Plan Overview

A Data Management Plan created using DMPTool

Title: ONLINE AGNOSTIC RECOMMENDATION SYSTEM FOR APPLICATION IN INVESTMENT FUNDS

DMP ID: https://doi.org/10.48321/D1K881

Creator: Antonio Newton Licciardi Jr - ORCID: 0000-0002-6755-883X

Affiliation: Non Partner Institution

Funder: Universidade Presbiteriana Mackenzie (up.mackenzie.br)

Template: Digital Curation Centre

Project abstract:
Considering the reduction on basic interest rate in Brazil, the bonus payments obtained through “caderneta de poupança” (a popular and traditional brazilian special type of account which total value is correct by inflation index and standard low taxes, basically), which is the most used investment in the country, had been becoming deficitary. This fact has led to a growth in the number of individuals investing in the stock market looking for more attractive profitability. The system objective is make available an agnostic system that analyzes in real time the investment funds that have shown the best performance and can suggest, for people with low level of financial knowledge, the funds portfolio that best suits the investor profile. In order to build the system, open fund databases made available by CVM in Brazil (dados.gov.br) and the investor's potential profile are explored, using the most appropriate user friendly computational tool. Besides, a system cliente survey deployed have its answers compiled and analysed in a paper tied to system implementation.

Start date: 08-03-2020

End date: 06-08-2021

Last modified: 06-08-2021

Copyright information:
The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customize it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal.
ONLINE AGNOSTIC RECOMMENDATION SYSTEM
FOR APPLICATION IN INVESTMENT FUNDS

Data Collection

What data will you collect or create?

Three Datasets are actually used:

1. CVM Dataset with Funds information
   - This dataset is a kind of catalog of each fund, and from it it is possible to correlate with the data
     dataset that follows, using CNPJ information (type character). Available information:
     - Fund CNPJ (character - Objective of correlation),
     - Corporate name (character),
     - Manager (character),
     - Registration date (character),
     - Date of cancellation (character),
     - Status (character),
     - Fund classification (character),
     - Type of profitability (character),
     - Fund managing institution (character),
     - CNPJ of the Institution (character),
     - Responsible director (character).

2. CVM Dataset with Daily Funds information
   - It has daily information distributed in fields and types on:
     - Fund's CNPJ (character format),
     - The total value of the fund's portfolio (float format),
     - Equity (float format), the value of the quota (float format),
     - The funding carried out on the day (float format),
     - The redemptions paid on the day (float format),
     - The number of shareholders (int format).

3. User Information Profile
   - Notice - respecting to Brazilian Law 13.709/18
   - Name - indicated by user
   - E-mail - to receive information on optimal investments funds to his/her profile
   - Eight answers to questions that categorizes:
     - 0 - investor that would not like to take risks on investments,
     - 5 - categorization for mid-term investors considering take risks
     - 10 - investor able to take risks as stock options to achieve better profitability

How will the data be collected or created?

- Dataset (1) and (2) are extracted by files available in dados.gov.br (cvm - brazilian funds)
- Dataset (3) - based are collected by a Google Form proposed to use evaluation and so stored in a Google Sheets.

Documentation and Metadata

What documentation and metadata will accompany the data?

Documentation is available on Github together Code and Data
https://github.com/PauloMoura96/SISTEMA-ELETR-NICO-RECOMENDANDO-AGNOSTICO-DE-APLICA-O-EM-FUNDOS-DE-INVESTIMENTOS-
Ethics and Legal Compliance

How will you manage any ethical issues?

There is no ethical issue to be treated, once system respect to Brazilian Data Law number no. 13.709/18

How will you manage copyright and Intellectual Property Rights (IP/PR) issues?

It is an open research. Results were collected for a paper evaluation, but that is no PR/IPR issues.

Storage and Backup

How will the data be stored and backed up during the research?

System information to replicate and evolve it, it is available on Github. For more information check https://github.com/PauloMoura96/SISTEMA-ELETR-NICO-DE-RECOMENDA-O-AGN-STICO-E-ONLINE-DE-APLICA-O-EM-FUNDOS-DE-INVESTIMENTOS-

Internal tables depend only on date/time system is running in python stored in GCS (Google Cloud System) as a PaaS

How will you manage access and security?

Admin account rights @ GCS environment

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

All necessary data to recover and run the system is available in Github.

There is no retention on data treated in mentioned datasets
GCS PaaS exposed, currently, on IP 34.95.230.228

What is the long-term preservation plan for the dataset?

Preservation with be done considering information @ Github.
Also system description and its usage in scientific article.
No other long-term preservation intended.

Data Sharing
How will you share the data?

Data is shared in Github. Research will be also put available in Research Gate, for research proposals

https://github.com/PauloMoura96/SISTEMA-ELETRICO-DE-RECOMENDA-O-AGNISTICO-E-ONLINE-DE-APLICA-O-EM-FUNDOS-DE-INVESTIMENTOS-

Are any restrictions on data sharing required?

Not at all

Responsibilities and Resources

Who will be responsible for data management?

Mentioned Principal investigator and eventually Project Manager (in fact - engineering advisor professor) are responsible for data (and system) preservation and its evolution

What resources will you require to deliver your plan?

Plan execution depend on:
> Google account resource
> Google Sites tied to this account
> Google forms tied to this account
> GCS also tied to account created
Planned Research Outputs

Audiovisual - "-- Example of Email sent to user, after User Risk evaluation and Funds analysis --"

Olá Teste,

Após analisarmos as suas respostas do questionário, identificamos que o seu perfil de investidor é moderado.

Baseado nisso a classe que mais se adequa ao seu perfil é a de Fundos Multimercado.

Então escolhemos para você os três melhores fundos de investimentos para o seu perfil, que apresentaram a maior rentabilidade nos últimos seis meses. São eles:

Sugestão 1: HASHDEX 100 NASDAQ CRYPTO INDEX FUNDO DE INVESTIMENTO MULTIMERCADO INVESTIMENTO NO EXTERIOR

Sugestão 2: TREND CANNABIS FUNDO DE INVESTIMENTO MULTIMERCADO

Sugestão 3: VITREO CRIPTOMOEDAS FI EM COTAS DE FUNDO DE INVESTIMENTO MULTIMERCADO INVESTIMENTIMENTO NO EXTERIOR

Por favor, nos ajude a melhorar respondendo um rápido questionário de feedback! Você será redirecionado para o questionário clicando no link a seguir: https://forms.gle/t6ppVszZmW1hq92N9

Email: encontreseufi@gmail.com | Site: https://sites.google.com/view/encontreseufi

Atenciosamente,
Paulo Henrique Barros de Moura

Collection - "--- Project and Data information ---"

https://sites.google.com/view/encontreseufi/in%C3%ADcio

Planned research output details

<table>
<thead>
<tr>
<th>Title</th>
<th>Type</th>
<th>Anticipated release date</th>
<th>Initial access level</th>
<th>Intended repository(ies)</th>
<th>Anticipated file size</th>
<th>License</th>
<th>Metadata standard(s)</th>
<th>May contain sensitive data?</th>
<th>May contain PII?</th>
</tr>
</thead>
</table>