

Alati za kreiranje plana upravljanja istraživačkim podacima

sa primerom Argos aplikacije i projektnog poziva IDEJE
Fonda za nauku

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Prezentacija je nastala u okviru projekta „Boosting EOSC readiness: Creating a scalable model for capacity building in RDM“, koji finansira Evropska unija u okviru projekta H2020-EU.1.4.1.1. EOSC Secretariat br. 831644



Upravljanje istraživačkim podacima

Upravljanje istraživačkim podacima (eng. Research Data Management, RDM) odnosi se na niz aktivnosti kako bi se na najefikasniji način prikupili i organizovali podaci, i pripremili za buduću upotrebu i deljenje sa drugima.

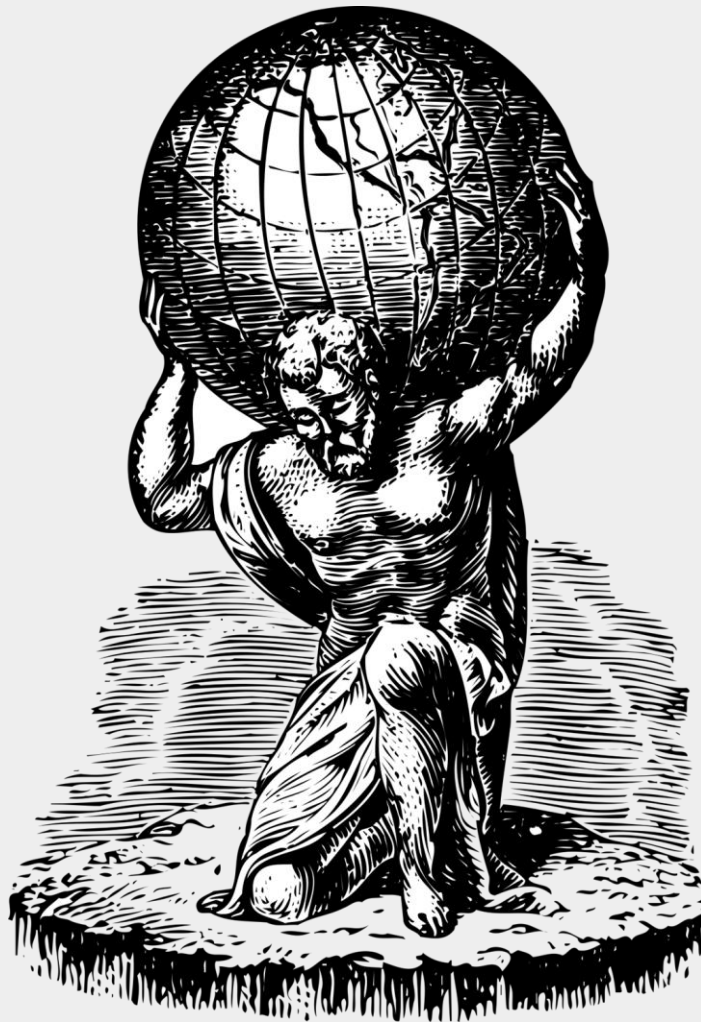
Sve su češći zahtevi finansijera, izdavača i naučnih institucija za adekvatnim upravljanjem i deljenjem podataka.

Prednosti:

- smanjuje se rizik od dupliranja već prikupljenih podataka;
- bolja zaštita od gubitaka podataka;
- veća transparentnost i ponovljivost istraživanja;
- veća citiranost;
- bolja saradnja sa drugim istraživačima, i dr.

Data Management Plan

Plan upravljanja
istraživačkim podacima



Data Management Plan

Dokument koji služi kao okvir svim učesnicima na projektu kako da upravljaju podacima i na koji način da ih čuvaju.

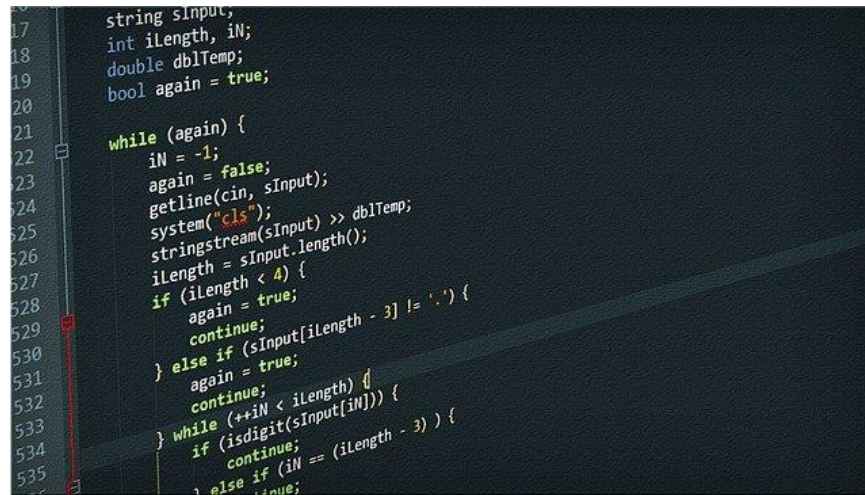
Donosi se na početku projekta i svi učesnici bi trebali da su upoznati sa njim.

Dozvoljena je revizija Plana u toku projekta.

Izrada Plana postala je obavezna kod većine finansijera istraživanja u svetu.

Sadržaj DMP-a

- Kreiranje i prikupljanje podataka
 - izbor formata
 - organizovanje datoteka i foldera
 - imenovanje
 - verzije
- Dokumentacija i metapodaci
 - upitnici, programski kod, lab. notebooks, ...
 - metapodaci: standardizovani, čitljivi za ljude i mašine

A screenshot of a code editor with a dark background and light-colored text. The code is in C++ and shows a loop that processes a string input. The code is as follows:

```
17 string sInput;  
18 int iLength, iN;  
19 double dblTemp;  
20 bool again = true;  
21  
22 while (again) {  
23     iN = -1;  
24     again = false;  
25     getline(cin, sInput);  
26     system("cls");  
27     stringstream(sInput) >> dblTemp;  
28     iLength = sInput.length();  
29     if (iLength < 4) {  
30         again = true;  
31         continue;  
32     } else if (sInput[iLength - 3] != '.') {  
33         again = true;  
34         continue;  
35     } while (++iN < iLength) {  
36         if (isdigit(sInput[iN])) {  
37             continue;  
38         } else if (iN == (iLength - 3)) {  
39             continue;  
40         }  
41     }  
42 }
```

Sadržaj DMP-a

- Zaštita podataka
 - rezervne kopije - *backup*
 - kontrola pristupa - lozinke, enkripcija
- Deljenje podataka
 - “as open as possible, as closed as necessary” (H2020)
 - licence za korišćenje podataka
- Dugoročno čuvanje
 - izbor podataka za dugoročno čuvanje
 - repozitorijumi za podatke



Image by John from Wikimedia Commons

Obrazac za pisanje DMP-a

Da bi se što više ispoštovali FAIR principi i olakšalo pisanje DMP-ova, mnoge organizacije i institucije razvile su obrasce (eng. *templates*) sa smernicama i pitanjima.

- Science Europe: *Practical Guide to the International Alignment of Research Data Management - Extended Edition*
- Horizon 2020 FAIR Data Management Plan (DMP) template (*Annex 1*)



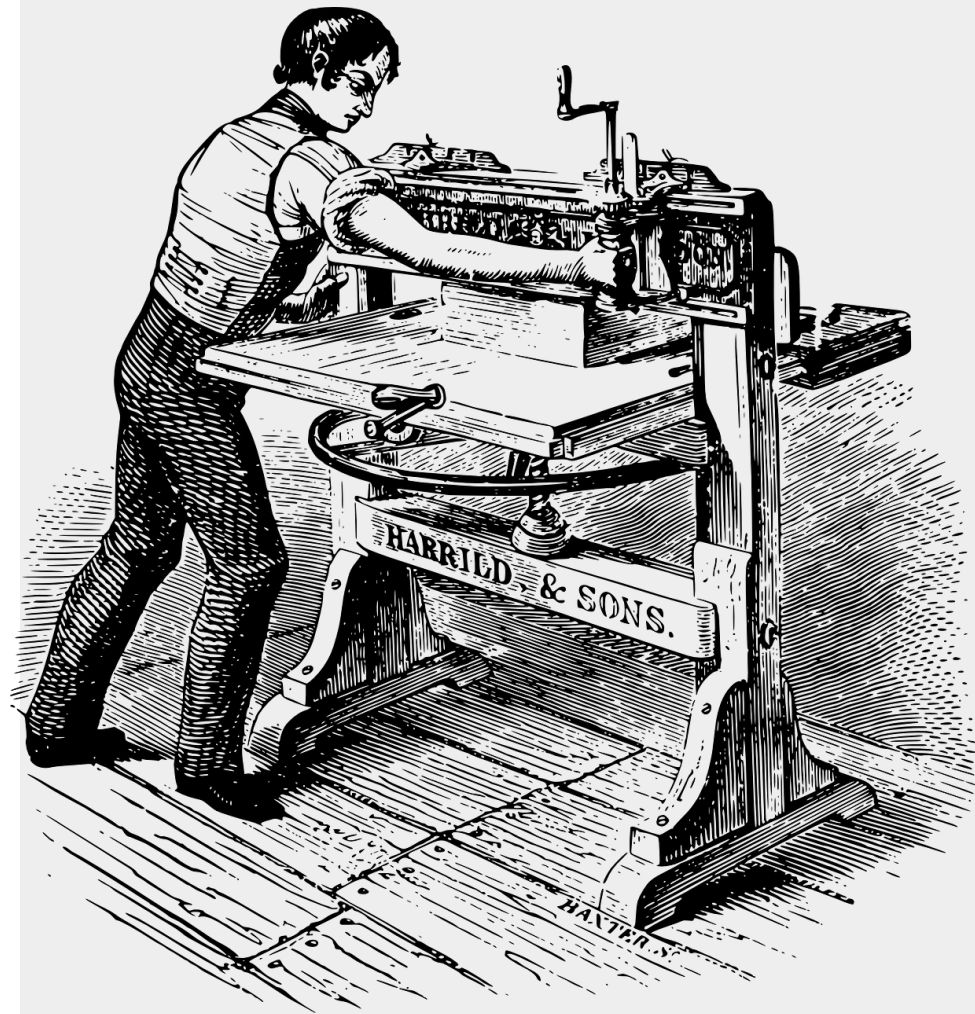
Obrazac za pisanje DMP-a



Fond za nauku Republike Srbije -- odeljak *Data Usage* u pozivima PROMIS i IDEJE.

- Uputstvo za pisanje Plana upravljanja podacima za program IDEJE Fonda za nauku Republike Srbije ([DOI: 10.5281/zenodo.4496935](https://doi.org/10.5281/zenodo.4496935))

Alati za DMP



Alati za DMP

3.2 How will data security and protection of sensitive data be taken care of during the research?

- ☒ Not applicable (no sensitive data)
- ☐ Default security measures of the institution networked research storage
- ☐ Additional security measures (please specify)

Additional Information

B	<i>I</i>				
There will be no sensitive data					

Save

Answered just now by obrad.vuckovac@gmail.com

Guidance

Comments

NWO

Consider data protection, particularly if your data is sensitive – for example, containing personal data, politically sensitive information or information relating to religion and health, trade secrets or national security information. Describe the main risks and how these will be managed. Inquire with your institution's research support staff whether your intended storage solution meets your institution's data security policy if your research involves sensitive data. If you are using offline storage, describe how data will be recovered in the

Alati za DMP

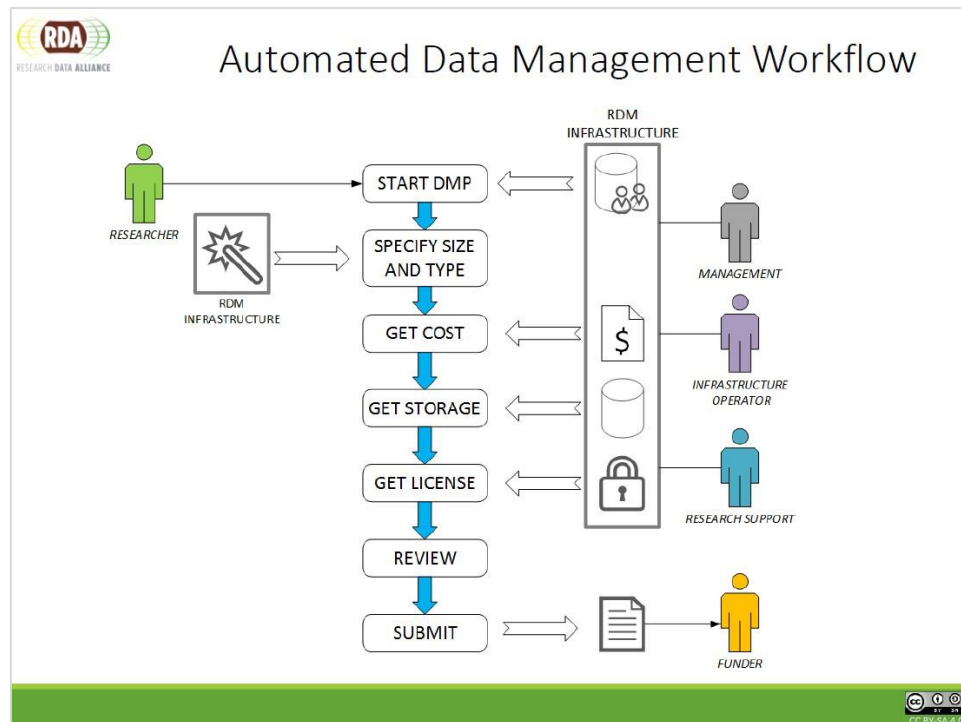
<p><i>“traditional” DMP</i></p> <p>DMPOnline - DCC & Univ. of Edinburgh DMP Tool - California Digital Library</p>	<p>human readable (PDF, DOCX)</p>
<p><i>machine-actionable DMP</i></p> <p>Argos (OpenAIRE i EUDAT) Data Stewardship Wizard (Elixir CZ/ND)</p>	<p>human readable (PDF, DOCX) machine readable (JSON, RDF/XML)</p>

Novi trendovi - machine-actionable DMPs

RDA Common Standard for machine actionable Data Management Plans

U okviru ovog projekta razgovarali smo sa predstavnicima timova koji su razvili alate:

- Argos (OpenAIRE i EUDAT) i
- Data Stewardship Wizard (Elixir CZ/ND).



Alati za DMP



- machine-actionable (prema *RDA Common Standards for maDMP*)
- free and open-source
- dozvoljen prevod na druge jezike pored engleskog
- omogućena izrada obrazaca finansijera

DMP alati: Argos

Datasets

Title: NewSiest_DMP

Template: Horizon 2020

External References

Data Repositories

External Datasets

Registries

Services

Dataset Description

1 Data Summary

1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

Purpose of data collection/generation: To study the optimal nanoparticle (NP) concentration and thermal modification conditions to improve the UV stability of wood surfaces. Data will be useful for academic and scientific readers and also has construction, industrial importance. **Relation to objectives of project:** The main research objectives of the action are: i) to introduce and optimize envelope treatment of wood with UV protecting nanoparticles ii) to set up the process of heat treatment of wood with nanoparticles in the envelope iii) to evaluate UV and fungal resistance of the novel wood-based material for industrial/commercial application. The collected data will therefore include: i) Experimental procedures and reaction conditions to achieve wood envelope treatment. Data on basic liquid properties of NP dispersion, retention and depth of penetration of the nanomaterial onto wood. ii) the generated data includes standard methodology of thermal modification of wood and data on percent mass loss, mechanical properties, contact angle variations, colour and chemical changes. iii) Data from evaluation of wood against light (UV) and fungal stability where change in wood properties will be accessed by weight loss, colour change, Scanning Electron Microscopy (SEM), and changes in chemical constituents using FTIR spectroscopy.

1.2 What types and formats of data will the project generate/collect?

Types and formats of data generated: 1. Envelope treatment of wood using

DMP alati: Argos

Datasets

Title: NewSiest_DMP

Template: Horizon 2020

```
{
  "dmp" : {
    "contact" : {
      "contact_id" : {
        "identifier" : "c22450b2-9999-4896-9ec6-f7c0af5bfa37",
        "type" : "other"
      },
      "mbox" : "obrad.vuckovac@gmail.com",
      "name" : "Obrad Vuckovac"
    },
    "contributor" : [ {
      "contributor_id" : {
        "identifier" : "http://orcid.org/0000-0001-5616-2680",
        "type" : "orcid"
      },
      "name" : "Obrad Vučkovic"
    } ],
    "cost" : [ ],
    "created" : "2020-08-06T18:19:38Z",
    "dataset" : [ {
      "dataset_id" : {
        "identifier" : "62c5029c-2322-4eb7-ba52-bf808de1c615",
        "type" : "other"
      }
    } ],
  },
}
```

of the data collection/generation and its relation to the objectives

n/generation: To study the optimal nanoparticle (NP) in conditions to improve the UV stability of wood surfaces. Data in conditions to improve the UV stability of wood surfaces. Data ic readers and also has construction, industrial importance. main research objectives of the action are: i) to introduce and with UV protecting nanoparticles ii) to set up the process of heat in the envelope iii) to evaluate UV and fungal resistance of the al/commercial application. The collected data will therefore d reaction conditions to achieve wood envelope treatment. Data ion, retention and depth of penetration of the nanomaterial onto standard methodology of thermal modification of wood and data erties, contact angle variations, colour and chemical changes. iii) ight (UV) and fungal stability where change in wood properties change, Scanning Electron Microscopy (SEM), and changes in roscopy.

ats of data will the project generate/collect?

a generated: 1. Envelope treatment of wood using

Hvala na pažnji

Serbi8.RDM

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