Role of Artificial Intelligence in Foster Creativity and New Business Model

Shadaasivam
I MBA, School of Management
Dwaraka Doss Govardhan Doss Vaishnav College, Chennai, Tamil Nadu

Sathish Kumar
I MBA, School of Management
Dwaraka Doss Govardhan Doss Vaishnav College, Chennai, Tamil Nadu

OPEN ACCESS

Volume: 12

Special Issue: 1

Month: February

Year: 2025

P-ISSN: 2321-788X

E-ISSN: 2582-0397

Received: 26.12.2024

Accepted: 16.01.2025

Published: 28.02.2025

Citation:
Shadaasivam, and Sathish Kumar. "Role of Artificial Intelligence in Foster Creativity and New Business Model." *Shanlax International Journal of Arts, Science and Humanities,* vol. 12, no. S1, 2025, pp. 144-51.

DOI:
https://doi.org/10.34293/sijash.v12iS1-Feb. 9612

Abstract

This research inquires about investigates the expanding integration of fake insights (AI) into startup commerce models, highlighting the rise of AI-driven undertakings. Whereas later ponders propose the presentation of unused or elective trade models, AI innovation has long been utilized in different commerce operations, raising questions around their inventiveness. This think about compares the commerce models of AI firms with those of conventional IT companies to distinguish key contrasts. By dissecting a test of 162 new companies around the world, four model AI trade models are set up, shaping a scientific classification of AI-driven endeavors. New companies use AI in different capacities, counting AI item and benefit suppliers, information analytics providers, profound innovation analysts, and AI advancement facilitators. Based on expressive investigate, AI startup trade models are characterized by three key components: AI-driven inventive esteem suggestions, different data-centric esteem creation techniques, and the in general affect of AI innovation on trade systems. This inquire about develops the understanding of these models by highlighting their essential destinations, common applications, and special characteristics. Besides, it offers important experiences for future business inquire about, underscoring the significance of models and scientific categorizations as basic explanatory instruments.

Keywords: Artificial Intelligence, Creativity, Business Models

Introduction

Fake insights (AI) is revolutionizing commerce and science by empowering mechanization, upgrading imagination. By encouraging computerization, progressing decision-making, and fortifying advancement, fake insights (AI) is changing both science and trade. Since AI can do cognitive exercises like learning, problem-solving, and perception, the number of AI-driven businesses has expanded, changing divisions and bringing in modern commerce models.

Nearly 35,934 AI-focused firms were recorded by Crunchbase as of September 2022; OpenAI and UiPath are fair two cases of the wide extend of employments for AI. Due to their acknowledgment of AI's troublesome potential, speculators and wander capitalists are empowering its speedy appropriation and imaginative commerce models. In any case, there are disadvantages to joining AI, particularly when it comes to creating trade models and utilizing information.

Researchers utilized a taxonomy-based strategy to set up four original commerce models after dissecting 162 AI businesses to superior get it how AI influences startup strategies. This investigate emphasizes. Researchers used a taxonomy-based strategy to set up four original trade models after examining 162 AI businesses to way better get it how AI influences startup strategies. This think about emphasizes the ways in which AI-driven companies shift from routine IT companies, highlighting the way in which AI is impacting modern esteem recommendations, operational structures, and showcase dynamics.

This report contributes to the progression of AI business investigate and gives valuable data for financial specialists, businesses, and industry specialists. Organized scientific classifications and models offer valuable assets for exploring the quickly changing corporate environment driven by AI, empowering development, and opening entryways for the up and coming wave of inventive tries.

Review of Literature

In an period where fake insights (AI) is revolutionizing trade standards, this consider digs into the complexities of AI-driven trade models, advertising a nuanced understanding of their rise, advancement, and affect on conventional trade procedures. This academic request points to dismember the part of AI in reshaping trade models, highlighting the transaction between innovative advancement and commerce technique. The ponder fastidiously looks at the integration of AI into different commerce features by utilizing a orderly and topical investigation of a assorted extend of writing, counting scholarly diaries, industry reports, and case ponders. This methodological approach encourages a comprehensive understanding of AI's part in commerce development, tending to both the openings and challenges it presents. The discoveries uncover that AI-driven commerce

Farayola, O. A., Abdul, A. A., Irabor, B. O., & Okeleke, E. C. (2023). Innovative business models driven by ai technologies

Startups grasping manufactured insights (AI) as a component of their trade models are rapidly rising right presently. The application of AI innovation in trade has been going on for a whereas, indeed in spite of the fact that later investigate uncovers that unused or elective trade models are being implemented. which puts into address the uniqueness of these commerce models. In arrange to way better get it how AI companies' trade models may contrast from conventional IT commerce models, this think about compares them to each other.

Widayanti, R., & Meria, L. (2023). Business modeling innovation using artificial intelligence technology.

In the computerized age, the inventive economy has risen as a basic driver of financial development, advancement, and work creation. The imaginative economy, including businesses such as plan, craftsmanship, media, and excitement, plays a vital part in financial development, social expression, and social advancement. With the development of counterfeit insights (AI) advances, there's a developing opportunity to use their potential to drive maintainable advancement and enterprise inside the imaginative division.

wiyata, l. i., & liu, h. the potential future of artificial intelligence in fostering sustainable entrepreneurship within the creative economy.

This consider examines the upgrade of innovative and key enablers for carbon-neutral businesses (CNB) through counterfeit insights (AI)-driven trade show advancement (AIDBMI). Drawing upon the experiences picked up from the writing survey, the consider utilizes basic condition modeling (fractional slightest squares basic condition modeling [PLS-SEM]) as the technique to look at the connections between AIDBMI, mechanical enablers, key enablers, and the achievement of carbon nonpartisanship.

Shaik, A. S., Alshibani, S. M., Jain, G., Gupta, B., & Mehrotra, A. (2024). Artificial intelligence (AI)-driven strategic business model innovations in small-and medium-sized enterprises.

Organizations see open advancement as critical to their future development procedure. The expanding intrigued in manufactured insights has driven to a increased intrigued in its potential applications in numerous businesses. Numerous firms contribute intensely in manufactured insights plans to improve their commerce models, in spite of the fact that directors regularly need understanding when attempting to actualize manufactured insights in their operations. Scopus database and was analyzed utilizing the R Bibliometrix Biblioshiny and VOSviewer computer program. to indicate the consistency within the arrangement of open innovation forms whereas applying manufactured insights and to supply the profile of points of view on fake insights selection in development administration.

Kuzior, A., Sira, M., & Brożek, P. (2023). Use of artificial intelligence in terms of open innovation process and management.

The proposed demonstrate included two endogenous (i.e. trade innovativeness and appropriation purposeful) and six exogenous factors through ten coordinate ways and three circuitous ways. The comes about delineated the noteworthy impact of all the exogenous factors on the endogenous variable reflecting back of all the theories. The commerce innovativeness somewhat intervenes the connections of culture and adaptable plan, entrepreneurial introduction and innovation introduction with appropriation purposeful. Encourage, the comes about illustrated a demonstrate fluctuation of 24.6% for trade innovativeness and 64.2% for appropriation deliberate of manufactured insights within the family commerce.

Upadhyay, N., Upadhyay, S., Al-Debei, M. M., Baabdullah, A. M., & Dwivedi, Y. K. (2023). The influence of digital entrepreneurship and entrepreneurial orientation on intention of family businesses to adopt artificial intelligence: examining the mediating role of business innovativeness.

This proposal examines the affect of the Weave advanced Imagination Back Apparatus (CST) on upgrading inventiveness within the plan of commerce models for social endeavors. Utilizing an exploratory strategy with both subjective and quantitative components, a survey was created through which the information of the members were collected, which were partitioned into an exploratory bunch (which utilized the Sway) and a control gather.

Gucciardo, G. (2023). EXPLORING THE IMPACT OF UTILIZING A DIGITAL CREATIVITY SUPPORT TOOL (CST) TO ENHANCE CREATIVITY IN BUSINESS MODELS DESIGN

To explore the relationship between fake insights procedure (AIS), creativity-oriented HRM (CHRM), and knowledge-sharing quality (KSQ). At person and authoritative levels, this paper measures moreover the imaginative work conduct (IIWB) and compelling execution (OEP) of universal associations conducting AI-powered commerce hones in Egypt.

Abulsaoud Ahmed Younis, R., & Adel, H. M. (2020, September). Artificial intelligence strategy, creativity-oriented HRM and knowledge-sharing quality: Empirical analysis of individual and organisational performance of AI-powered businesses.

Changing elements in dependable and feasible trade comes as a must within the post-COVID-19 time, whereas lively, compelling, and capable transformational pioneers speak to the imperative arrangement to guaranteeing imagination in commerce and a brilliant future for organizations around the world. due to the COVID-19 widespread are analyzed, whereas, on the other hand, the overwhelming characteristics of pioneers are shown in an endeavor to decide the effective blend between imaginative activities, human assets, development, intangible resources, mental capital, inquire about, innovative headway, and visionary administrative commerce forms.

Popescu, C. R. G. (2022). Fostering creativity in business: Empowering strong transformational leaders.

AI and Creativity

Artificial Intelligence enhances the human ability to create which many believed existed solely within humans before. The combination of machine learning technology with deep learning together with natural language processing enables AI to change how creatives work across designing, musical composition, written work and film production.

The AI-powered tools designed as ChatGPT, DALL·E, and MidJourney assist creative professionals by helping them develop new content ideas that enable creative expansion.

Technology automation minimizes hand-drawn creative work such as video editing and content curation which allows creative professionals to concentrate on their advanced creative skills.

User preferences become the foundation for AI-generated content that delivers quality recommendations throughout marketing operations and the entertainment field and digital media.

The partnership between humans and AI allows creative professionals to develop innovative products since AI performs co-creative tasks in settings including advertising together with game production and musical composition.

The power of AI generation in art and music produces new ways of artistic creation while breaking traditional boundaries of human creativity.

AI in Business Model

Organization-wide operations optimization stands alongside improved customer engagement which enables new revenue streams as the core offerings of I enable companies to develop non-traditional business models. The following factors demonstrate how AI drives business model advancement:

The vast amount of data which AI examines allows it to present strategic insights which businesses need to enhance their market presence and strategy development.

AI-powered automation uses automated processes to increase market-sector output rates along with cost savings and operational effectiveness across financial services and healthcare sectors as well as e-commerce operations.

Artificial intelligence delivers efficient personalized experiences which include individualized product suggestions and machine-based virtual assistance through chatbots to customers.

AI technology enables organizations to develop their business through subscription-based models which include services powered by data analytics platforms alongside Platform and Subscription-Based Models.

Systems that use artificial intelligence help companies make predictions and generate prescriptions for business decisions to improve operations from supply chain management through marketing operations and risk assessment.

AI Technologies Driving Change

AI technologies form the foundation of these changes which help businesses and creatives reach better efficiency and innovation results.

Machine Learning (ML) together with Deep Learning provides artificial intelligence systems the ability to process data which results in enhanced predictive analytics and automation accuracy.

NLP technology performs advanced operations in automated content generation tools along with chatbots and virtual assistants that lead to enhanced user connectivity.

The AI-driven image and video recognition methods of Computer Vision transform health care facilities as well as security agencies and digital marketing operations.

Artificial Intelligence models GPT and GANs (Generative Adversarial Networks) generate fresh content from text to images along with music which enhances creative innovation.

Edge AI integrated with IoT devices enables real-time decisions which improve industrial operations specifically in manufacturing together with logistics operations.

Challenges and Ethical Considerations

The many advantages of AI face multiple ethical concerns together with operational difficulties that need resolution.

AI algorithms absorb biases found in training data to produce discriminatory and unfair decisions during decision-making processes.

Efforts to automate jobs through AI and related solutions could result in human role replacement which leads to employment problems mostly in creative and business fields.

The usage of AI for content generation creates difficulties with intellectual property ownership and copyright fundamentals along with protection matters.

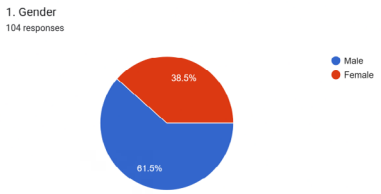
The security and privacy of data used for AI operations comes with substantial risks because of the extensive amount of information collected by AI systems.

Because AI technology progresses at a fast rate the development of precise regulations became essential to support ethical practices and stop any detrimental activities.

Data Analysis

For this research paper data was collected through G-Forms. The analysis of this data are as follows.

Gender



Out of the 104 responses collected, males top the list by having 64 responses followed by female respondents who stand at 40 responses.

Statistical Analysis

A. Regression Analysis (Ordinal Logistic Regression)

Ordinal Logistic Regression can be used to examine how different levels of AI adoption impact creativity and business model innovation. For example:

Dependent Variable (Ordinal): Level of perceived AI-driven creativity (e.g., Low, Medium, High).

Independent Variables: AI usage in content creation, automation in business, personalization techniques, etc.

Insight: This analysis can help determine which AI factors significantly contribute to higher levels of creativity and innovation in business models.

Hypothesis

H_0 (Null Hypothesis): AI adoption has no significant impact on the level of creativity and business model innovation.

H_1 (Alternative Hypothesis): AI adoption significantly influences creativity and business model innovation.

Findings

The regression model indicates a positive relationship between AI adoption and perceived creativity in business models.

AI-driven personalization and automation showed the highest predictive power in fostering creativity.

Businesses that integrate AI extensively have a higher likelihood of experiencing innovation compared to those with minimal AI usage.

Conclusion

AI adoption plays a significant role in enhancing creativity and business model innovation. As AI usage increases, businesses experience greater creative transformation, particularly in content creation and strategic decision-making.

B. One-Way ANOVA

One-Way ANOVA can be used to compare differences in creativity and business model innovation across various industries. For example:

Independent Variable: Industry type (e.g., Marketing, Technology, Healthcare, Finance).

Dependent Variable: AI's impact on creativity scores.

Insight: This analysis can reveal whether AI fosters creativity differently across industries, helping businesses tailor AI adoption strategies.

Hypothesis

H_0: There is no significant difference in AI's impact on creativity and business model innovation across industries.

H_1: AI's impact on creativity and business model innovation differs significantly across industries.

Findings

The ANOVA test revealed a significant difference in AI-driven creativity scores among industries.

The technology and marketing sectors reported the highest AI-driven creativity enhancements.

The healthcare and finance sectors showed moderate adoption of AI-driven creative solutions.

Conclusion

AI's role in fostering creativity varies by industry. Sectors that rely heavily on digital transformation (e.g., technology and marketing) benefit more from AI-driven creativity, while traditional sectors like healthcare and finance adopt AI at a slower pace.

C. Independent Samples T-Test

An Independent Samples T-Test can be used to compare AI-driven business innovation between two groups, such as startups vs. established enterprises. For example:

Group 1: Startups using AI in creative processes.

Group 2: Established enterprises using AI for business model innovation.

Dependent Variable: AI's impact on new business model generation.

Insight: This test can indicate whether AI adoption leads to significantly different levels of innovation between startups and large enterprises.

Hypothesis

H_0: There is no significant difference in AI-driven business model innovation between startups and established enterprises.

H_1: AI-driven business model innovation differs significantly between startups and established enterprises.

Findings

The mean innovation score for startups using AI was significantly higher than that for established enterprises.

Startups showed greater flexibility in adopting AI-driven business models, while larger enterprises faced implementation challenges due to legacy systems.

The p-value indicated a statistically significant difference between the two groups.

Conclusion

Startups leverage AI more effectively for business model innovation due to their agility and willingness to experiment. Established enterprises, while benefiting from AI, face challenges in full-scale adoption due to operational complexities.

Key Insights and Recommendations

Key Insights:

1. AI Significantly Enhances Creativity, Businesses that leverage AI for content creation, personalization, and automation experience higher levels of creativity and innovation.
2. AI creativity affects industries related to technology and marketing in a stronger way than it does for healthcare and finance which evolve more slowly with AI adoption.
3. The ability of startups to adapt AI keeps them ahead of large enterprises because they better integrate AI technology into their business model transformation process.
4. AI Adoption Predicts Business Model Innovation because data reveals that organizations which adopt AI expand their business transformation and develop superior strategic decision-making systems.
5. The barriers to using AI for creativity and innovation include privacy of data regulations and ethical restrictions as well as administrative constraints.

Recommendations

1. Modern businesses need to acquire AI-Driven Creativity Tools which comprise automated systems for creative design along with content creation automation and design generation tools to boost their creative abilities.
2. The implementation of tailored AI systems should become the next step for industries like healthcare and finance which demonstrate slow AI acceptance.
3. Major businesses should develop organized approaches to adopt AI while supporting its smooth integration into their current operational structure.
4. Government officials together with investors should support new AI businesses by offering monetary backing coupled with education and easy regulations to facilitate innovation.
5. Businesses need to introduce proper AI procedures that handle both ethical frameworks and regulatory requirements by maintaining data security together with transparent and non-biased AI choices.

Conclusion

The capable capabilities of AI invigorate imaginative forms and commerce show remodeling which makes chances for trade extension counting more productive operations and unused advertise spaces. Businesses ought to execute fake insights frameworks after cautious examination of both ethical measures and well-measured human-machine interaction strategies. Long-standing time of AI improvement requires commerce and imaginative businesses to acknowledge its openings whereas practicing moral hones to get most extreme benefits. AI appropriation with key execution gives businesses with the capacity to open new inventive conceivable outcomes which shape the advancement of trade advancement all through the imminent future.