



# Software Management Planning with DSW

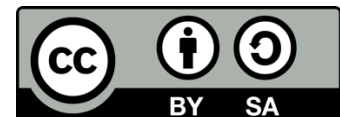


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# Data vs. Software



5.94,66755.39,0  
59.12,42826.99,0  
35.64,50656.8,0  
15.94,67905.07  
115.94,66938.9  
0192.49,86421.0  
73798.5

=

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```
...event.spectat...  
...this/7a.handleObj.handler...  
...c-a(this),e-c.data("bs.alert")...  
...function(b)(a(b).on("click",e-c...  
...l.remove())var d-a(this),e-d...  
...length||(f=d.hasClass("alert"))...  
...isDefaultPrevented())(f.remove...  
...c));var...  
...d.a.fn.alert.noConflict=function...  
...c,d.prototype.close))}(jQuery)...  
...f-object==typeof b||b...  
...this.element-a(b),this.options...  
...c.prototype.setState-function(b)...  
...text,null=f.resetTextid.datal...  
...loadingText=b7(this.isloading...  
...removeClass(c).removeClass(c)...  
...length)(var c=this...  
...checked";this.element.hasClass...  
...button-b,a.fn.button.Constructo...  
...data-api",[data-toggle="button"]...  
...jQuery),+function(a){use strict...  
...data(),object==typeof b||b...  
...to(b):g7e|g|():f.interval...  
...this),this.$indicators-this...  
...this.interval=this.$active-thi...  
...this.on("mouseleave.bs.carousel...  
...cycle-function(a){switch(a.whic...  
...c.prototype.cycle-function(b){...  
...this.options.interval;...  
...this.$active);c.prototype.to-fu...  
...this.$items.length-1||b?void 0...  
...this.pause().cycle():this.slid...  
...this.cycle();this.interval=clea...  
...this.$element.find(".item.active...  
...return this.sliding=!;var j=0...  
...isDefaultPrevented())(this.sli...  
...return a.support.transition?thi...  
...one("bsTransitionEnd",function...  
...).sliding=!;setTimeout(function...  
...a.fn.carousel.a.fn.carousel-b,a...  
...id.replace(/.(?=[^s]+)$/,"[da...  
...interval=...  
...function(a){use strict";functi...  
...data(),object==typeof b||b...  
...this.transitioning=null,this.o...  
...this.transitioning=null,this.o...  
...c.prototype...  
...c.prototype...
```

# What is Research Software



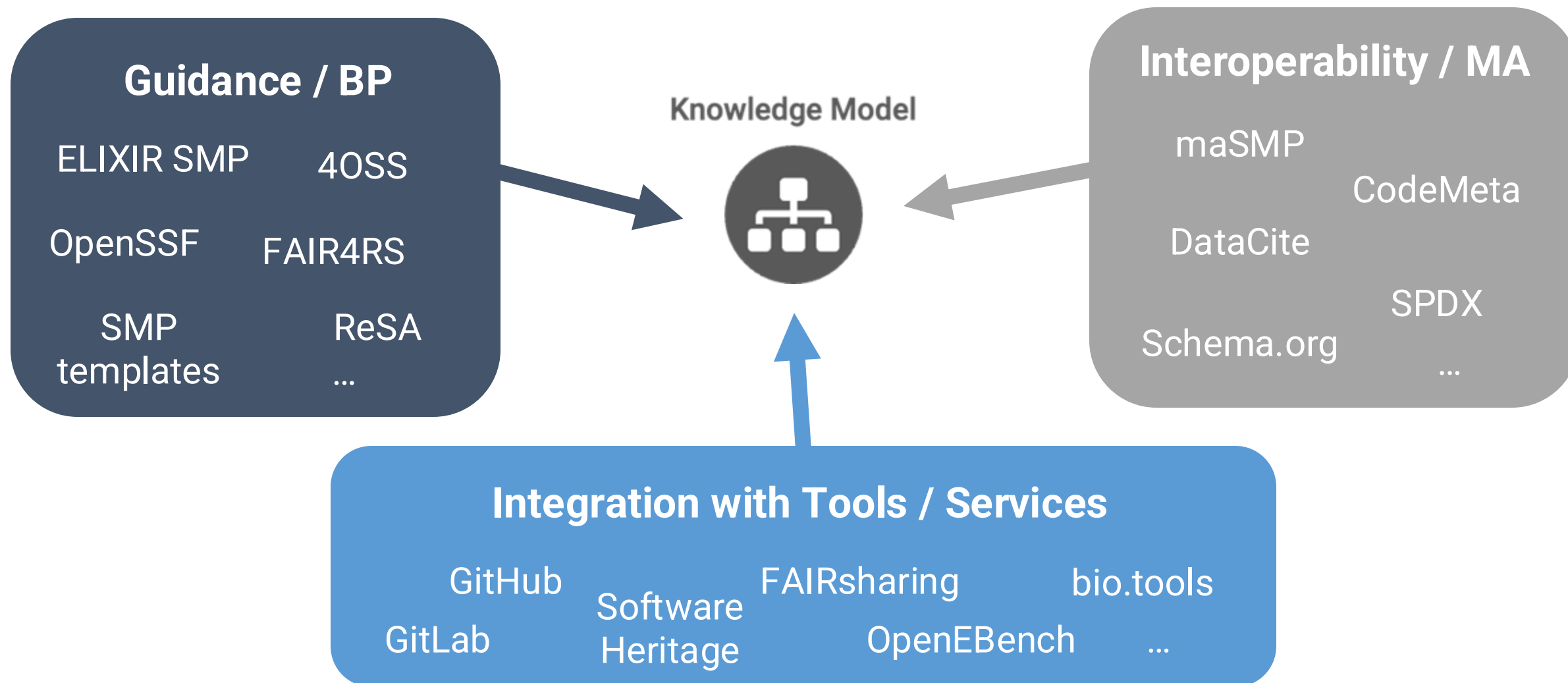
- Research software is any software developed to generate, process, analyze, or simulate data **within a research project**. It is a **key component of reproducible science**.
- It includes code, scripts, algorithms, or other computational tools designed to **support scientific inquiry and discovery**.
- Research software can range **from small scripts** automating data analysis **to large-scale, collaborative platforms** used across institutions or research infrastructures.
- It is **often custom-built or adapted** to meet the specific needs of a research question or methodology.
- It often suffers from **not being published, maintained, nor well-designed**.

# Research Software “Hype”



- Sharing research software (GitHub / GitLab / ...) with **open-source license** (e.g. MIT or Apache)
- Making the **project inclusive and documented** (README, CONTRIBUTING, CODE\_OF\_CONDUCT)
- Following **OSS and software quality best practices** (4OSS, OpenSSF badges, RSQkit)
- **Promoting correct software citation** / crediting authors (CITATION.cff)
- Archiving source code and **assign PIDs** (Zenodo, Software Heritage)
- Complying with **FAIR principles for Research Software** (FAIR4RS)
- Composing and maintaining a **software management plan** covering all above and more...

# Plans within ELIXIR-STEERS




# Plans within ELIXIR-STEERS



- Developing **knowledge model** (guide and collect information)
  - with proper guidance for (research) software management
  - and to collect necessary software metadata
  - while promoting best practices (open-source, FAIR4RS, PIDs, ...)
- Developing **document templates** (export)
  - to produce human-readable outputs (SMP, developer steps, PI/funder checklist)
  - as well as machine-actionable outputs (CodeMeta, CITATION.cff, project boilerplate)
- Developing **integrations to import and synchronize** with research software project





# Maybe it is just a beginning...



## FAIR Principles for Research Hardware

Interest Group

🔗 recognised-and-endorsed • Active 4 months ago




## DATA SCIENCE JOURNAL

Reading: Going Digital: Persistent Identifiers for Research Samples, Resources and Instruments

### Essays

Going Digital: Persistent Identifiers for Research Samples, Resources and Instruments


Esther Plomp ✉



## Rethinking Data Management Planning: Introducing Research Output Management Planning (ROMPi) Approach

ESSAY

STEFANO DELLA CHIESA   
SUJIT KUMAR SIKDER 

 ubiquity press

\*Author affiliations can be found in the back matter of this article

## PLOS COMPUTATIONAL BIOLOGY

 OPEN ACCESS

EDITORIAL

### Ten simple rules for making training materials FAIR

Leyla Garcia, Bérénice Batut, Melissa L. Burke, Mateusz Kuzak, Fotis Psomopoulos, Ricardo Arcila, Teresa K. Attwood, Niall Beard, Denise Carvalho-Silva, Alexandros C. Dimopoulos, Victoria Dominguez del Angel, Michel Dumontier, Kim T. Gurwitz, [ ... ], Patricia M. Palagi  [ view all ]

Published: May 21, 2020 • <https://doi.org/10.1371/journal.pcbi.1007854>

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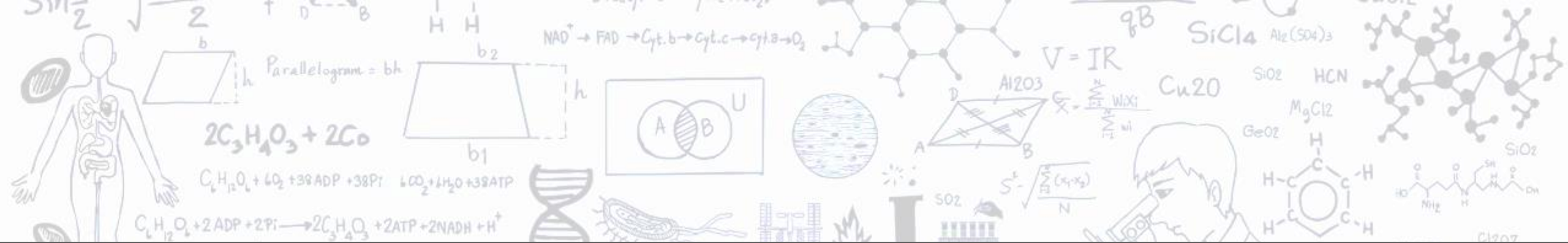


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# Questions & Discussion





# Thank you!

