



MINISTRY OF INFORMATION AND COMMUNICATIONS  
VIETNAM INTERNET NETWORK INFORMATION CENTER

# **Applying AI on .VN ccTLD management and promotion – experience and current research of VNNIC**

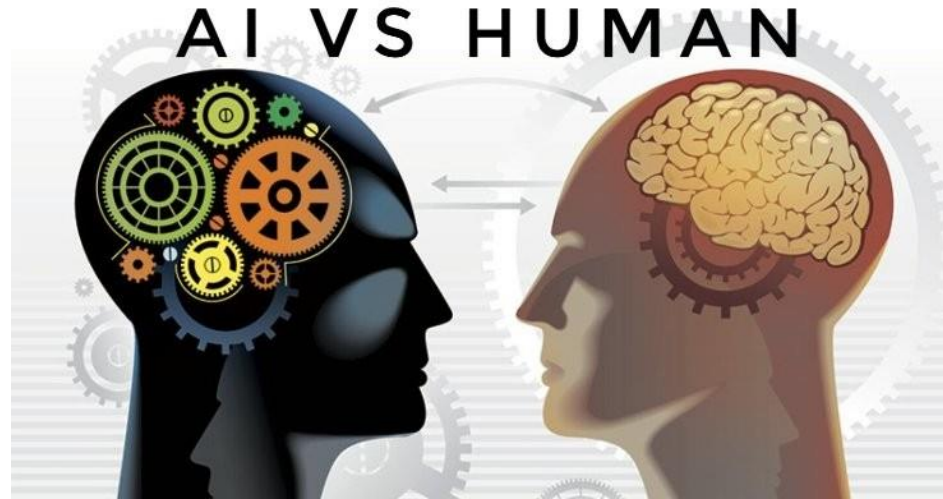
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Session 7A @APTLD86

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# Artificial Intelligence (AI) – Key advantages and disadvantages



## • Key advantages of AI

- Reduction in human error
- Smoothly handles with large amount of data
- Facilitates Quick Decision-Making
- Automates Repetitive Tasks and Processes
- Enabled Digital Assistants: chat-bot,...
- Full-Time Availability (24x7)

## • Disadvantages of AI

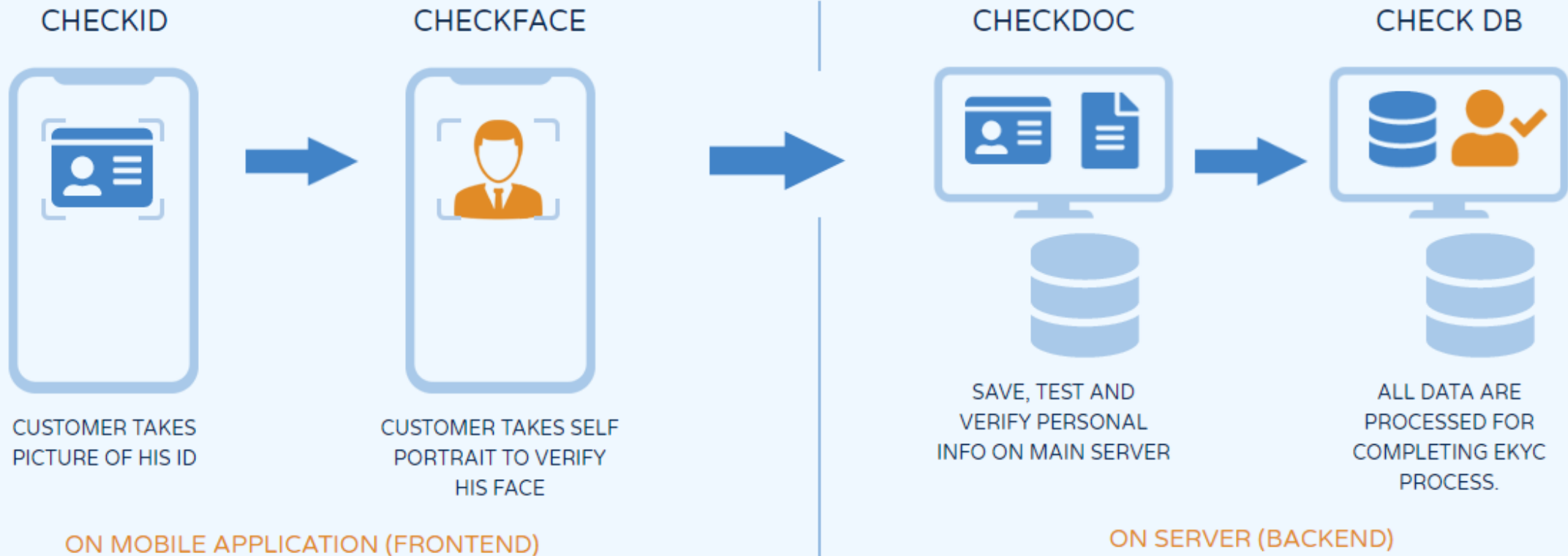
- Depend on trained data
- Take more time to adopt to changes
- Lack of emotional intelligence
- Lack of soft skills

# Research and apply AI on .VN ccTLD management and promotion



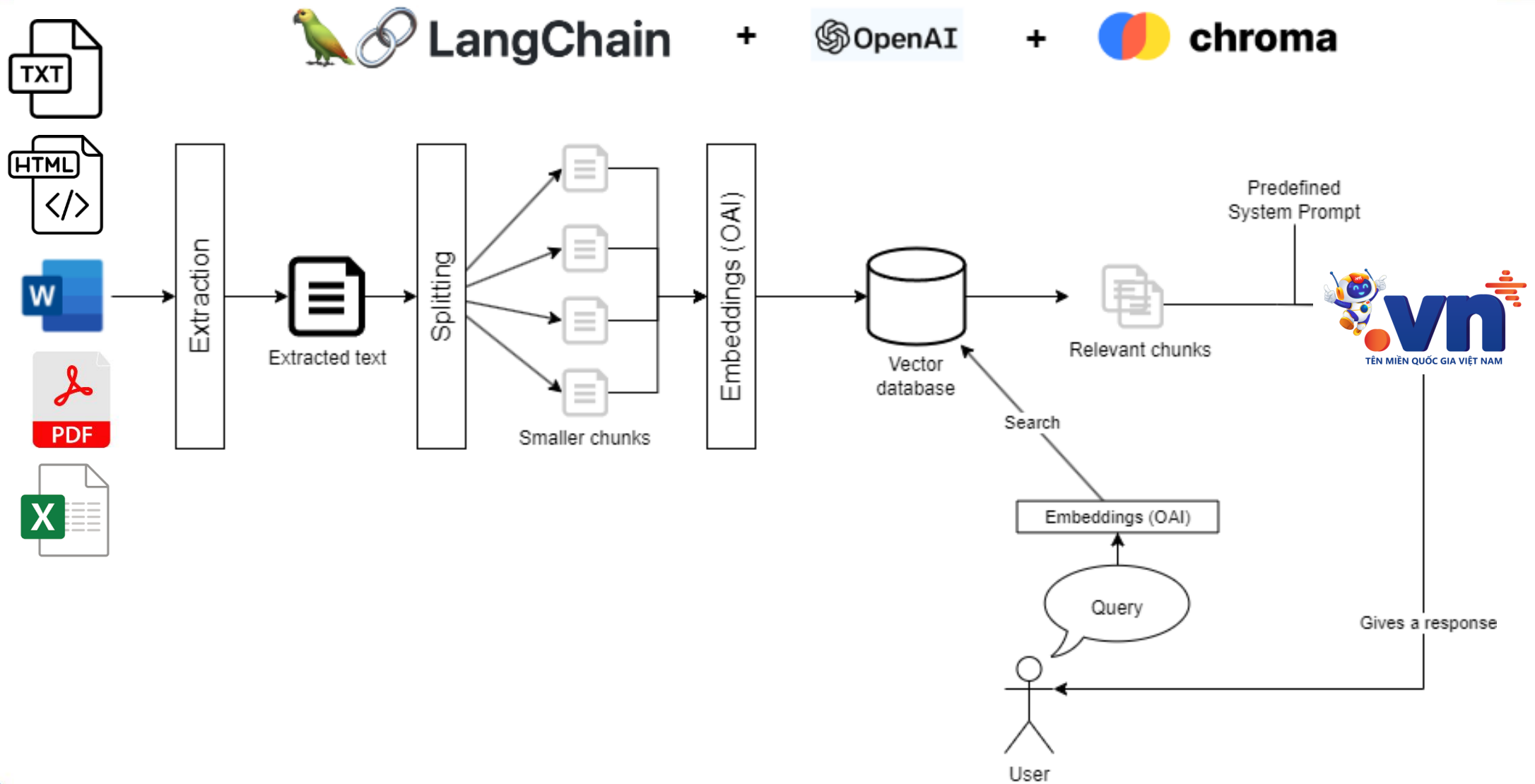
# Individual Identity Verification and Registration document post-check

## VERIFICATION PROCESS





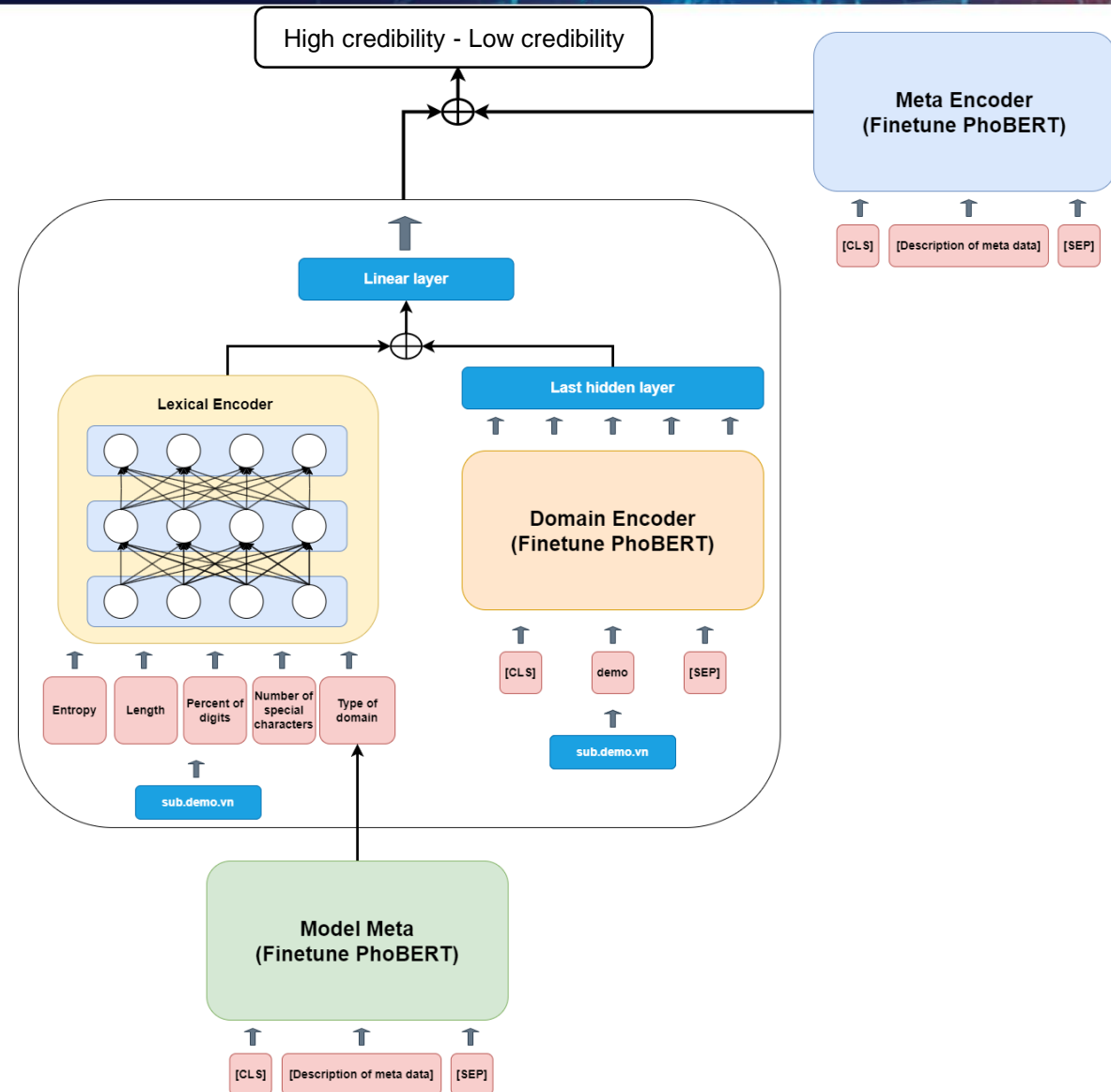
# AI Chat bot for .VN ccTLD website



- DNS Abuse Report Portal:
  - Report from individuals and organizations
  - URL: <https://dnsabuse.vnnic.vn>
  - Support 4 types of DNS Abuse report: Phishing, Malware, Botnet, Spam.
  - Backend system for registry (VNNIC) to perform action on domain name, statistics, collaborate with other stake holders
  - Launching on May 13<sup>th</sup>, 2024
- Scan website for content violation:
  - Via keyword
  - Manual post-check
- Apply AI and Machine Learning (collaborated research project with Vietnam Korea University - VKU)



- Credibility rating via:
  - Lexical of domain name and URL (entropy, length, percent of digit, special characters)
  - Domain name feature: tld (low cost tld), brand name variant, renew period, domain age,...
  - Meta data of website: keyword, description, ...



- Benefits of AI for .VN ccTLD management and promotion:
  - Save both time and resources for .VN ccTLD managements (VNNIC and .VN registrar)
  - Enabled fully online domain registration
  - Improve the user experience
  - Help in decision making about mitigating DNS Abuse
- Future research:
  - Data analysis for .VN ccTLD market
  - Detect DNS Abuse based on content of website





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Thank you !