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### FEATURING LIONBRIDGE EXPERTS:

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Review relevant AI tool options + benefits to using AI for development and within a course



Share examples and recommended next steps to assess your own use of AI



How Lionbridge can support you with AI-based development



### WHERE CAN AI BE EFFECTIVELY APPLIED?

### How to Assess Whether to Use Al

#### THOROUGH UNDERSTANDING OF YOUR NEEDS, GOALS, AND THE CAPABILITIES OF AI TECHNOLOGIES.

	<b>Identify Learning</b>
V	Objectives

Determine what you aim to achieve with your eLearning program.

Are you looking to improve learner engagement, personalize learning paths, automate assessments, or enhance content delivery?

Evaluate Existing Challenges

Identify the pain points in your current eLearning strategy.

Are there areas where learners struggle, where instructors spend too much time, or where engagement is low?

Understand Al Capabilities

Research the various AI technologies available (e.g., machine learning, natural language processing, predictive analytics) and how they can address your specific challenges and objectives.

Analyze Data
Availability

Assess whether you have sufficient and relevant data for AI to analyze, such as for content curation within an LMS/LRS. AI systems will require this data to function effectively.

Cost-Benefit Analysis

Consider the costs associated with implementing AI solutions versus the potential benefits. This includes both financial costs for acquiring paid tools and time investment to learn the tools.

6 Scalability and Flexibility

Evaluate whether the AI solution can scale with your needs and adapt to future changes in your eLearning strategy.

User Experience

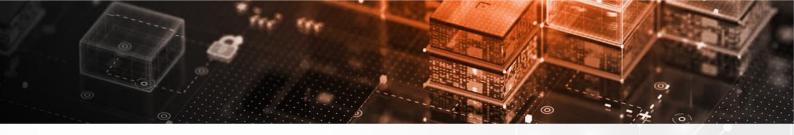
Ensure that the AI solution enhances the learner's experience without adding complexity. User-friendliness is crucial for both learners and administrators.





Learning Need	Solution	Advantages	Limitations
Support Instructors and Course Designers	<ul> <li>AI-Powered Analytics</li> <li>Convert content between different form factors (Re-use content from one training deliverable to another)</li> </ul>	<ul> <li>Saves considerable time and effort for instructors and course designers, allowing them to focus on more strategic tasks.</li> <li>Ensures a uniform quality and style across different types of deliverables.</li> <li>Facilitates the rapid scaling of training programs to meet the needs of diverse and widespread learner populations.</li> <li>May be cost-effective</li> <li>May enhance accessibility of course content</li> <li>Can provide insights into which content formats are most effective. Instructors and designers can make informed decisions about content delivery strategies.</li> </ul>	<ul> <li>Al might not always accurately capture the nuances and context of the original content.</li> <li>Biases</li> <li>Security and Privacy Concerns</li> <li>Requires specialized skills and investment in technology and infrastructure.</li> <li>Requires ongoing human oversight to ensure the accuracy, relevance, and quality of the converted content.</li> </ul>





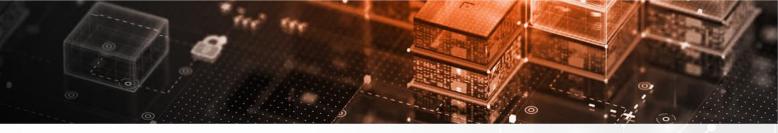
Learning Need	Solution	Advantages	Limitations
Automate Assessments	Natural Language Processing (NLP)	<ul><li>Fast turnaround</li><li>Supports ID and content re-use</li></ul>	<ul><li>Al can be inaccurate/biased.</li><li>Security</li></ul>
Enhance Content Delivery	Content Recommendation Engines*	<ul> <li>Saves time and enhances the learning process.</li> <li>Provides a tailored learning experience that keeps learners engaged.</li> </ul>	<ul> <li>Data Privacy</li> <li>Bias</li> <li>Can limit exposure to a diverse range of content</li> </ul>
Improve Content Quality	Ideation and Course Design Course text content • Brainstorm • Co-write • Wordsmith	<ul> <li>Supports faster ID turnaround on initial course design plans and ensures consistency.</li> <li>Enhances the creative process and brings new ideas to the table.</li> <li>Maintains a consistent tone and style throughout the course material.</li> </ul>	<ul> <li>Al-generated content might not always meet high-quality standards.</li> <li>Biases</li> <li>Data security and privacy</li> <li>May produce content that feels formulaic or lacks depth</li> </ul>



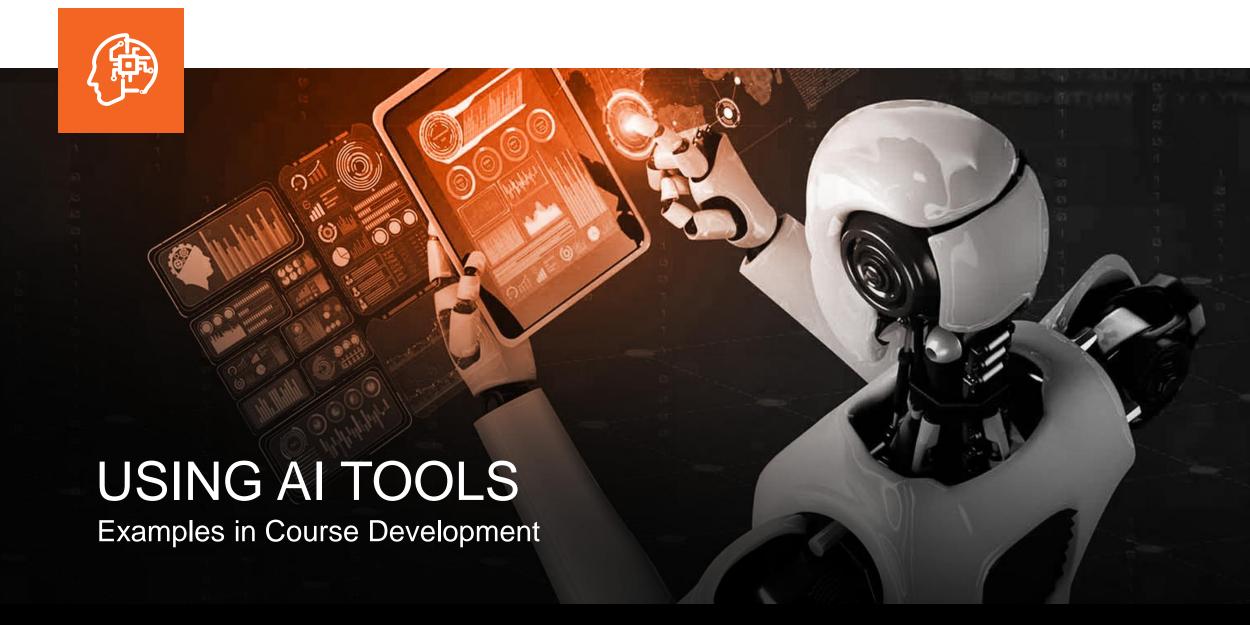


Learning Need	Solution	Advantages	Limitations
Visual Learning Aids	Image Generation Building course image/video assets	<ul> <li>Fast turnaround</li> <li>May lower the cost of course development</li> <li>Al can generate novel and creative visuals</li> </ul>	<ul> <li>Can affect the overall aesthetic and credibility of the course</li> <li>May require additional work by a graphic designer to adjust and refine.</li> <li>Keeping multiple images and videos consistent in style and quality can be difficult.</li> <li>Requires careful monitoring and filtering to ensure ethical and unbiased visual assets.</li> <li>Technical Issues</li> </ul>
Enhance Accessibility	Al Voices	<ul> <li>Fast turnaround, easier to update if content changes than professional human VO</li> <li>Increases options to reach different types of learners</li> <li>May reduce the overall cost to course production</li> <li>Facilitates the rapid scaling of courses</li> <li>Enhances the inclusivity and relevance of the course content for a global audience.</li> </ul>	<ul> <li>Can sound robotic; need to check pronunciation, emphasis, and emotional range</li> <li>Photo-realistic avatars may lack natural expressions and gestures.</li> <li>May not always accurately capture cultural nuances and sensitivities</li> <li>May negatively impact learner engagement and satisfaction.</li> </ul>
	Al Avatars		





Learning Need	Solution	Advantages	Limitations
Improve Learner Engagement	Use chatbots within a course	<ul> <li>Increases learner engagement</li> <li>Immediate, personalized, and standardized feedback for learners</li> <li>Scalable</li> <li>Data on learner interactions</li> </ul>	<ul> <li>Al can be inaccurate/biased.</li> <li>Security</li> <li>Lack of empathy</li> <li>Possible technical issues or limited understanding</li> </ul>
Personalize Learning Paths	Machine Learning Algorithms*	<ul> <li>Increases learner engagement</li> <li>Efficiently address and adapt to learning needs</li> </ul>	<ul> <li>Data Privacy</li> <li>Bias</li> <li>Technically complex and resource-intensive</li> <li>Relies heavily on quality and quantity of data</li> </ul>





# COURSE DESIGN EXAMPLE

### **Content Outline for Microlearning**



### **Prompt**

I am an instructional designer and writing a short, 10 minute online, mircolearning course on AI Readiness in elearning initiatives. Emphasize this key message: Thorough understanding of your needs, goals, and the capabilities of AI technologies. Write a content outline for the course using a cognitive approach to suggest interactive activities, on-screen text, and voiceover.

Refer to this source content.

#### **Identify Learning Objectives:**

 Determine what you aim to achieve with your eLearning program. Are you looking to improve learner engagement, personalize learning paths, automate assessments, or enhance content delivery?

#### 2. Evaluate Existing Challenges:

 Identify the pain points in your current eLearning strategy. Are there areas where learners struggle, where instructors spend too much time, or where engagement is low?

#### 3. Understand AI Capabilities:

 Research the various AI technologies available (e.g., machine learning, natural language processing, predictive analytics) and how they can address your specific challenges and objectives.

#### 4. Analyze Data Availability:

 Assess whether you have sufficient and relevant data for AI to analyze. AI systems rely heavily on data to function effectively.

#### Cost-Benefit Analysis:

 Consider the costs associated with implementing AI solutions versus the potential benefits. This includes both financial costs and time investment.

#### 6. Scalability and Flexibility:

 Evaluate whether the AI solution can scale with your needs and adapt to future changes in your eLearning strategy.

#### User Experience:

 Ensure that the AI solution enhances the learner's experience without adding complexity. User-friendliness is crucial for both learners and administrators.



### **Output**

#### Content Outline for Microlearning Course on AI Readiness in eLearning Initiatives

#### Introduction

- . On-Screen Text: "Welcome to the AI Readiness in eLearning Initiatives Microlearning Course"
- Voiceover: "In this short course, you'll learn how to prepare your eLearning programs to effectively integrate Al
  technologies. Let's get started!"

#### Module 1: Identifying Learning Objectives

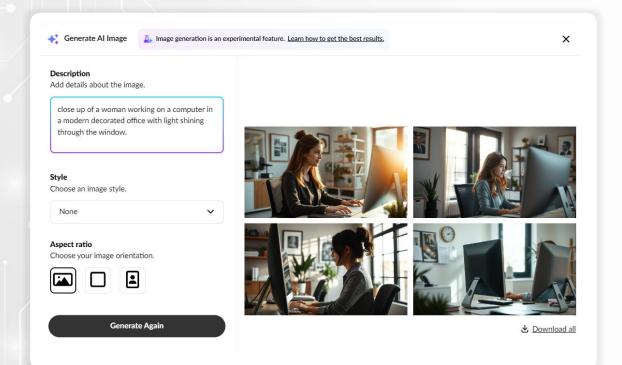
- . On-Screen Text: "Learning Objectives: What do you aim to achieve?"
- Voiceover: "Before implementing AI, it's essential to determine what you aim to achieve with your eLearning program."
- Interactive Activity:
  - Activity: Drag-and-drop exercise where learners match different objectives (e.g., improve learner
    engagement, personalize learning paths, automate assessments) to their descriptions.
  - Feedback: Immediate feedback is given for correct/incorrect matches.

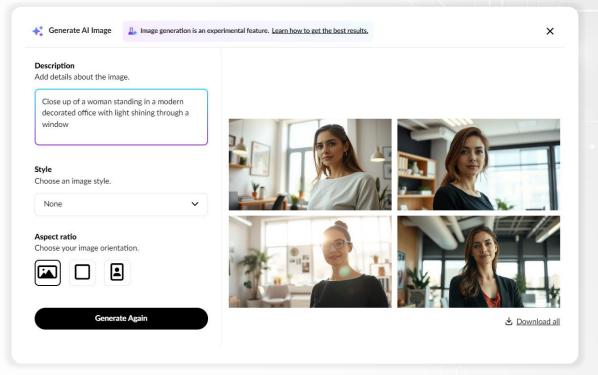
#### **Module 2: Evaluating Existing Challenges**

- On-Screen Text: "Identify Pain Points in Your Current eLearning Strategy"
- Voiceover: "Understanding the existing challenges in your eLearning strategy is crucial for identifying where Al
  can be most beneficial."
- Interactive Activity:
  - Activity: Interactive quiz where learners select common pain points from a list (e.g., low engagement, high instructor workload).
  - Feedback: Explanations for each choice to reinforce learning.

#### **Module 3: Understanding AI Capabilities**

# COURSE ASSETS EXAMPLES Image Generation







# **COURSE DESIGN EXAMPLES**

Content Outline for Game-Based, Level 3 interactive Course



I am an instructional designer and writing a short 10 minute online, escape room course on data compliance. write a content outline for the course including suggested activities, on-screen text, and voiceover.



#### Data Compliance Escape Room Course Outline (10 Minutes)

#### Introduction (1 minute)

- On-Screen Text:
  - "Welcome to the Data Compliance Escape Room!"
  - o "Your mission: Navigate through challenges to ensure data compliance. Are you ready?"

#### · Voiceover:

 "Welcome, agents! Your mission today is to navigate through a series of challenges related to data compliance. Each challenge will test your knowledge and decision-making skills. Let's get started!"

#### Challenge 1: Identifying Sensitive Data (2 minutes)

- On-Screen Text:
  - o "Challenge 1: Identify which types of data are considered sensitive."
  - "Drag and drop the correct data types into the 'Sensitive Data' box."
- Voiceover:
  - "In this challenge, you need to identify which types of data are considered sensitive. Drag and drop the correct data types into the 'Sensitive Data' box."
- Suggested Activity:
  - Interactive drag-and-drop activity with data types like Social Security Numbers, Credit Card Information, Birthdates, Email Addresses, etc.
- Feedback:
  - Correct: "Great job! You've correctly identified the sensitive data."
  - Incorrect: "Oops, that's not quite right. Sensitive data includes information like Social Security Numbers and Credit Card Information. Try again!"

#### Challenge 2: Data Encryption (2 minutes)

- On-Screen Text:
  - o "Challenge 2: Secure the data using the correct encryption method."



# **COURSE ASSETS EXAMPLES**

**Image Generation** 



















# **COURSE ASSETS EXAMPLES**

**Image Generation** 





















# **COURSE INTERACTIONS EXAMPLES**

## **Chatbot Example**



# Your Answer:

I believe sensitive data includes Social Security Numbers and Birthdates, but I'm not sure about Email Addresses and Credit Card Information.

### Feedback:

Almost there! You've correctly identified Social Security Numbers and Birthdates as sensitive data. However, Email Addresses and Credit Card Information are also considered sensitive.

Sensitive data often includes personal and financial information that can be used for identity theft or fraud. Let's review the key concepts and try again.





## The benefits of using Al tools for eLearning development

- Time and Cost Savings
  - Automating repetitive tasks such as formatting, creating quizzes, and organizing content, allowing the ID to focus on the strategic aspects of course design.
- Variety of Content for Increased Engagement
  - Al can suggest different learning resources for the ID and learning assets for the learner at any stage in the course development



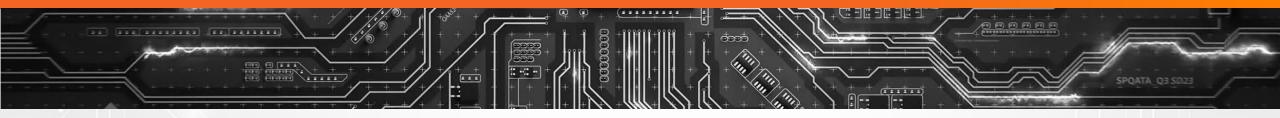
### The benefits of using Al within a course

- Al-driven chatbots and virtual tutors can provide instant feedback, answer questions, and offer explanations, thereby facilitating continuous learning support.
- voice-based interactions and assessments, making learning more accessible and engaging, especially for language learning and communication skills development.
- improve accessibility by providing real-time translations, speech-to-text capabilities, and personalized accommodations



### WHAT IT TAKES TO MANAGE AI PROJECTS

Recommendations & Considerations



- Ensure dev team are trained and clear on how to implement and use the AI tools
  - Discuss/document addressing limitations to the AI tools
- Establish and implement an updated workflow
  - Factor in impact on existing workflow and timeline
    - May adjust tasks across team members
  - o Determine what resources are needed and when for the post-editing, assembly and testing
  - Update production cost information for using AI instead of standard dev tools
- For scaling up larger content creation programs
  - Check source content availability
  - Standardize course structure first for consistency



# **HOW CAN I SUCCESSFULLY DEPLOY AI?**

Process Impacts / Improvements



Determine where AI can be effectively applied in your eLearning initiatives (including realistic and relevant tool options)

- Use questions from slide 1 to conduct a needs analysis
- Use tools list from slide 2 to compare existing tools and processes to see where AI can effectively be applied



Update your existing dev processes to incorporate AI tools



Run a pilot course dev using the new process



Assess and modify process as needed



THIS IS
WHERE
LIONBRIDGE
CAN ASSIST
YOU!





We break barriers and build bridges to new opportunities. Everywhere.

LIONBRIDGE