Lesson Plan

Introduction to Artificial Intelligence

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Preface

Thank you for being willing to facilitate this facilitated session related to Artificial Intelligence.

At   , we strive to ensure that our Consultants are as knowledgeable as possible in terms of the products that we offer, as well as the processes and procedures that we follow. To enable our Consultants to feel confident when engaging with customers on every call, it is our duty to ensure they are well equipped with the correct knowledge and skills to perform in their job roles. You, as a Facilitator, form a critical step in their learning journey.

Have lots of fun in the classroom and encourage discussion.

Preparation

Read through the entire lesson plan to ensure that you are familiar with the structure and content of the session and can facilitate confidently.

Use these Facilitator Notes in conjunction with the Learner Guide, which serves as a support tool. The Learner Guide complements the Lesson Plan in an interactive way. Familiarise yourself with this beforehand. See where you can add a personal touch to the content or personal examples.

- Familiarise yourself with the Learning Objectives.
- Take a watch or a cell phone with a clock with you so you can manage your discussion time.
- Print out and make enough copies of any handouts that will be needed for the session.

Required Materials

Make sure that your classroom is equipped with the following:

- Enough tables and chairs
- Projection screen
- Projector
- Handouts
- Flipchart with sufficient flipchart paper
- Pens, pencils and markers
- Activity props
- Blank paper - A4/A3 paper for small group activities
- Post-It Notes

Learning Objectives

By the end of this course, you will be able to do the following:

- Define artificial intelligence (AI).

- Define concepts related to AI.

- Recognise instances where AI has been used.

- Explain how AI is used in the insurance industry.

- Apply your knowledge of AI to create new uses of AI to the insurance industry.

Defining Artificial Intelligence			
Task	**Time**	**Interaction**	**Activity**
Introducing the Session	5 mins	Whole group	• Welcome the group and take a quick register. • Explain that this session will focus on developing a general definition of artificial intelligence. (Specifically indicate that the session will only focus on **basic** definitions around artificial intelligence. • It is important for learners to familiarise themselves with concepts and terminology commonly encountered in discussions around artificial intelligence.
Activity 1: Pre-course Survey	10 mins	Individual task	• Handout the pre-course survey to all of the learners. • Instruct them that this survey will evaluate the current knowledge about artificial intelligence.
Activity 2: Icebreaker	10 mins	Whole group	• Explain to the learners that we will start the session by getting to know each other. • Each learner must select a coin from the bowl of coins on the table, and share something that happened in their lives in the year that the coin was produced.

Activity 3: Defining artificial intelligence	20 mins	Whole group	• Tell learners that you are going to hand out Post-Its on which they will write words and phrases they would use to define or describe what artificial intelligence is. • These Post-Its will be stuck on the board and, as a group, we will select those that best define artificial intelligence. • Write down only one word/phrase per Post-It. • Tell learners to include defining concepts and products around artificial intelligence. • Once the Post-Its have been sifted through and grouped according to 'concept' or 'product', the group will write a consolidated definition of artificla intelligence. The facilitator is to guide this process, and remove any Post-It notes that do not refer to artificial intelligence. • The definition should be something similar to the following: *Artificial intelligence (AI) is an area of computer science that emphasizes the creation of intelligent machines that work and react like humans. Some of the activities computers with artificial intelligence are designed for include:Speech recognitionLearningPlanningProblem solving* (What is Artificial Intelligence (AI)? - Definition from Techopedia, n.d.)
Activity 4: AI and the insurance industry	10 mins	Whole group	• Play the video titled, What happens next in insurance: AI and machine learning (8min 48sec). Url: https://www.youtube.com/watch?v=CeUYqGfZf3g

| Activity 5: Examples of AI applied in the insurance industry | 30 mins | | Discuss each of these examples with the group.

1. Behavioural Policy Pricing:
Ubiquitous Internet of Things (IoT) sensors will provide personalized data to pricing platforms, allowing safer drivers to pay less for auto insurance (known as usage-based insurance) and people with healthier lifestyles to pay less for health insurance

2. Image Analytics:
Advanced image analytics allows for quick analysis of photos (selfies included), to determine parameters like age, BMI, habits, etc. that are important in the perspective of life insurance. These parameters can help determine if a medical underwriting is required or not. It is possible for insurers to provide an instant quote and formulate a policy within minutes, if an underwriting is not required.

Advanced image analytics can be applied in Property and Casualty Insurance to analyse images of cars in accidents, determine parameters,and assess the replacement costs. Evolving algorithms can accurately estimate the extent of damage and automate the claims evaluation process within minutes, without any human interaction.

3. Machine Learning in Underwriting: [Automated Process of Claims] |

AI, Machine Learning, and deep learning can help in extracting information from these documents, align it to a common vocabulary, and make information easily accessible through a search engine or virtual assistants. Underwriting is thus reduced to an automated process that lasts about a few seconds.

4. Process Automation of Data Intake:

Incoming data received from brokers is most often a cause of concern for insurers. It comes in a variety of formats, without standardisation, and requires a lot of people to convert the data to a standard format. Only if the data is mapped accurately can the submission be processed. AI displays high potential here, enabling insurers to reduce inefficiencies in processes. Machines can learn patterns and automatically map new submissions. AI can also improve data quality by detecting gaps in incoming data and addressing them.

5. Connected Claims Processing:

With advanced algorithms, insurance claims can be largely automated, enabling insurers to achieve dramatic levels of efficiency and accuracy, reducing processing times from days to hours or minutes. Data-capture technologies including IoT sensors replace manual methods. Claims triage and request for repair services can also be triggered automatically. Evaluation of the validity of a claim is also a much easier task for insurers.

6. Chatbots and Virtual Agents:

			Lengthy documents and complex policies often leave customers confused and daunted about insurance policies. They have questions, expect almost instantaneous responses to their problems and so, 24×7 support is mandatory. Chatbots, developed from natural language processing capabilities of AI, serve as Virtual Agents that can answer most customer service requests and questions. These chatbots can also transfer certain requests to human agents if the requests are not in their domain. (sources: https://www.neutrinos.co/ai-insurance-industry/; https://emerj.com/ai-sector-overviews/artificial-intelligence-in-insurance-trends/

Activity 6: Pair and share	30 mins	Groups of four	• Learners will come up with a use of AI in insurance by doing the following:
			   o Split into groups of four.
			   o Select a use of AI.
			   o Select a data group (i.e. a characteristic that you can use to identify a group, such a female drivers, for example).
			   o Combine them to create a new product/use of AI.
			   o Present your product to the class.
			   o You have 30 minutes.

Activity 7: Post-course Survey	10 mins	Individual task	• Handout the post-course survey to all of the learners. • Instruct them that this survey will evaluate how much they have learned about artificial intelligence during this facilitated session.

Close-out	5 min	Whole group	• End the session with a final activity. Ask learners to share what is the most important thing that they learned about artificial intelligence today.

Bibliography

- *What is Artificial Intelligence (AI)? - Definition from Techopedia.* (n.d.). Retrieved 11 18, 2019, from https://www.techopedia.com/definition/190/artificial-intelligence-ai