

AI Training in Emerging Markets and the UK: Accessible and Affordable Options

Introduction

Artificial intelligence (AI) is rapidly transforming the global economy, and businesses in emerging markets are increasingly recognizing the need to upskill their workforce to remain competitive¹. Access to quality AI training, however, can be a challenge, especially for businesses with limited resources. This report explores the current landscape of accessible and affordable AI training courses for business people in emerging markets and the UK, focusing on online resources, university programs, scholarships, government initiatives, and real-world case studies.

The AI Skills Gap: A Growing Need for AI Training

The demand for AI skills is growing rapidly, but there is a significant skills gap in both emerging markets and the UK. This gap is driven by several factors, including:

- **Rapid Technological Advancements:** The field of AI is constantly evolving, with new technologies and applications emerging at an accelerating pace². This makes it challenging for individuals and organizations to keep up with the latest developments and acquire the necessary skills.
- **Limited Access to Training:** In many emerging markets, access to quality AI training programs can be limited due to factors such as cost, infrastructure constraints, and a lack of qualified trainers³.
- **Lack of Awareness:** Some employers and employees may not fully grasp the importance of AI skills for their organizations' success and competitiveness². This lack of awareness can hinder investment in AI education and skills development initiatives.

The skills gap has significant implications for businesses and governments. Organizations with a shortage of AI talent may struggle to adopt and implement AI solutions effectively, potentially losing out on opportunities to improve efficiency, innovation, and competitiveness². Governments also face challenges in preparing their workforce for the AI-powered economy and ensuring that everyone can benefit from the opportunities of AI⁴.

The International Telecommunication Union (ITU) estimates that 94% of global business leaders see AI as critical for their organizations' success, highlighting the growing demand for AI skills¹. To address this gap, businesses and governments need to invest in AI education and skills development initiatives. This includes providing access to training programs, promoting AI literacy, and encouraging lifelong learning⁵.

Specific AI Skills in Demand:

The following technical and workplace AI skills are currently in high demand: ⁶

Technical Skills:

- Prompt engineering
- Data science and analysis
- Programming languages such as Python
- Emotional intelligence
- Interpersonal skills
- Active learning and willingness to continue learning
- Innovation and creative thinking
- Bias detection
- Analytical judgment and critical thinking
- Flexibility and adaptability

AI Training Options: A Diverse Landscape

Fortunately, a diverse range of AI training options is available to address the skills gap, catering to different needs and budgets. These options include online courses, university programs, and in-person workshops.

Online Courses and Resources

Online platforms offer a flexible and often affordable way to acquire AI skills. Many courses are self-paced, allowing learners to fit their studies around their work and personal commitments.

DeepLearning.AI:

- **Generative AI for Everyone:** This three-hour course provides a comprehensive overview of generative AI technology, covering its capabilities, limitations, and potential impact on society⁷.
- **ChatGPT Prompt Engineering for Developers:** This one-hour course teaches prompt engineering best practices for application development and how to build custom chatbots⁷.

Google:

- **Introduction to Generative AI:** This introductory course explains the basics of generative AI, its applications, and how it differs from traditional machine learning methods⁷.
- **Introduction to Responsible AI:** This eight-hour course explores the concepts and importance of responsible AI and how Google implements it in their products⁷.

LinkedIn Learning:

- **An Introduction to Generative AI:** This 45-minute course covers the fundamentals of generative AI, including its ethical implications and future predictions⁷.
- **Using Bing Chat as a productivity tool:** This 35-minute course teaches how to use Bing Chat's generative AI capabilities for various tasks, such as generating ideas, summarizing data, and solving work problems⁷.

Other Providers:

- **Elements of AI (University of Helsinki):** This collection of courses offers a flexible and comprehensive introduction to AI concepts, with modules ranging from basic introductions to more technical deep dives into machine learning and neural networks⁷.

- **Fundamentals of AI (Cognitive Class):** This three-hour course provides an engaging introduction to AI concepts, including machine learning, computer vision, and self-driving cars⁷.
- **SkillsBuild (IBM):** This platform offers free courses on AI fundamentals, including natural language processing, practical applications, and ethical considerations. It also provides resources for building chatbots⁸.
- **Google AI Essentials (Coursera):** This self-paced course teaches how to use generative AI tools to boost productivity and enhance work. It covers responsible AI use, identifying potential biases, and avoiding harm. The course costs \$49⁹.
- **Udemy:** Udemy offers a variety of AI courses at affordable prices, often with significant discounts. These courses cover topics such as AI for business, machine learning, and deep learning¹⁰.
- **Coursera:** Coursera partners with universities and organizations to offer a wide range of AI courses, specializations, and professional certificates. Many courses are available for a monthly subscription fee, providing access to a vast library of learning materials¹¹.
- **MyGreatLearning:** Offers a variety of free introductory courses on AI topics such as prompt engineering, ChatGPT, and generative AI for beginners¹².
- **edX:** Offers a variety of free and low-cost AI courses from institutions like Harvard and MIT, covering topics such as computer science, machine learning, and the implications of AI for business strategy¹³.

University and Institutional Programs

Universities and other institutions offer more structured and in-depth AI training programs, often leading to formal qualifications such as certificates or degrees.

Institution	Program	Format	Duration	Cost
University of Notre Dame	Philosophical Issues in AI, AI and Human Flourishing, Generative AI, The Future of Labor	In-person/online	Varies	Varies
University of Texas at Austin	AI and Machine Learning Certificate	Online	Varies	Varies

Institution	Program	Format	Duration	Cost
Harvard University	Program			
	Artificial Intelligence in Business: Creating Value with Machine Learning	In-person/online	Varies	\$2,850
Massachusetts Institute of Technology (MIT)	Professional Certificate Program in Machine Learning & Artificial Intelligence	In-person/online	36 months	Varies

These programs provide a comprehensive learning experience, covering both theoretical concepts and practical applications of AI. They often include hands-on projects, case studies, and interactions with industry experts.

Scholarships and Financial Aid

Several scholarships and financial aid options are available to support AI training for business people in emerging markets, making AI education more accessible and affordable.

Scholarships:

Scholarship	Provider	Amount	Eligibility
Richard E. Merwin Scholarship	IEEE Computer Society	Up to \$1,000	Active student volunteers
ESA Foundation Scholarship	ESA Foundation	Varies	Students pursuing careers in the video game

Scholarship	Provider	Amount	Eligibility
			industry
Betty Stevens Frecknall Scholarship		Varies	IT majors with a GPA of 3.0 or above
Lockheed Martin Scholarship	Lockheed Martin	Varies	Undergraduates in computer science or engineering with a minimum GPA of 2.5
Upsilon Pi Epsilon Scholarship		Varies	Students in computing fields and IEEE members
Society of Women Engineers (SWE) Scholarships	SWE	Varies	Women pursuing ABET-accredited programs in engineering and related fields
Northrop Grumman Scholarship	Northrop Grumman	Varies	Students in approved programs in computer science, mathematics, physics, or engineering
DeepMind Scholarship Program	DeepMind	Full financial support	Students from underrepresented groups pursuing graduate-level AI study
Vector Scholarship in Artificial Intelligence	Vector Institute	CAD 17,500	Students pursuing master's level AI study in Ontario, Canada

Financial Aid:

- **AWS AI & ML Scholarship Program:** Provides scholarships for Udacity's Nanodegree

programs in AI and machine learning, with a focus on students from underserved communities¹⁴.

- **Teaching or Research Assistantships:** Many universities offer assistantships to graduate students, providing a stipend and tuition remission in exchange for teaching or research assistance¹⁶.
- **Small Business Grants and Programs:** Several organizations offer grants and programs to support small businesses, which can be used to fund AI training for employees. These include the Amber Grant Foundation, the Athene Black & Brown Business Summit Pitch Competition, and Amazon's Black Business Accelerator Program¹⁷.

Case Studies of AI in Emerging Markets

Examining how businesses in emerging markets are using AI can provide valuable insights for business people seeking to understand the practical applications of AI.

Fintech:

- **Mudra:** Developed an AI-powered personal finance management app that automates expense tracking, provides budget alerts, and offers a user-friendly interface¹⁸.
- **Vectra:** Created Cognito, an AI-powered technology designed to detect and track cyber threats in the financial sector¹⁹.
- **HSBC:** Implemented Google Cloud's AML AI to improve the detection of suspicious activities and combat money laundering¹⁹.

Retail:

- **Levi Strauss:** Uses AI to analyze consumer demand signals, forecast product needs, and optimize its supply chain²⁰.
- **Sport Clips:** Employs AI to build tools that assist franchisees with staffing, employee productivity, and engagement²⁰.
- **SPAR ICS:** Leverages AI to predict demand, manage its supply chain, and create a customer app for grocery shopping²⁰.
- **Ulta Beauty:** Uses AI to improve customer experience, personalize product recommendations, and optimize marketing campaigns²⁰.

Healthcare:

- **University of Rochester Medical Center:** Provides incoming medical students with AI-powered Butterfly IQ probes to improve the accuracy and speed of diagnoses²¹.
- **Valley Medical Center:** Uses AI to increase observation rates and improve patient status determinations²¹.
- **Novant Health:** Employs an AI-powered virtual assistant to provide patients with 24/7 access to healthcare information and services²¹.
- **UAB Medicine:** Developed a large-scale model for data acquisition and synchronization to provide patients with more personalized care²¹.

These case studies demonstrate the diverse applications of AI across various sectors in emerging markets. They highlight how AI can be used to improve efficiency, enhance customer experiences, and drive innovation.

Government Initiatives: Fostering AI Literacy and

Skills Development

Governments in emerging markets and the UK are launching initiatives to promote AI literacy and skills development. These initiatives aim to prepare the workforce for the AI-powered economy and ensure that everyone can benefit from the opportunities of AI.

International Initiatives:

- **The AI Skills Coalition (ITU):** This initiative provides an online platform for AI education and capacity building, with a focus on underserved and marginalized groups¹.
- **AI for Good Global Summit (ITU):** This summit brings together experts to discuss AI for sustainable development and features workshops on skills training¹.
- **USAID Playbook for AI in Global Development:** This playbook provides guidance on enhancing AI capacity and promoting AI-related skills in developing countries²².

National Initiatives:

- **SkillsFuture Program (Singapore):** This national re-education model provides financial support for citizens to upskill in technology-related fields, including AI²³.
- **National Retraining Scheme (UK):** This scheme offers training and support to help adults improve their technical skills and adapt to the changing economy²³.
- **Compte Personnel de Formation (CPF) (France):** This program provides employees with personal training accounts that can be used to collect hours for training courses²³.
- **National AI Policy Framework (South Africa):** This framework outlines plans to invest in AI research, talent cultivation, and infrastructure development²⁴.
- **National Artificial Intelligence Initiative (USA):** This initiative encourages AI education and skills development through various programs and resources²⁵.

These initiatives demonstrate a growing recognition of the importance of AI literacy and skills development for economic growth and social progress. They provide valuable resources and support for individuals and organizations seeking to navigate the AI-powered world.

Key Considerations for Government Initiatives:

- **Developing 4IR-ready human capital:** This involves integrating emerging technologies into education and training programs to equip the workforce with the skills needed for the future²⁶.
- **Developing future-looking regulatory frameworks:** This includes creating agile and adaptive regulations that can keep pace with the rapid advancements in AI while addressing ethical considerations and potential risks²⁶.
- **Promoting AI literacy:** This involves raising awareness about the potential benefits and challenges of AI and providing accessible information and resources to the public²⁷.

Conclusion: Investing in AI for a Brighter Future

The availability of accessible and affordable AI training courses is crucial for businesses in emerging markets and the UK to thrive in the AI-powered economy. Online resources, university programs, scholarships, and government initiatives are playing a vital role in bridging the AI skills gap and ensuring that everyone can benefit from the opportunities of AI.

Key Takeaways:

- **Accessibility:** AI education is becoming increasingly accessible through online platforms and government initiatives, with a growing number of free and low-cost courses and programs available.
- **Affordability:** AI training is becoming more affordable, with scholarships, financial aid, and low-cost online courses making it easier for individuals and organizations to invest in skills development.
- **Innovation in Emerging Markets:** Businesses in emerging markets are using AI in innovative ways to address specific challenges and opportunities, demonstrating the potential of AI to drive economic growth and social progress.

Recommendations:

- **Businesses:** Invest in AI education and skills development for your workforce to enhance competitiveness, improve efficiency, and foster innovation. Explore the various training options available, including online courses, university programs, and in-person workshops.
- **Governments:** Continue to invest in initiatives that promote AI literacy and skills development, with a focus on underserved and marginalized groups. Develop future-looking regulatory frameworks that can keep pace with the rapid advancements in AI while addressing ethical considerations and potential risks.

By investing in AI education and skills development, businesses and governments can empower their workforce, enhance their competitiveness, and contribute to sustainable economic growth. As AI continues to transform the world, it is essential to ensure that everyone has the opportunity to participate in the AI-powered economy and benefit from its potential.

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