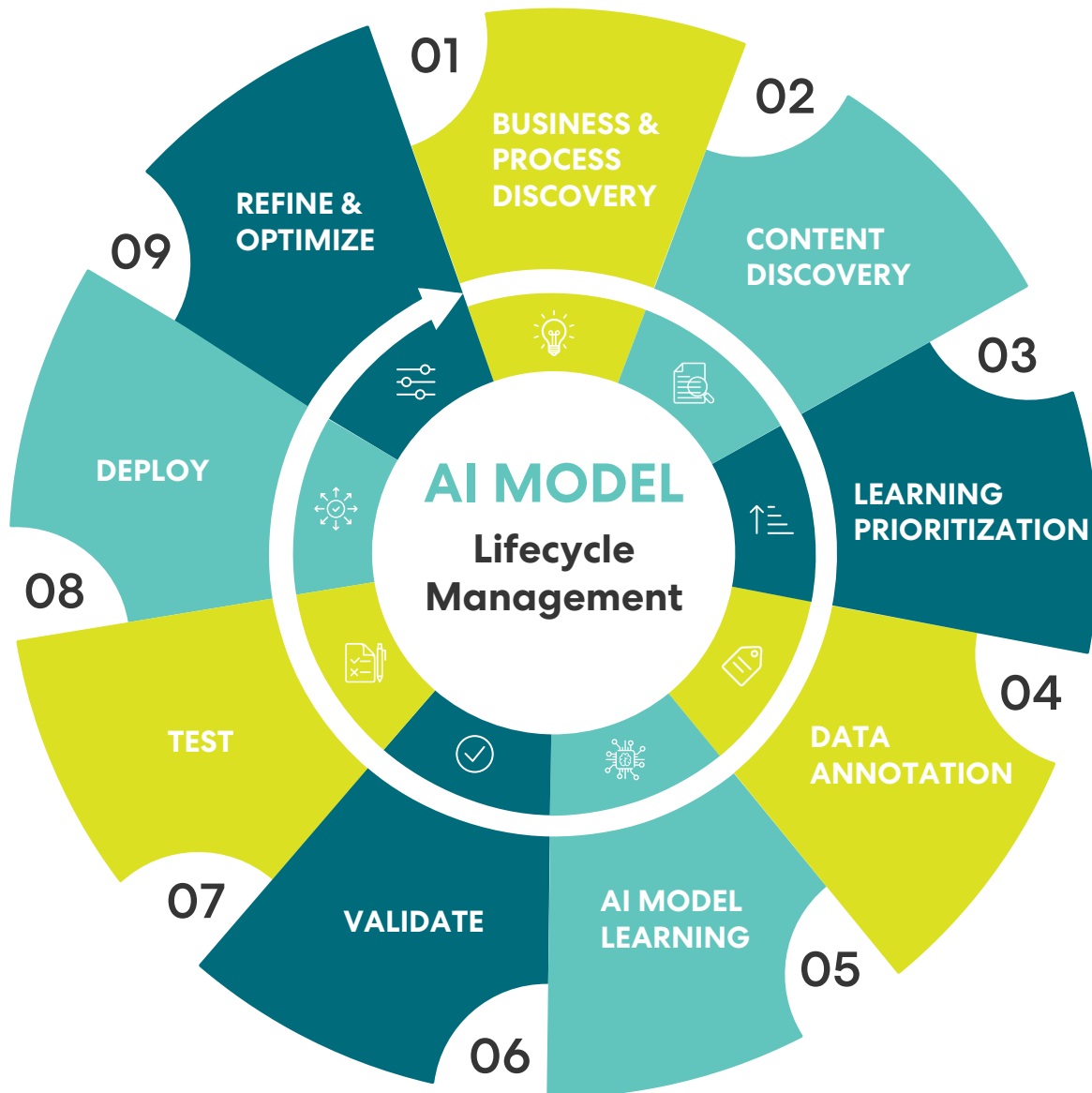


Teaching AI to Learn in Healthcare

AI's ability to learn tasks, interpret data and make decisions has made a huge impact in healthcare. Today, AI guides robots conducting surgery, assists in making diagnoses, corrects dosage errors – the list is endless. But exactly how does AI learn? Concord Technologies breaks down the process of developing AI models for specific applications within healthcare.



Human intelligence is comprised of **experience, training, and intuition**. These are **key factors** in successfully harnessing the **value artificial intelligence can deliver**.

BUSINESS AND PROCESS DISCOVERY

What do we expect AI to learn? Think of Business and Process Discovery as a teacher developing a syllabus for a class. A narrow syllabus may limit the AI's ability to execute. A broad syllabus will increase the time needed to train the AI.



CONTENT DISCOVERY

What *kind* of information will the AI learn from? How *much* information will be available for the AI to learn from? Think of Content Discovery as a teacher defining a curriculum for a class. The quantity and quality of data will directly impact the AI's accuracy and performance.



LEARNING PRIORITIZATION

Which subjects should AI learn first? How well should the AI know each subject? In healthcare, this could mean the AI first learns how to identify patient names, social security numbers and chart numbers.



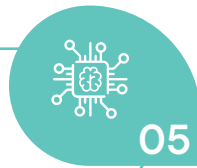
DATA ANNOTATION

The annotation process tells the AI what information it needs to find, where to find it and most importantly, what to do with it. For example, how will the AI differentiate the patient's name from the physician's name or the surgeon's name?



AI MODEL LEARNING

This is the first phase of the AI working independently. AI models take into account the annotated data from Step 4 to make decisions or produce outputs. This will be the first indicator of how well the AI is performing.



VALIDATE

Is the AI executing as intended? Do significant gaps exist in how the AI is learning? Is additional annotation required? These gaps need to be filled before the AI is ready for prime time.



TEST

The AI is now working with test data without any human assistance. The test step can be considered the AI's first full performance review. How the AI performs in this step will dictate what additional learning may be needed.



DEPLOY

The lessons are over. The exams have been taken. The AI is now ready to graduate and go out into the real world. The AI will begin working with live, production data. This is where the AI's performance benchmarks are established.



REFINE AND OPTIMIZE

Once the AI is deployed into production, refinements to the model can be made. Refining and optimizing is an iterative process. Over time, AI's accuracy will continue to improve as it learns more about the data it is processing.



To **Learn More** about how Concord uses AI to transform clinical and administrative processes, speak to a member of our team.