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How Technology Companies Can Utilize AI to Drive Brand Growth: Case Study Based on Digital Marketing Strategies

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Abstract. There is a phenomenon that almost all companies face throughout the whole human history, which is the cost of labor. Cost of labor is a fundamental obstacle that almost 30% of startups failed to deal with. Moreover, the cost of labor had always be a major barrier for startups to overcome. This paper will specifically focus on how does AI can minimize the cost on labor and how to fully utilize the AI as an substitute of labor. In addition in this paper there will use case study to probe this phenomenon.

Keywords: AI advertising, AI and cost, AI and productivity

1. Introduction

Today, many businesses are facing the problem of tight funding. In this article, I'll focus on how artificial intelligence can help businesses take off and grow. Currently, 23% of companies go bankrupt because they can't hire employees [1]. Artificial intelligence can help them solve this problem. This article will present case studies and place them on topics I have researched. 2 Artificial intelligence, cost and work efficiency

1.1. AI and cost reduction

This paper looks closely at how AI technologies—like Machine Learning (ML), Natural Language Processing (NLP), and automated software bots (RPA)—help businesses cut expenses and boost profits. AI is known as an effective way to do repetitive work and to increase productivity. In today's fast-paced business world, saving money and operating efficiently are top priorities, and Artificial Intelligence (AI) has become a powerful tool to help companies achieve these goals. The study breaks down the complex math and algorithms AI uses to forecast trends and distribute resources efficiently. It also uses real-world examples and graphs to prove that these tools actually save money and deliver a solid return on investment (ROI). While the results are promising, the paper also addresses the problems that businesses face, such as moral concerns and the fear of AI replacing human jobs. Ultimately, this research acts as a roadmap for any company wanting to use AI to improve its financial health [2].

The approach of this topic is basically about helping start up to decrease the minimize costs. AI plays an essential role in saving budget, whether in startups or technology companies. So this essay i am discussing about the importance of startup to hire AI as their productive tool.

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Their findings show that since 2016, the cost to train the most demanding AI systems has multiplied by about 2.4 times every single year. For the best models like GPT-4 and Gemini, the biggest capital consumption is specialized artificial intelligence chips and talent, both of which cost tens of millions of dollars. The rest of the budget is allocated between server components, network infrastructure, and energy use. If costs continue to rise at this rate, training state-of-the-art artificial intelligence by 2027 could cost more than $1 billion, which means that only very rich companies can have the resources [3].

1.2. AI and business efficiency

The cost of developing advanced artificial intelligence is high, although exact figures are rarely disclosed. To solve this problem of insufficient data, the researchers created a model to estimate these costs by considering hardware, energy, cloud computing, and employee salaries. There is a tendency to develop one's own model. If this trend continues, by 2027, the cost of training the largest model of artificial intelligence could exceed 1 billion dollars, and only the richest organizations can afford the development of cutting-edge artificial intelligence [3].

1.3. The cost of AI adoption

AI market is testing new methods of charging customers, as the traditional method is no longer effective. The original computer uses token-based pricing fees, but it often surprises buyers with unexpectedly high bills. Results-based pricing is charged only for successful business outcomes; however, buyers don't like it because future costs are hard to predict and success is hard to determine. The credit system allows customers to buy a set of balances, facilitating budgeting, although it can hide the real cost of each action. To solve these problems, hybrid pricing becomes the first choice. As customers use more AI features, hybrid pricing combines stable basic subscriptions with additional costs. This provides businesses with predictable bills and allows software vendors to generate more revenue as usage increases. Another option is the upper limit, which is charged according to activity, but stops at a strict monthly upper limit. In order for these complex models to work, companies must create a powerful billing system that can track activities instantly and transparently [4].

2. Case studies in AI-driven digital marketing

There is already a very mature system used by firms who already succeeded in reducing costs and customizing services.

2.1. Klarna

Klarna, a popular payment company, started using artificial intelligence to save about $10 million a year on its marketing costs. In the first few months of 2024, they reduced their total sales and marketing budget by 11%, even though they ran more ad campaigns than before. Before using AI, Klarna spent a lot more time and money making ads. Creating new pictures for a campaign used to take six long weeks. Now, with AI tools, that exact same work only takes seven days [5].

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2.2. Bajaj Pulsar

Bajaj Pulsar used an AI platform called Whilter to generate 160,000 personalized videos from a single customer selfie. This hyper-personalized campaign achieved a 70% click-to-conversion rate and generated over 30 million impressions [6].

2.3. Netflix and Blockbuster

The difference between the AI-intensive company and the companies that are labor-intensive is significant. Neflix they built a machine learning system that tracked every single thing a user watched or rated. This early AI analyzed millions of data points to predict exactly what you would want to watch next. now, Netflix's AI is even more advanced it doesn't only recommend shows, it decides which movie thumbnails to show you based on colors or actors you click on most and helps them predict which original shows will be massive hits before they even start film which saved them tiousands and millions of dollars to hire employees. However Blockbuster is a application which have similar functions and it is an labor intensive company. However, companies that didn't use AI are suffering from high labor costs. For example, Blockbuster had to reach more customers and build physical stores and hire thousands of local cashiers, store managers, and regional directors, which pulled them into a plight where Human labor and real estate were their biggest expenses. In addition, the store manager must intuitively guess how many physical copies of new films need to be stored. If they misguess, the shelves will be empty, which will frustrate customers, or the extra copies will collect dust and waste money. In summary, the winner of the battle of the family entertainment is Netflix, while Blockbuster is the ultimate loser. The decline of Blockbuster stems from the strong dependence on physical infrastructure and manual labor. Running thousands of shops requires huge commercial lease funds and the salaries of tens of thousands of employees. Inventory management is based on human speculation, while customer discovery depends on the subjective advice of store employees. On the contrary, Netflix won by replacing physical friction with efficiency. By bypassing expensive stores, Netflix used centralized distribution. Netflix's recommendation algorithm is not dependent on employees, but analyzes a large amount of user data to provide personalized movie suggestions. When the company switched to digital streaming media, this advantage exploded. With automated servers replacing physical leasing, the marginal cost of streaming services for new customers will be reduced to near zero. Blockbuster cannot get rid of the overwhelming financial burden of his traditional stores and manpower. Eventually, Netflix built a globally scalable digital empire in data and automation, making Blockbuster completely outdated [7-10].

3. Challenges of AI application

3.1. Implementation and administrative cost

Although AI can help companies reduce operating and marketing costs, its implementation also requires financial investment. Companies may need to pay for AI software, computing resources, data processing, and employee training. For small businesses and startups, these initial costs can be a significant burden. Therefore, companies need to consider whether the expected improvement in efficiency and marketing performance can justify the cost of adopting AI. Moreover, there will also be an extra cont on the administrating the AI tools because, in economic terms, there is a term called diminishing marginal benefit. This is basically about when there is one person manipulating the

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machine, it might be light work for the worker hoever a very low efficiency. When there is one worker manipulating ten machines, it might end up in an inefficient situation, so the same rule applies to AI; a company that wants to apply AI as a tool might struggle to adjust the best proportion.

3.2. Employee training and job displacement

Another challenge is the impact of artificial intelligence on employees. Artificial intelligence can perform many repetitive and routine tasks, which can reduce the need for some types of manual work. So This may raise concerns about the transfer of a job. At the same time, employees must learn how to use artificial intelligence effectively and adapt to new working methods. Moreover artificial intelligence should be considered as a assist for workers. The company should also provide appropriate training and enable employees to focus on tasks that require human creativity, communication, and decision-making.

The use of artificial intelligence in marketing and business activities also raises ethical issues. Artificial intelligence systems can use a large amount of customer data to provide personalized recommendations and advertisements. If the company does not manage this data properly, customers may be concerned about privacy and data protection. In addition, greater dependence on automation systems will affect the transparency of business decision-making. Therefore, when implementing artificial intelligence, companies should pay attention to data privacy, security and responsible use. In addition, artificial intelligence companies must obtain permission from customers to use their information and generate responses such as cookies.

4. Conclusion

In short, this article shows that artificial intelligence can help companies reduce costs and improve operational and marketing efficiency. The cases of Klarna, Bajaj Pulsar and Netflix illustrate the different applications of artificial intelligence in marketing, personalization, automation and customer service. Artificial intelligence can reduce repetitive work, accelerate content production, and provide customers with a more personal experience. However, the company must also consider implementation costs, employee-related issues, and ethical issues. Therefore, artificial intelligence can be an important business tool, but its value depends on how the company effectively integrates artificial intelligence into existing activities and marketing activities.

References

[1] Vincent. (2026). Why startups really fail in 2026 (not what CB Insights said). *Preuve AI*.
[2] Ismanov, I., Qayumov, N., Mukhamadjonova, D., & Akhmadaliyev, B. (2024). AI and cost management: Strategies for reducing expenses and improving profit margins in business. *2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)*. https://doi.org/10.1109/ICKECS61492.2024.10616761
[3] Cottier, B., Rahman, R., Fattorini, L., Maslej, N., & Owen, D. (2024). The rising costs of training frontier AI models. arXiv. https://arxiv.org/abs/2405.21015
[4] Kummari, S. (2026, February 26). AI is breaking how companies charge for software. *JustPaid*. JustPaid article
[5] Klarna. (2024, May 28). AI helps Klarna cut marketing agency spend by 25% and run more campaigns. *Klarna*. Klarna official article
[6] Whilter.AI. (2026). Bajaj Pulsar—case study. *Whilter.AI*.
[7] Christensen, C. M., Raynor, M. E., & McDonald, R. (2015). What is disruptive innovation? *Harvard Business Review, 93*, 44–53.
[8] Gomez-Uribe, C. A., & Hunt, N. (2015). The Netflix recommender system: Algorithms, business value, and innovation. *ACM Transactions on Management Information Systems, 6*, 1–19.

DOI: 10.54254/2754-1169/2026.38140

[9] Shih, W., Kaufman, S., & Spinola, D. (2009). Netflix. *Harvard Business School Case, 9*, 1–25.
[10] Voigt, K. I., Buliga, O., & Michl, K. (2017). Entertainment on demand: The case of Netflix. In *Business Model Pioneers* (pp. 127–141).