181*	.0809	.0481
		V-Level	-.21448*	.0811	.0232
	D-Level	B-Level	.19181*	.0809	.0481
		V-Level	-.02267	.0783	.9556
	V-Level	B-Level	.21448*	.0811	.0232
		D-Level	.02267	.0783	.9556
Content Generation	B-Level	D-Level	-.05691	.0764	.7371
		V-Level	-.1455	.0766	.1402
	D-Level	B-Level	.05691	.0764	.7371
		V-Level	-.0886	.0740	.4550
	V-Level	B-Level	.1455	.0766	.1402
		D-Level	.08866	.0740	.4550
Ease of Use	B-Level	D-Level	-.10457	.0845	.4326
		V-Level	-.01464	.0849	.9841
	D-Level	B-Level	.10457	.0845	.4326
		V-Level	.08993	.0819	.5158
	V-Level	B-Level	.01464	.0849	.9841
		D-Level	-.08993	.0819	.5158
Privacy, Safety and Ownership	B-Level	D-Level	-.20769*	.0910	.0592*
		V-Level	-.25627*	.0912	.0148
	D-Level	B-Level	.20769*	.0910	.0592
		V-Level	-.04858	.0880	.8453
	V-Level	B-Level	.25627*	.0912	.0148
		D-Level	.04858	.0880	.8453
Trust and Reliability	B-Level	D-Level	-.13546	.0754	.1726
		V-Level	-.15613*	.0752	.0961
	D-Level	B-Level	.13546	.0754	.1726
		V-Level	.02068	.0728	.9560
	V-Level	B-Level	.15613*	.0752	.0961
		D-Level	-.02068	.0728	.9560
*. The mean difference is significant at the 0.10 level.					