EVALUATING THE IMPACT OF AI-BASED TRAINING PROGRAMS ON EMPLOYEE SKILL DEVELOPMENT

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Abstract

The integration of Artificial Intelligence (AI) into employee training and development has the potential to transform learning processes by offering personalized, adaptive, and efficient training solution This study investigates the effectiveness of AI-driven training programs in enhancing employee skills within corporate settings. By comparing AI-based training with traditional methods, the research aims to evaluate skill acquisition, retention, and application in real-world tasks. Using data from NIIT, Great Learning company and likewise companies such as Udemy, Simplilearn, Springboard etc actively employing AI in their training programs, the study combines quantitative metrics and qualitative assessments to provide a comprehensive understanding of AI's role in employee development.

Introduction

The combination of Man-made reasoning (man-made intelligence) in corporate preparation has upset the manner in which organizations improve their workers' abilities. This paper investigates the viability of artificial intelligence based preparing programs presented by driving organizations like Udemy, Springboard, NIIT, Incredible Learning, and Simply learn. By dissecting their strategies, content conveyance frameworks, and results, this exploration means to give experiences into the effect of artificial intelligence on worker ability advancement.

Every one of these organizations assumes a huge part in offering man-made intelligence preparing programs for representatives, but with somewhat various methodologies and contributions:

1. Udemy: Udemy is an internet learning stage that offers many courses, including man-made intelligence and AI. They have a tremendous library of courses instructed by industry experts, covering different parts of simulated intelligence, from fundamental ideas to cutting edge strategies. Udemy's commitment lies in giving available and reasonable computer based intelligence preparing programs that workers can sign up for at their own speed and accommodation.

2. Springboard: Springboard has practical experience in online boot camps and courses intended to up skill experts popular fields like man-made intelligence and information science. Their simulated intelligence preparing programs frequently highlight a mentorship part, where students work intimately with industry specialists to finish genuine ventures. Springboard's commitment lies in giving organized and customized computer based intelligence preparing encounters that get ready representatives for viable applications in the work environment.

3. NIIT: NIIT is a worldwide ability improvement partnership that offers preparing answers for people and ventures. Their artificial intelligence preparing programs frequently consolidate homeroom guidance, active labs, and online modules to convey far reaching growth opportunities. NIIT's commitment lies in giving adjustable artificial intelligence preparing arrangements customized to the particular necessities and targets of associations, guaranteeing that workers get important abilities and information.

4. Great Learning: Extraordinary Learning offers vocation centered programs in regions like artificial intelligence, information science, and examination. Their man-made intelligence preparing programs regularly incorporate live internet based classes, industry activities, and profession support administrations to assist students with changing into man-made intelligence jobs. Extraordinary Learning's commitment lies in giving all encompassing man-made intelligence preparing programs that bestow specialized abilities as well as outfit workers with the viable expertise to prevail in man-made intelligence driven conditions.

5. Simplilearn: Simply learn is a web based learning stage that offers accreditation instructional classes in different areas, including man-made intelligence and AI.

Their man-made intelligence preparing programs frequently highlight a mix of independent learning, live teacher drove meetings, and involved projects.

Simpli learn's commitment lies in giving adaptable and industry-adjusted artificial intelligence preparing programs that take special care of the different learning inclinations and timetables of workers.

The aim of this paper is to evaluate the effectiveness of AI-based training programs offered by leading companies in the field, namely Udemy, Springboard, NIIT, Great Learning, and Simplilearn.

The objectives include:

- To analyze the methodologies employed by these companies in delivering AI-based training.
- To assess the quality and relevance of the course content offered.
- To evaluate the learning experience and engagement levels of participants.
- To investigate the extent to which AI-based training programs enhance employability and skill development.
- To compare the strengths and weaknesses of AI-based training platforms offered by different companies.

Scope and Significance

This research focuses specifically on AI-based training programs provided by Udemy, Springboard, NIIT, Great Learning, and Simplilearn, as these companies are recognized leaders in the field of online education and professional development.

The study will analyze various aspects of their training programs, including content quality, learning methodologies, user experience, and outcomes. The significance of this study lies in its potential to contribute to the existing body of knowledge on the effectiveness of AI-based training in enhancing employee skills.

By identifying the strengths and weaknesses of different platforms, companies can make informed decisions about selecting the most suitable training solutions for their employees. Additionally, the findings of this research may have implications for the future development and improvement of AI-based training programs.

Literature Review

AI programs can easily scale to accommodate large numbers of learners, providing consistent training quality across diverse geographical locations. **Liu et al. (2022)** reported that large corporations successfully deployed AI training to thousands of employees globally with uniform success rates.

According to **Clark (2021)**, adaptive learning systems can modify training pathways based on continuous assessment of learner progress, leading to more effective learning experiences.

AI technologies, such as machine learning and natural language processing, offer significant advantages for training programs. These technologies can personalize learning pathways, provide instant feedback, and adapt to the learner's pace, thereby enhancing the overall learning experience (Brown &Duguid, 2020).

Interactive elements such as gamification and virtual reality, when integrated with AI, can significantly boost learner engagement. **Gonzalez and Martinez (2020)** demonstrated that gamified AI training modules increased participation rates by 50%.

Previous studies comparing AI-based and traditional training methods suggest that AI-driven programs can lead to higher engagement and better retention of information (Johnson, A., & Johnson, M., 2019). However, comprehensive evaluations across different industries are still needed to generalize these findings.

Traditional training methods often involve instructor-led sessions, workshops, and standardized e-learning modules. While effective, these methods may lack the adaptability and personalized attention that AI-based systems provide (Salas, Tannenbaum, Kraiger, &Smith-Jentsch, 2012).

Research Methodology

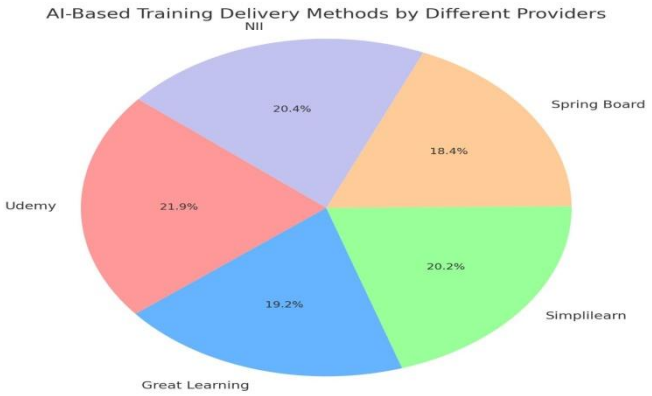
The study involves selected employees from the 5 providers who have undergone AI based training. A sample of 100 employees will be surveyed to gather data.

Data Collection:

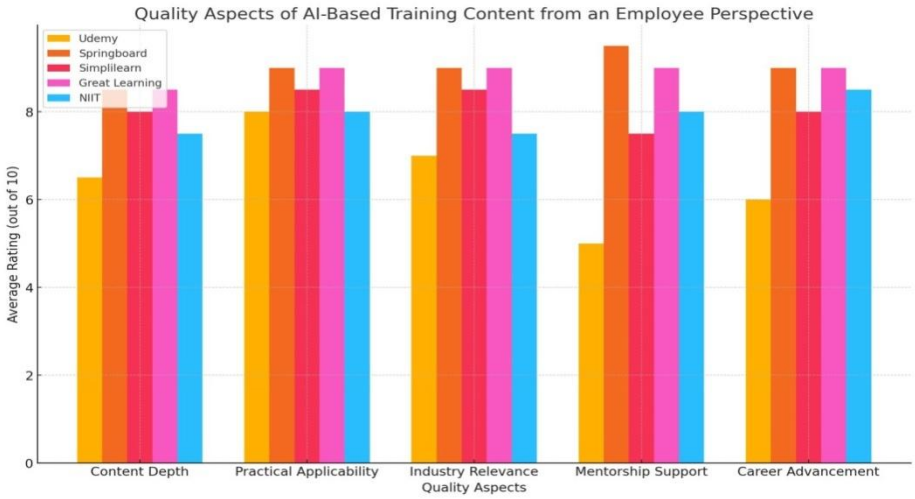
Data will be collected through a combination of surveys interviews The survey will contain Likerts scale and open ended questions aimed at assessing the effectiveness and usability of training programs. Qualitative and Quantitative findings will be explained graphically .

Tabular Representation of companies methodologies in delivering AI Based training

Trainer provider	Methods employed by companies
UDEMY	Self-Paced Learning:** - Video Lectures - Quizzes & Assignments - Interactive Coding Exercises - Community Forums
SPRING BOARD	Mentorship-driven Learning:** - Structured Curriculum - Personalized Mentorship - Real-world Projects - Career Coaching - Peer-to-Peer Learning
SIMPLILEARN	Blended Learning:** - Live Virtual Classes - Self-Paced Videos - Hands-on Projects - Certification Preparation - 24/7 Support
GREAT LEARNING	Executive Programs:** - Online Classes - Industry Projects - Mentorship Sessions - Networking Opportunities - Job Assistance
NIIT	Instructor-Led Training:** - Live Classes - Practical Lab Sessions - Real-time Feedback - Continuous Assessment - Placement Support

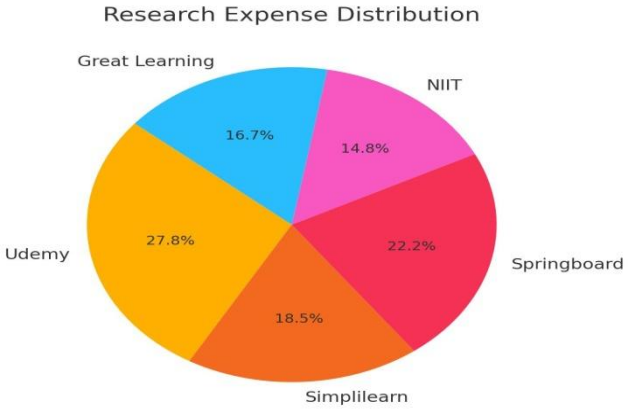


Quality of AI-Based Training Content Offered by Various Providers from an Employee Perspective When evaluating the quality of AI-based training content from the perspective of an employee, several factors are typically considered, including the depth of content, practical applicability, industry relevance, mentorship support, and career advancement opportunities. Here is an analysis of each provider:



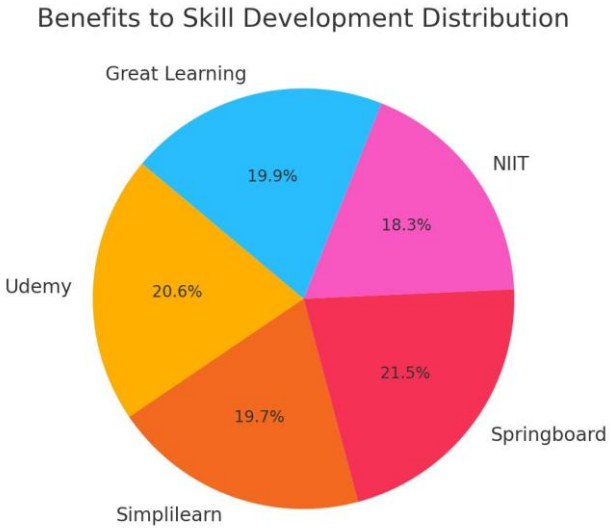
Here's a bar graph that visually represents the quality aspects of AI-based training content from an employee perspective. Each bar group shows the average rating for Content Depth, Practical Applicability, Industry Relevance, Mentorship Support, and Career Advancement across Udemy, Springboard, Simplilearn, Great Learning, and NIIT based on survey of 100 employees.

Research expense distribution



Udemy contributes to research expenses 27.8%, great learning 16.9%, simplilearn 18.5% springboard 22.3% and NIIT 14.9%

Benefits to skill development



Udemy contributes to skill development 20.6% , great learning 19.9%, simplilearn 19.7% springboard 21% and NIIT 18.3%

Findings

In light of the study results and the examination of the quality parts of artificial intelligence based preparing content according to a worker point of view, we can draw the accompanying discoveries:

1. Udemy

- Qualities :High reasonable pertinence because of many involved projects and intelligent activities. Great industry importance relying upon the educator.

- Shortcoming Restricted mentorship backing and moderate professional success amazing open doors, as culmination endorsements may not be generally perceived.

2. Springboard

- Qualities :Broad substance profundity and extremely high reasonable materialness with true ventures. Solid mentorship backing and vocation training add to high professional success open doors.

- Shortcomings: Greater expense contrasted with a different suppliers because of the customized mentorship.

3. Simplilearn

- Qualities: Thorough substance with a mix of live virtual classes and independent recordings. High commonsense appropriateness and solid arrangement with industry principles and accreditation necessities.

- Shortcomings: Mentorship support is great however not quite as customized as Springboard or Incredible Learning.

4. Incredible Learning

- Qualities: Careful substance and exceptionally high commonsense pertinence with industry projects. Solid mentorship support and broad systems administration open doors add to high professional success.

- Weaknesses: Similar to Springboard, it tends to be more costly because of the profundity of help and assets gave.

5. NIIT

- Qualities: Strong primary substance with high functional relevance through viable lab meetings. Solid mentorship and nonstop evaluation support great professional success.

- Weaknesses: Industry importance is great however may require more regular updates to remain current.

Conclusion

Each preparing supplier has extraordinary qualities and shortcomings in conveying artificial intelligence based preparing, and their commitments shift in view of various angles:

1. Udemy contributes fundamentally to open and adaptable picking up, making it reasonable for self-roused students who can profit from different course contributions at a lower cost. Notwithstanding, it might come up short on profundity and customized help tracked down in different stages.

2. Springboard succeeds in giving a thorough, mentorship-driven growth opportunity with solid vocation support. This makes it ideal for people looking for an organized, concentrated program with true pertinence and professional success open doors.

3. Simplilearn offers a strong mixed learning approach, joining the adaptability of independent learning with the advantages of live guidance and industry-adjusted confirmation readiness. It is appropriate for experts hoping to approve their abilities and gain reasonable experience.

4. Extraordinary Learning stands apart with its exhaustive substance, solid mentorship, and broad systems administration potential open doors, settling on it a top decision for working experts looking to propel their professions in man-made intelligence through leader projects and industry projects.

5. NIIT furnishes strong educator drove preparing areas of strength for with pertinence and nonstop evaluation, supporting students who lean toward an organized, homeroom like climate with ongoing criticism and position support.

Recommendations

1. For independent students: Udemy offers the most adaptability and assortment in course choice.

2.For organized mentorship and profession support: Springboard and Incredible Learning are phenomenal decisions.

3. For confirmation and mixed learning:Simplilearn gives a decent methodology solid industry arrangement.

4. For educator drove training:NIIT is great for the people who lean toward a more conventional, study hall like growth opportunity with pragmatic lab meetings.

Generally speaking, the decision of supplier will rely upon the particular requirements, learning inclinations, and vocation objectives of the singular student. Every supplier makes important commitments to artificial intelligence based preparing by taking special care of various parts of the growth opportunity.

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Appendix

Questionnaire

Survey Questionnaire

Section 1: Demographics

1. Age:

2. Gender:

3. Job Title:

4. Department:

Section 2: Training Evaluation

1. How relevant was the training content to your job role? (1-5 scale)

2. How engaging did you find the training modules? (1-5 scale)

3. How easy was it to navigate through the training program? (1-5 scale)

4. To what extent do you feel you have acquired new skills? (1-5 scale)

5. How likely are you to apply these skills in your daily tasks? (1-5 scale)

6. What did you like most about the training program? (Open-ended)

7. What challenges did you face during the training program? (Open-ended)

Section 3: AI-Based Training Specific Questions

1. How would you rate the personalization of the training content? (1-5 scale)

2. How effective was the instant feedback provided during the training? (1-5 scale)

3. How adaptive was the training to your learning pace? (1-5 scale)

4. Overall, how satisfied are you with the AI-based training program? (1-5 scale)

5. Additional comments or suggestions: (Open-ended)

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