

GEMINI IN ACTION. ARTIFICIAL INTELLIGENCE SUPPORTING THE OFFICE WORK

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Abstract: *Artificial Intelligence (AI) is present in our everyday life and professional life as well. Can we assign to AI complex professional tasks and rely on answers? Can managers promote usage of Artificial Intelligence in office work? This current paper is searching for answer for these questions. We used for our analyse the Artificial Intelligence developed by Google, the Gemini. We tested the support of Gemini in writing emails, translating emails into different languages. We also tested Gemini in managing tasks, creating google calendar entries or tasks. We investigated some legal aspects also, support in writing a legal action against a Decision of a Hungarian Authority or asked support in accessing Government Incentives in some energy projects. Last but not least we uploaded 2 excel files and asked Gemini to combine the files, recalculate the columns using combination of information in both files. All these tests were highly successful, however in using AI for legal advices needs to be considered very carefully.*

Key Words: *artificial intelligence, automatization, prompts, generative AI*

1. INTRODUCTION

Testing the answers and knowledge of the Artificial Intelligence is a continuous task which professionals should not forget about. Hallucination is a risk connected to the answers generated by Artificial Intelligence. This mean Artificial Intelligence sometimes is filling the gap in the information found during web search with artificially generated information. If this artificially generated information is critical in formulating the answer, depends on the complexity of the topic. The risk connected to hallucination of the artificial intelligence and using wrong information in the decision process is increasing with the complexity of the topic. Managers of different organizations need to have high level of confidence in result generated by Artificial Intelligence in recommending usage

We tested the Gemini support connected to the google workspace, google drive and all the related application, including gmail and google calendar. In general, most of the tests were succesfull or highly successful. Gemini created emails, summarized series of emails and created google calendar entries. In the same time Gemini scanned the ggogle drive for internal policies connected to a certain topic or searched the web for different legal advices.. We tested Gemini also in data processing, asking to generate data for us using more than one excel files.

We will present in the next sections the result of the tests one by one..

2. EMAIL PERFORMANCE WITH GEMINI

One of the most developed and perfectly working part of Gemini is the support in communication especially in writing emails. There are several predefined prompts which are coming to bring solution to most common email writing tasks.

Help me write is a prompt which instructs Gemini to propose an complete new email based on the infromation provided by the user. The Quality of the content and the language of the email depends on the instruction given by the user. The Help me write prompt is as effective for replies to existing emails as writing totally new emails. Instuction can include analyses and assure consistency of data to the previous emails. This saves a lot of time analyzing connections to long list of emails.

Writing a professional email often requires proof reading or formalization. At the bottom of the email window the »Help me Write« button is available with several option offering possibility to polish , elaborate , shorten or to rewrite the complete email. Gemini can shorten or enlarge the text, make it more formal or informal depending on the circumstances. The key benefits of using Gemini in email conversation are beside time savings, quality in communications, security and tracebiity.

First day after holiday is not any more a nightmare. Gemini offers active assistance with option to summarize the key topics from one email or series of emails received during the vacation period. Gemini can execute precise questions placed in the chat dialog: Based on one or more emails Gemini can propose action list or propose tasks to be registered in the Google workspace. Creation of task from an email is as simply as dragging the email in the Gemini chat dialog and asking Gemini to search for tasks .

Searching email with a certain topic or information can be a nightmare. Fortunately Gemini can also support with similar task . Support in finding email reservations or answers from certain partners can take with Gemini only

a few seconds. first picture from below

Without Gemini significant unproductive time can be spent for searching a document. It should exist but not precise information is available about the exact location. After connecting Gemini to Google workspace, it can support in searching the folders and reduce into seconds the time of finding a file which was saved long ago and completely forgotten.

How to use Gemini for improving productivity in office ? When reading an email and after recognizing that there is a follow up needed , there is an icon at the top which by clicking on it automatically generates and prefilled action list. The only missing information is to add the due date. In case inside a complex email there are several tasks to be preformed, simply asking Gemini to review and create a list of actions. The easiest way is to simply drag the complete email into Gemini section and with a short prompt asking to analyse it[1-5].

3. OTHER GOOGLE COMMUNICATION TOOLS OPTIMIZED WITH GEMINI

Beside the formal and structured communication sent by emails, in every day life google chat is a fast and informal way to exchange information. In communication through google chat Gemini can be a great support also. Imagine a long list of chats where you need to find an information shared some time ago. By asking Gemini the searching task can be reduced to some seconds. There could be several actions discussed during a period of time . Gemini can help by summarizing these task and generating google tasks.

Managing projects can be difficult when information are scattered on different platforms, emails, chats or shared drives. Google space is an effective tool in project management by centralizing key information connected to a project. The main benefit are structuring the discussion, centralizing documentary resources and managing and tracking your action plan. Of corse, Gemini is also available in supporting further optimization of google space analyzing discussions or share of task is performed in some seconds.

In line with the modern communication, you need to include often picture expressing yur ideas. If you need to find a picture to express the best an emotion releated to a topic or simply show the efficiency of your ideas, the easiest way is to ask for support of Gemini. We asked Gemini to create us an image expressing how efficiently can support Gemini the email writing, The result you can find in the first picture [6-7].



Picture 1. Support in boosting email efficiency

4. GEMINI IN SUPPORT OF SEARCHING FOR INFORMATION

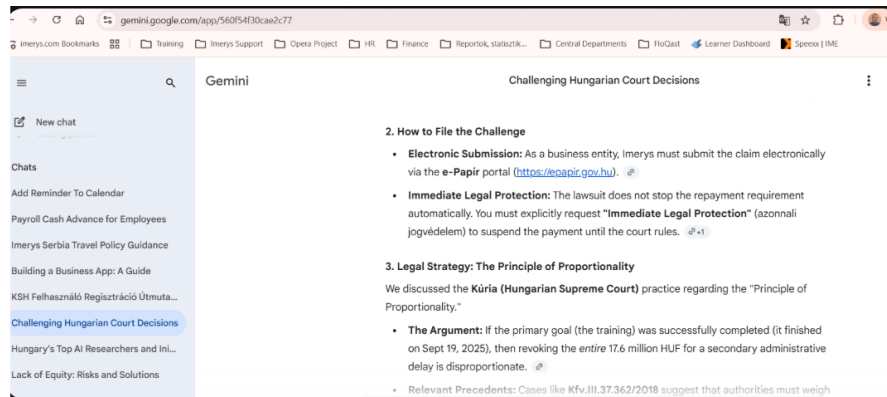
Artificial intelligence is the most commonly used for searching information on internet. Gemini can support also in finding useful information and summarizing them to make it easy and fast to be processed.

One of the most frequent question we placed to Gemini was in connection to usage of widely known Enterprise resource system SAP S/4HANA. Each of our specific question asking the right SAP process of handling financial documents were precisely answered with reference to the SAP support portal.

We asked Gemini also to support in finding information about a specific state incentive project called „Jedlik Anyos“ available in Hungary for energy projects. In some minuted Gemini described the whole project and the steps and conditions to access it. Precise and correct answers were received also when additional information were asked about availability of funds for multinational companies or specific condition for companies generating losses.

Another specific complex task where Gemini offered excellant and detailed support was in relation to a penalty calculated by the Finance authorities. Gemini analyzed the documents which was basis of the penalty calculation and suggested that legal action can be started against the document. Gemini summarized also the key point whey legal actions is possible to have success in similar cases and offered a draft of the official complaint also. However when Gemini offered precise reference to legal text, it happened that the reference was not precise. When for the second

or third time Gemini tried to correct and find the correct reference, unfortunately without success. The overall complain process was very deeply analysed but precise legal references were incorrectly mentioned. As a productivity improving tools Gemini is without doubts is excellent performing, however it is still not at that level to completely replace a work of a lawyer. In order to avoid hallucination and incorrect references human supervision of professionals is strongly recommended. Let us review together the legal advice received from Gemini.



Picture 2. Challenging the Hungarian Authorities. Detailed process description from Gemini

We tested the support of Gemini in finding answers to specific corporate topics, internal documents or own works. Own works and central internal documents are saved in shared google drives and shared with the users. The first step is enabling Gemini to have access to the files which are accessible for the user.

The first test was asking support from Gemini in which corporate policies are the cash advances regulated. In some seconds Gemini split the question into 2 parts and suggested to check the travel poolicy for travel advances and payroll policy for payroll advances. The first reference to the travel policy was very precise and perfectly correct hwoever the second part proved to be a hallucination, the payroll policy did not contain any reference to cash advances. After suggesting to Gemini that the corporate payroll policy did not include reference to the cash advances, Gemini appologized and suggested correctly that the second right corporate policy is the internal control manual. We consider the result of searching the information in internal corporate policies were highly efficient and even with the time correcting the partially correct information, Gemini contributed to significant time savings in finding the applicable internal policy. This is the huge progress in support of learning the internal policies and improving the quality of local procedures[8-10].

5. GEMINI FINDING AND DEBRIEFING LOCAL DOCUMENTS

Productivity in office work is strongly dependent on the capacity of the user to create a well structured own document management system. A well organized user has created a well structured own folder system, with easy to find file naming habbits. Later, the time spent for organized file structure returns in time saved for searching different files.

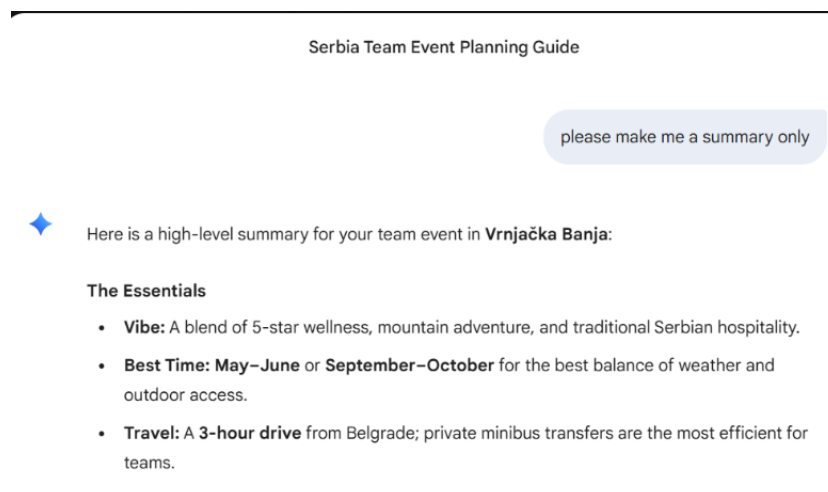
Support of Gemini in finding documents is highly appreciated especially by those who did not put much effort in creating a structured own document archive. Creation of precise prompts is the key of the success in finding easily a local document. In most of the cases the search is taking only few seconds and the efficiency of the searching engine of Gemini is significantly higher compared to any other file searching options, even by searching engine offered by Microsoft Windows.

Another way of improving productivity to ask Gemini in summarizing central policies, descriptions or official documents. Finding the corporate policy connected to a certain topic especially for a beginner employee could be a challenge. In most of the cases new employees are searching for information on different policies and regulations even after several hours spend for training. Frequently the new comers are asking experienced colleagues to guide through huge training materials or complex policies. Searching becomes with Gemini an easy and fast process reducing complexity for both beginners and experienced colleagues.. In few second Gemini can find the training document related to a certain topic. Gemini additionally offeres a perfect summary of any document, structured in an easily readable way to be able to read and understand in short time. Each summary is created in a perfect way, there are no hallucinations nor misunderstandings.

6. GEMINI IN SUPPORT OF ORGANIZING EVENTS

Organization of meetings or team events could be also time consuming. Managers could spend hours with communication on certain topics. In case of higher complexity the risk of skipping certain details is creating a high level of stress for managers. Artificial intelligence is coming in support of managers and taking over the stressfull

organization. Gemini is supporting managers in organizing events , starting from planning the event till executing and follow up. In the example from bellow we show how easy is to create with some sentences of prompts a whole step by step event planning. In our test we asked Gemini to support us in organizing a team event in Vrnjačka Banja Serbia. The long list of action and advices were containing too much information. After instructing Gemini to make a short summary we were able to create a picture as an illustration of our test.



Picture 3. Short summary of a long process description offered by Gemini

7. SUPPORT OF GEMINI IN DATA ANALYSES

Financial data is most commonly analysed using Microsoft Excel or in some cases Microsoft Power BI. The data source can be various enterprise resource systems, shared drives or files received through communication channels. The disadvantage of working with Excel is that in each complex analyse we need to replace the connection between different data sources. In case of a small mistake we can spend hours to find the errors. Even with Power BI users need to have knowledge to create the data structure and connect different data sources. Power BI offers already a high level of flexibility and adaptability in frequently changing environment. However the most flexible adaptability in connecting different data sources is done with Gemini through creation of the connection simply by using prompts. In our test we downloaded the sales of a month of a company from Hungary. The reason of the analyse is to calculate the impact of a system error through which wrong exchange rates were introduced in SAP. We downloaded from the internet site of the Hungarian National Bank all the currency rates from the specific month [11-13].

After uploading the 2 files to Gemini we instructed Gemini inside the prompts to calculate the value of the sales in local currency using the column of the value in foreign currency multiplied with the correct currency from the different file. The final result we asked to be included at the end of the Sales file. In some second Gemini recalculated the sales in local currency for the full month. Additional questions asking the date on which the currencies were wrong or asking the total monthly impact of the differences were also answered in some seconds

The success of testing connection of different files through prompts and generation of new information based on data extracted from different files also through instruction shared with Gemini through common language it is a revolutionary way of including the support of Artificial Intelligence in the every day work of controllers , managers or anybody who has a daily task of creating reports or data analytics. The time used by Artificial Intelligence is uncomparable by the time used by humans. Complex data analytics tools in the future could be replaced by standard prompts described in common language , saved in the chat box of the Artificial Intelligence. Gemini offers through prompts a flexible and easy way to connect different data sources without involving IT knowledge. [14-29].

8. CONCLUSIONS

We successfully manage to ask and receive support from Artificial Intelligence created by the company Google, called Gemini in the daily office task such as writing and answering emails, creating tasks, searching answers and information for specific professional topics, searching for documents or data analysing. The result of using Artificial Intelligence was amazingly successful, the time savings and the quality of the answer was far above what a human could produce. In some specific questions like finding a legal reference the answer received from the Artificial Intelligence was not precise. Even after several repetition, Artificial Intelligence still provided incorrect legal reference to a specific legal problem. Beside this specific legal inconsistency the information received from the Artificial Intelligence had high quality and very useful.

We strongly recommend including every employee who has some kind of office task in a training about

improving productivity by using Artificial Intelligence. Google and Gemini offer a complex package of services connected to each other. We did not cover other service providers, but most probably the results are similar. Even if the quality of the result is amazing by Gemini and the data quality provided by Artificial Intelligence is in general high, we still recommend to use human intelligence to validate the information received from Artificial Intelligence. The conclusion is that we advise managers to encourage using Gemini in supporting Office work but not without any automatic processing. Human validation still needs to stay at the end of the process and check if the data and answer make sense. Artificial intelligence, neither Gemini or Google, cannot be blamed for errors produced by improper data or lack of human validation.

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