Developing A Cognitive Assistant For the Audit Plan Brainstorming Session

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Introduction

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Audit Plan Brainstorming Session:

Mandated in two auditing standards: SAS No. 99 and SAS No. 109

Purpose: Discuss the susceptibility of the entity's financial statements to material misstatement due to fraud *(Landis 2008, Hammersley et al. 2010, Beasley and Jenkins 2003)*

Common procedure: Checklist in open-ended form

Current Issues:

- Limitations with Checklist: structurally-restrictive tool *(Seow 2011, Asare and Wright 2004, Dowling and Leech 2007, Landis 2008)*
  - limits new ideas generation & induces biases
- Uncollected experience and expertise
- Unreached additional external information

Audit Cognitive Assistant

Cognitive Assistant (Intelligent Personal Assistant)

Speech-enabled technologies that uses inputs such as the user's voice, vision (images), and contextual information to provide assistance by answering questions in natural language, making recommendations, and performing actions *(Canbek and Mutlu 2016, Hauswald et al. 2015, Myers et al. 2007, Garrido et al. 2010, Chen, 2015)*

Commercial personal assistants *(Mehrez, 2013)*: Apple Siri, Google Now, Microsoft's Cortana. Amazon's Echo/Alexa IBM Watson

Research Motivation

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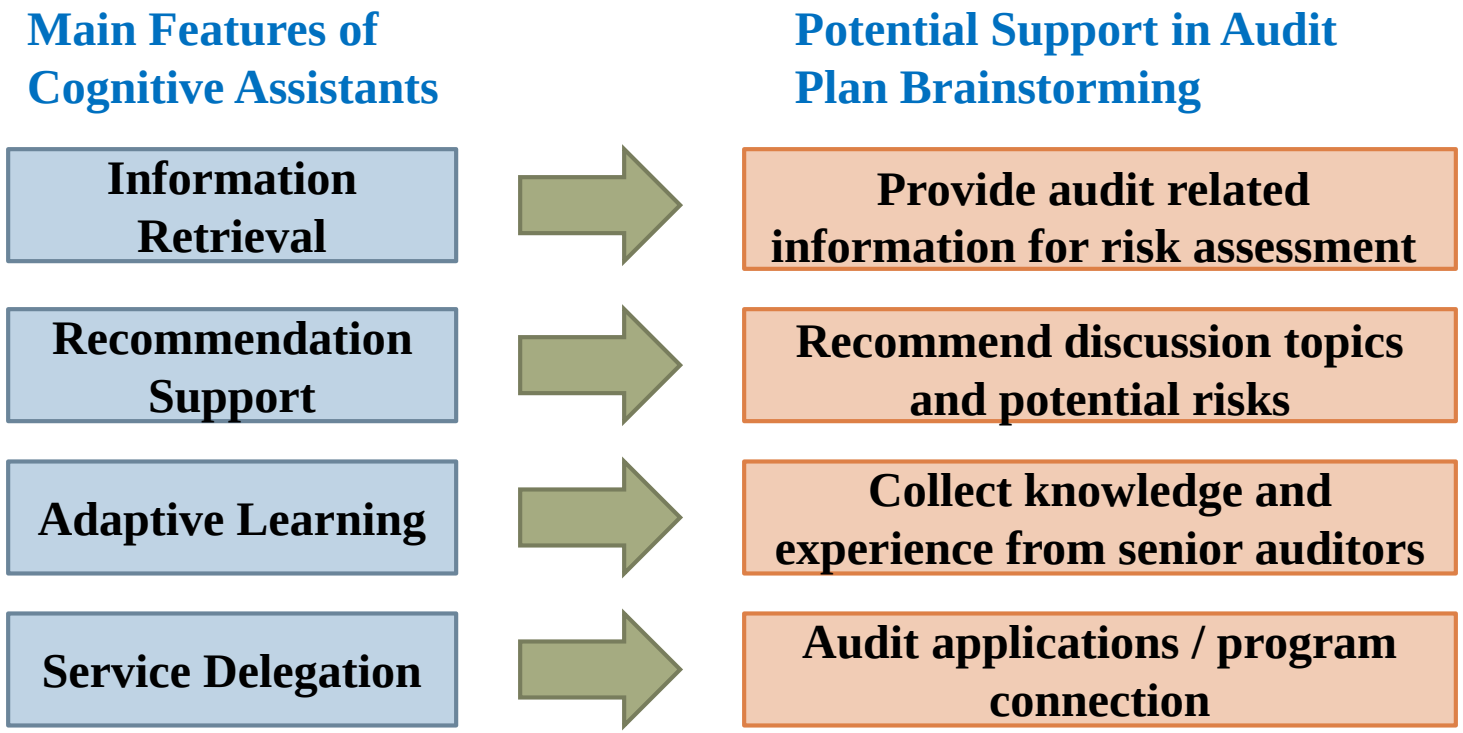
Advantages Of Cognitive Assistant In Audit Decision Plan Brainstorming:



Proposed Method: Proposed Audit Cognitive Assistant - Luca

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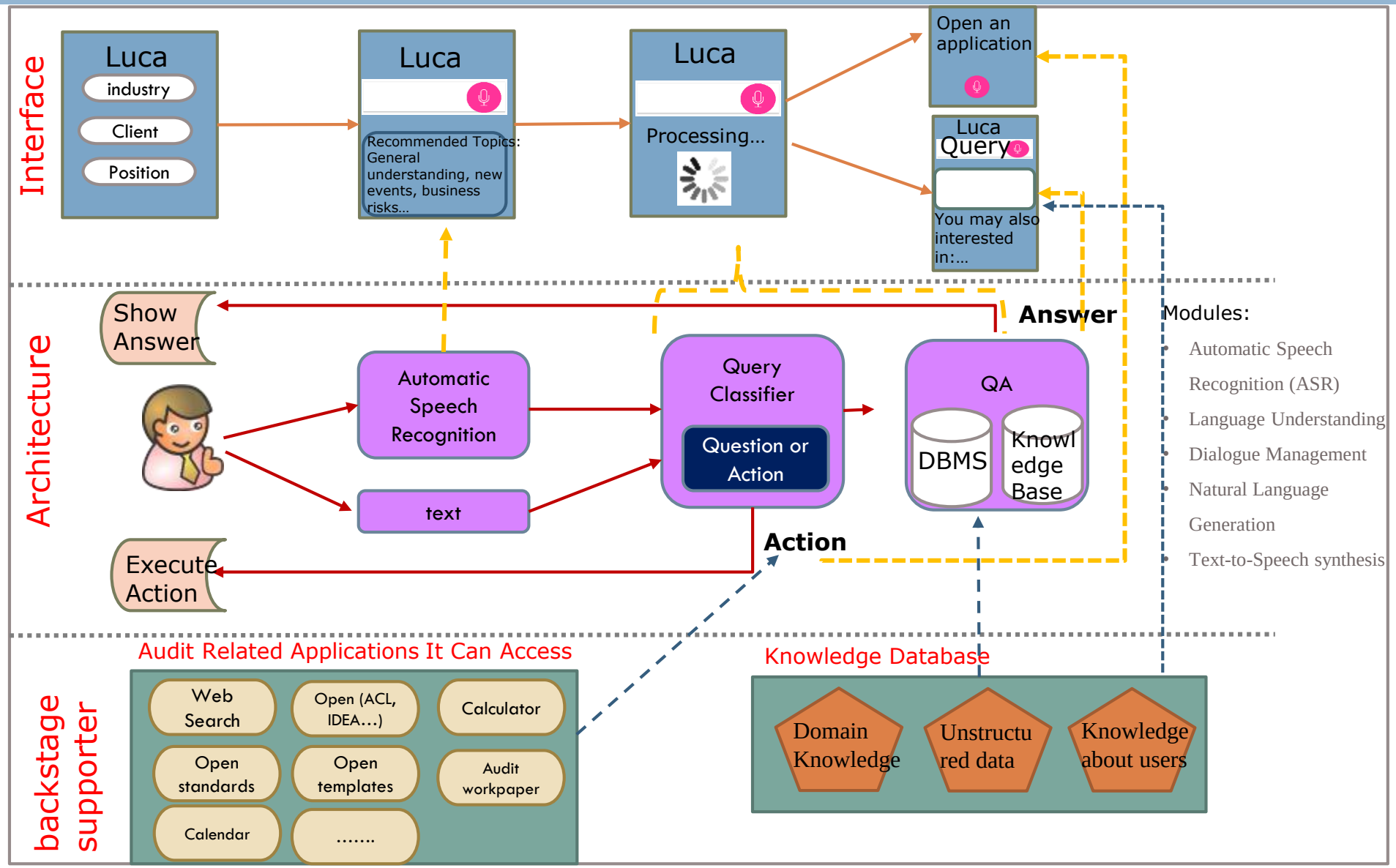

Architecture of the Proposed Audit Cognitive Assistant

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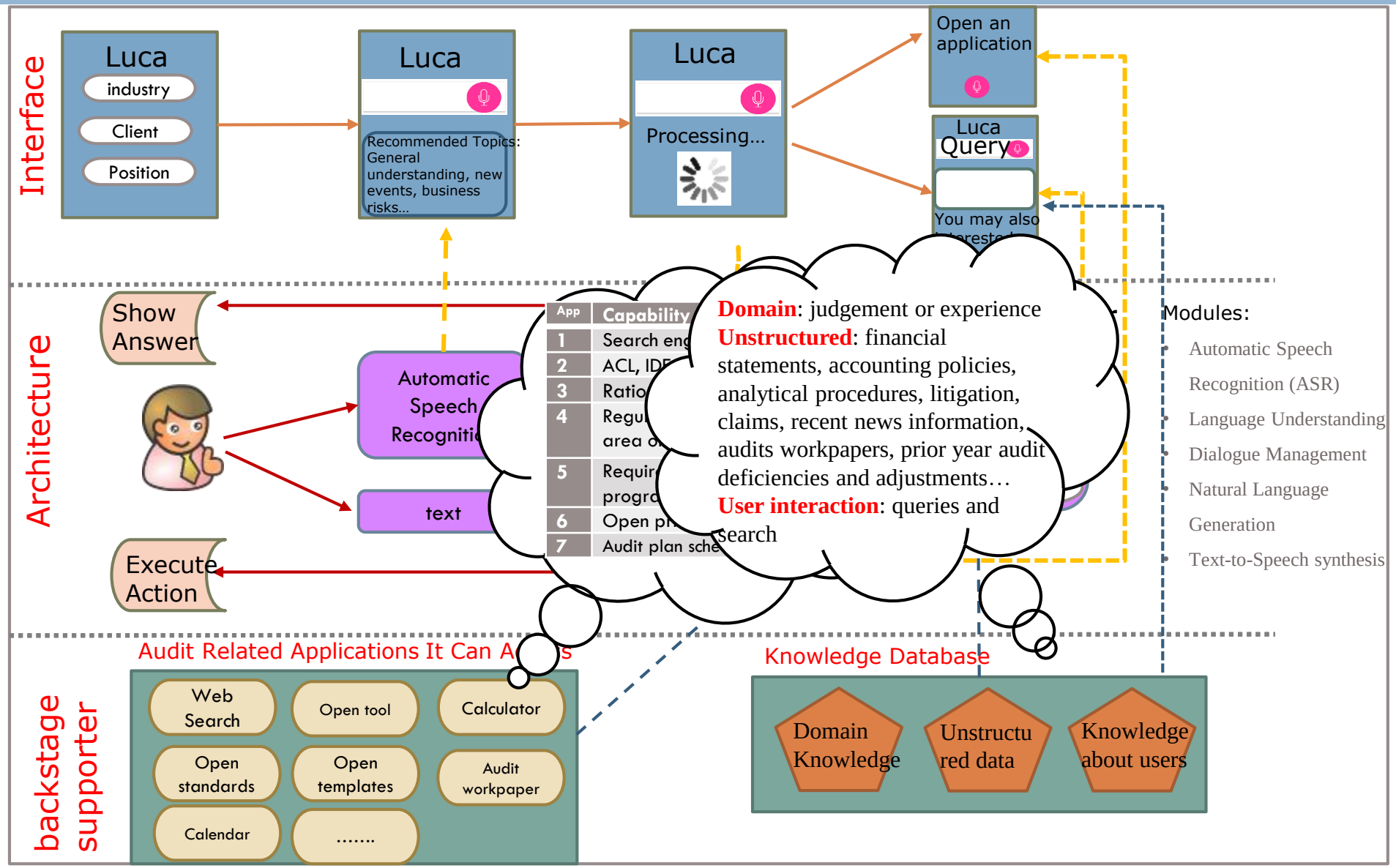

Question Answering System of the Proposed Cognitive Assistant

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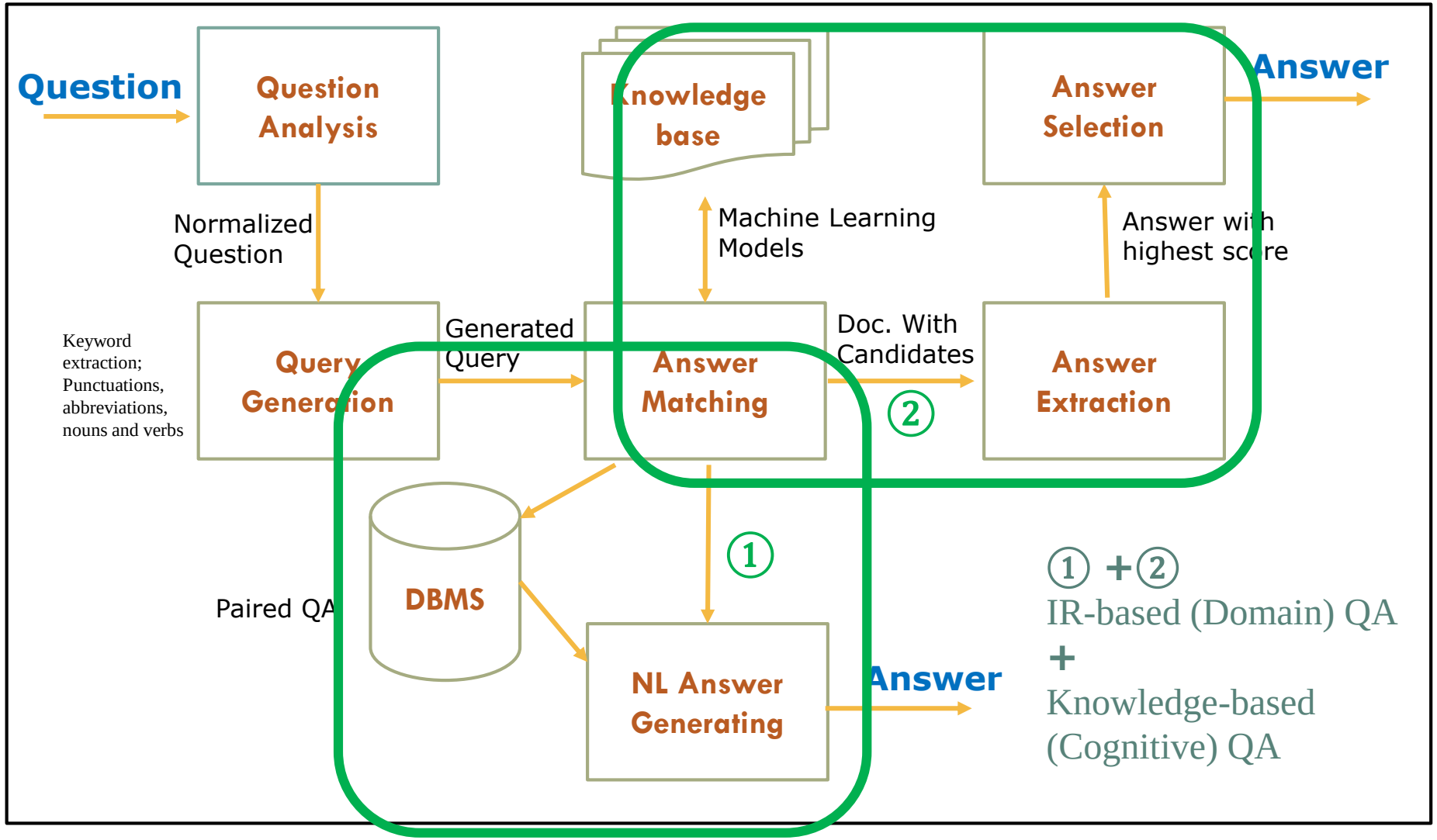

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Thank You !