Office of Evaluation (OED)



Food and Agriculture Organization of the United Nations

Exploring opportunities for applying AI in evaluation – Some practical examples



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Disclaimer

- Al is a fantastic tool. It offers unparalleled opportunities for innovation, efficiency, and personalized experiences, revolutionizing industries and enhancing human capabilities.
- However, It is limited to its reliance on existing data and algorithms; it is not infallible and may produce erroneous results; users should exercise caution and discretion when relying on AI-generated outputs.
- The responsible and ethical use of AI demands awareness of its limitations and a commitment to complementing automated processes with human judgment and expertise.

The following slides are based on a mix of imaginary and real-time applications

Context



Has been assigned as a team member

- Name: Rami
- Profession: Evaluator



• Evaluation of the project "Improving livelihoods of apple farmers in the province of Orchardistan"

Context – Team meeting



- Meeting with Team leader to discuss workload
- Requests:
 - Desk review of existing documents
 - Analysis of types of apple received per farmer
 - Writing of a short case study
- Submission by the end of the day

Desk review



- Available articles about Apple farming
- Upload to an AI tool for qualitative research which helps getting fast & detailed answers to research questions

Example that will be shown in next slide:

Hinman, Tammy and Ames, Guy. (2011). Apples: Organic Production guide. National Sustainable Agriculture Information Service ATTRA, 40 p., retrieved from <u>https://ucanr.edu/sites/placernevadasmallfarms/files/112366.pdf</u>

Desk review

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	Upload file (docx, pdf, xlsx, csv, xls) (limit 10MB/file)	
	Choose Files Apple.pdf Choose the type of analysis	
	Summarize Ask a specific question	
	Conduct thematic analysis Compare viewpoints across documents	

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Analysis

Apple Varieties
Granny Smith (30%); Gala (20%); Honeycrisp (30%); McIntosh (20%)
Granny Smith (10%); Gala (50%); Honeycrisp (20%); McIntosh (20%)
Granny Smith (50%); Gala (50%); Honeycrisp (0%); McIntosh (0%)
Granny Smith (25%); Gala (25%); Honeycrisp (25%); McIntosh (25%)
Granny Smith (20%); Gala (20%); Honeycrisp (30%); McIntosh (30%)
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Granny Smith (30%); Gala (20%); Honeycrisp (30%); McIntosh (20%)
Granny Smith (25%); Gala (25%); Honeycrisp (25%); McIntosh (25%)

- Data shared is in excel format
- Entry for type of apples is as shown in picture on the left
- More than 1,000 row with different percentages
- <u>Goal is to find the</u> <u>percentage of Gala</u> <u>received by each farmer</u> <u>and average</u>

Analysis



- Uses ChatGPT to find a quicker solution
- States the tab or a similar type of dataset and asks the chatbot to provide him with a formula to extract the percentage of Gala in a separate column

A You

Hello

ChatGPT

Hello! How can I assist you today?

You

I have the following on tab on an excell sheet: "Granny Smith (30%); Gala (20%); Honeycrisp (30%); McIntosh (20%)" - Can you help me find a formula to extract the percentage of Gala?

ChatGPT

Yes, you can use the `FIND` and `MID` functions in Excel to extract the percentage of Gala from the given string. Here's a formula you can use:

e	xxcel	🗂 Copy code
_	=VALUE(MID(A1.FIND("Gala".A1)+6.2))	

Assuming the string is in cell A1, this formula will search for the position of "Gala" in the string and then extract the two characters immediately after it, which represent the percentage. The `VALUE` function is used to convert the extracted text into a numerical value.

Make sure to adjust the cell reference if your string is located in a different cell. Also, this formula assumes that the percentage is always represented by two digits. If the percentage can have varying lengths, you may need to adjust the formula accordingly.

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SL	SUM ▼ : X ✓ f _* =VALUE(MID(A2,FIND("Gala",A2)+6,2))				
A		В			
1	Apple Varieties	Percentage of Gala			
2	Granny Smith (30%); Gala (20%); Honeycrisp (30%); McIntosh (20%)	=VALUE(MID(A2,FIND("Gala",A2)+6,2))			
З	Granny Smith (10%); Gala (50%); Honeycrisp (20%); McIntosh (20%)	50			
4	Granny Smith (50%); Gala (50%); Honeycrisp (0%); McIntosh (0%)	50			
5	Granny Smith (25%); Gala (25%); Honeycrisp (25%); McIntosh (25%)	25			
6	Granny Smith (20%); Gala (20%); Honeycrisp (30%); McIntosh (30%)	20			
7	Granny Smith (30%); Gala (20%); Honeycrisp (30%); McIntosh (20%)	20			
8	Granny Smith (10%); Gala (50%); Honeycrisp (20%); McIntosh (20%)	50			
9	Granny Smith (50%); Gala (50%); Honeycrisp (0%); McIntosh (0%)	50			
10	Granny Smith (25%); Gala (25%); Honeycrisp (25%); McIntosh (25%)	25			
11	Granny Smith (20%); Gala (20%); Honeycrisp (30%); McIntosh (30%)	20			
12	Granny Smith (50%); Gala (50%); Honeycrisp (0%); McIntosh (0%)	50			
13	Granny Smith (25%); Gala (25%); Honeycrisp (25%); McIntosh (25%)	25			
14	Granny Smith (20%); Gala (20%); Honeycrisp (30%); McIntosh (30%)	20			
15	Granny Smith (30%); Gala (20%); Honeycrisp (30%); McIntosh (20%)	20			
16	Granny Smith (25%); Gala (25%); Honeycrisp (25%); McIntosh (25%)	25			
17	Grappy Smith (20%): Gala (20%): Hopoverice (20%): Meletoch (20%)	20			

Once all percentages are extracted → The average can be extracted through a simple formula:

- =Average()
- Or ask ChatGPT 😳

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Writing



- Information analyzed → Writing of the case study report
- Ask ChatGPT to write a case study

PS: The AI bot assists well in generating compelling and accurate reports with ease. However, it is fundamental to know its limits (generic writing & mistakes) and to use one's own handwriting skills and judgement.

You Hello

ChatGPT Hello! How can I assist you today?

Nou You

I would like to write a 1-page case study about distribution of apples in Orchardistan. 30% of distributed apples are "Gala" variety with no pesticides used. Recipients of distributed apples were happy and are able to cultivate their fruits every season.

0

ChatGPT

Title: Orchestrating Success: Sustainable Distribution of Gala Apples in Orchardistan

Introduction:

Orchardistan, a picturesque land renowned for its lush orchards, has embarked on a remarkable journey towards sustainable agricultural practices. This case study delves into the successful distribution of Gala apples, emphasizing the integration of eco-friendly methods and the positive impact on local communities.

Distribution Strategy:

The distribution of apples in Orchardistan adopts a conscientious approach, with 30% of the distributed apples belonging to the "Gala" variety cultivated without the use of pesticides. This strategic allocation underscores a commitment to environmental stewardship while meeting market demand for premium, pesticide-free produce.

Sustainability Initiatives:

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ChatGPT can make mistakes. Consider checking important information.

Sustainability Initiatives:

Central to Orchardistan's distribution strategy is the prioritization of sustainable agricultural practices. By eschewing pesticides in the cultivation of Gala apples, farmers contribute to the preservation of biodiversity and soil health. Additionally, adopting eco-friendly methods minimizes environmental pollution and safeguards the health of consumers.

Community Engagement and Satisfaction:

The recipients of distributed apples in Orchardistan express profound satisfaction with the quality and provenance of their produce. Beyond mere consumer satisfaction, the distribution of Gala apples has empowered local communities to cultivate their fruits sustainably. This empowerment fosters self-reliance and resilience, enabling farmers to yield bountiful harvests season after season.

Economic Viability:

While prioritizing sustainability, the distribution of Gala apples in Orchardistan also underscores economic viability. By catering to consumer preferences for pesticide-free produce, farmers command premium prices for their Gala apples. This economic incentive incentivizes the adoption of sustainable practices, ensuring the long-term prosperity of Orchardistan's agricultural sector.

Conclusion:

Orchardistan's approach to the distribution of Gala apples serves as a testament to the harmonious coexistence of ecological responsibility and economic prosperity. Through sustainable agricultural practices and community engagement, Orchardistan exemplifies a model for equitable and environmentally conscious food distribution. As the orchards of Orchardistan continue to flourish, so too does the promise of a greener, more sustainable future for all.

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Submission



- Final review of data and writing
- Submission to supervisor

PS: All pictures in the story were Al-generated



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Thank you! Questions?