STM

STM Article Sharing Framework - Implementation

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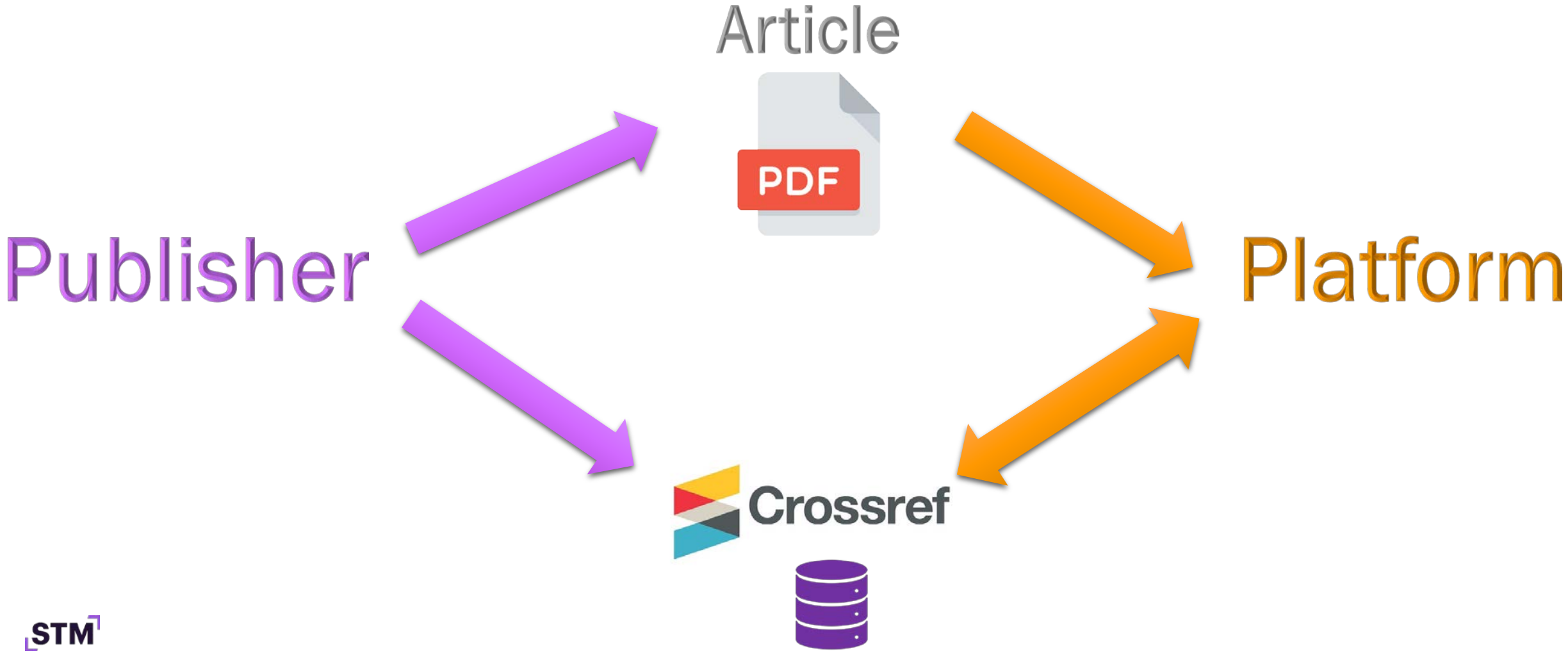
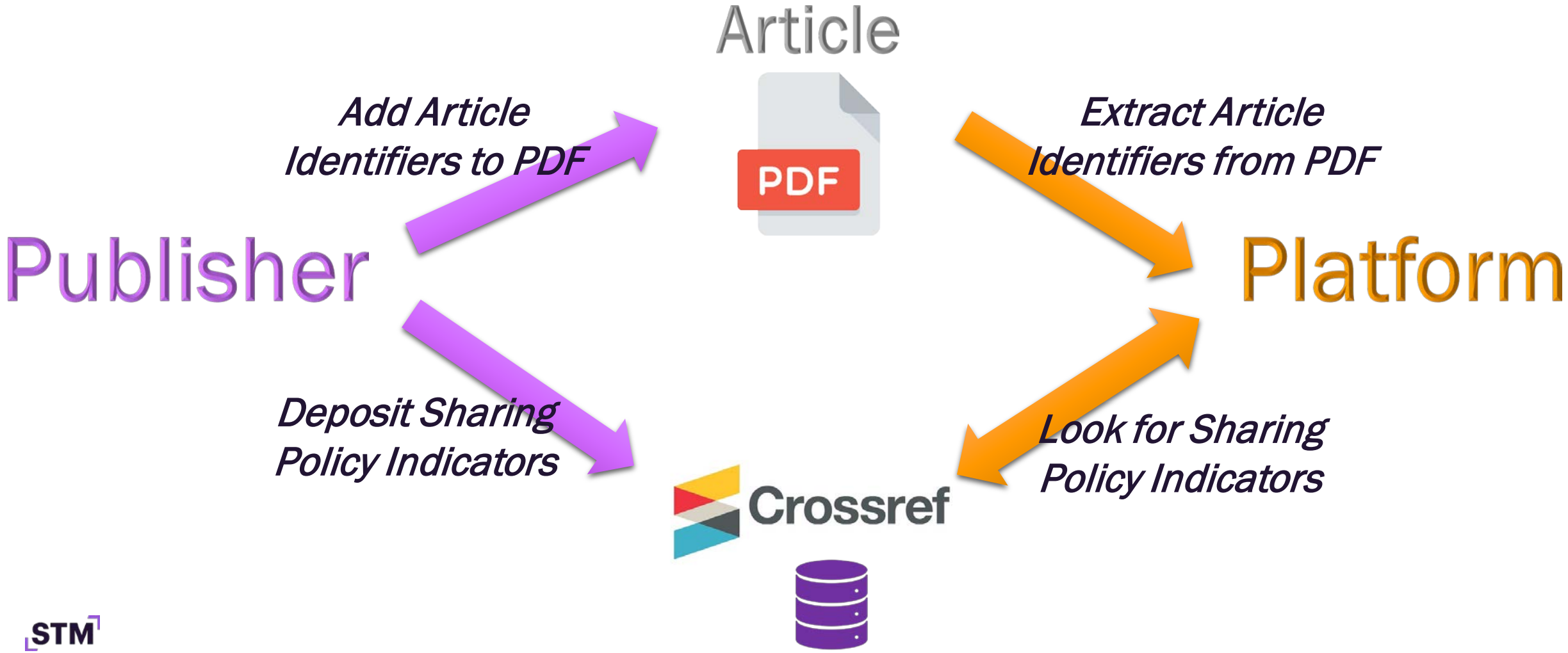
STM

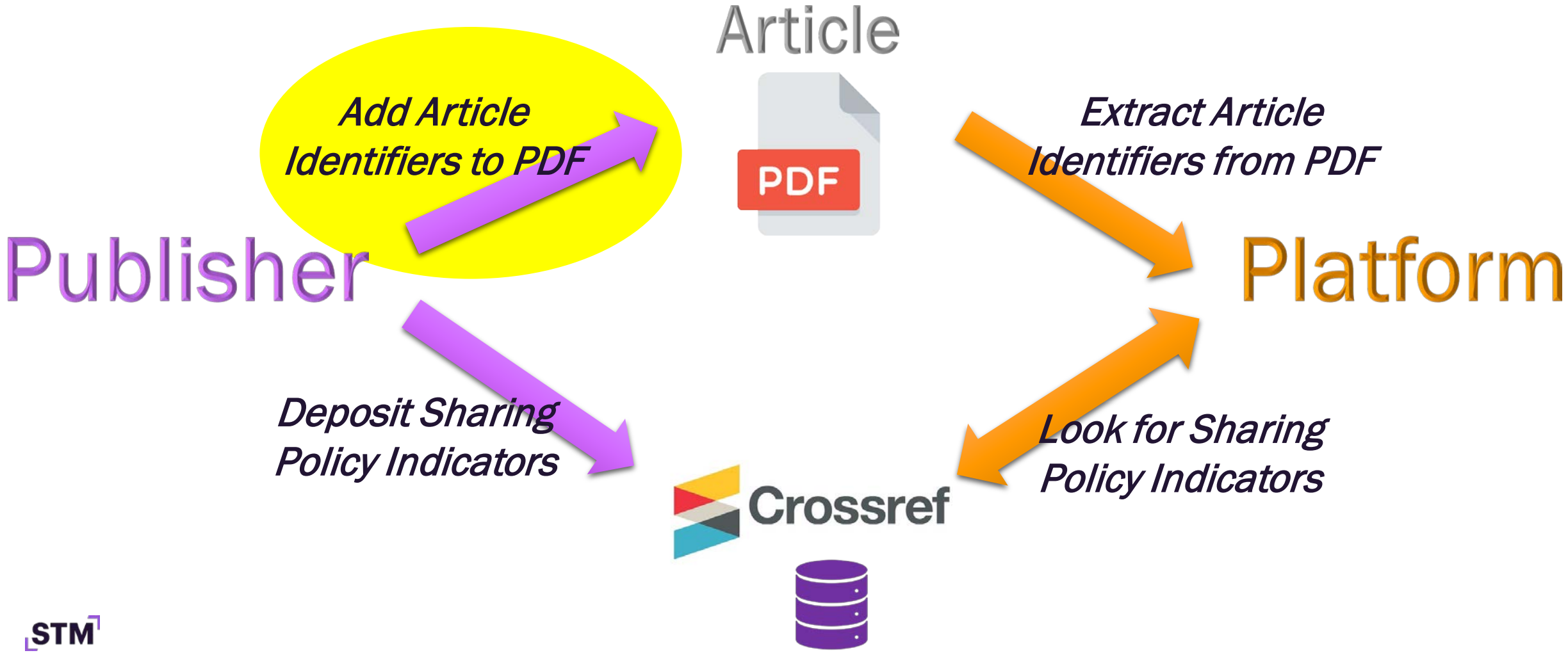
Implementation Overview



Implementation Overview



Implementation Overview



Publisher: Add Article Identifiers to PDF

Two fields

- **Article DOI**
- **Journal Article Version ("JAV")**

Two encoding methods

Two implementation methods

More on JAV

JAV defined as NISO recommended practice RP-8-2008
https://www.niso.org/publications/niso-rp-8-2008-jav

Supported JAV values within this framework:

- **VoR** – Version of record
- **AM** – Accepted Manuscript
- **AO** – Author Original

Publisher: Add Article Identifiers to PDF

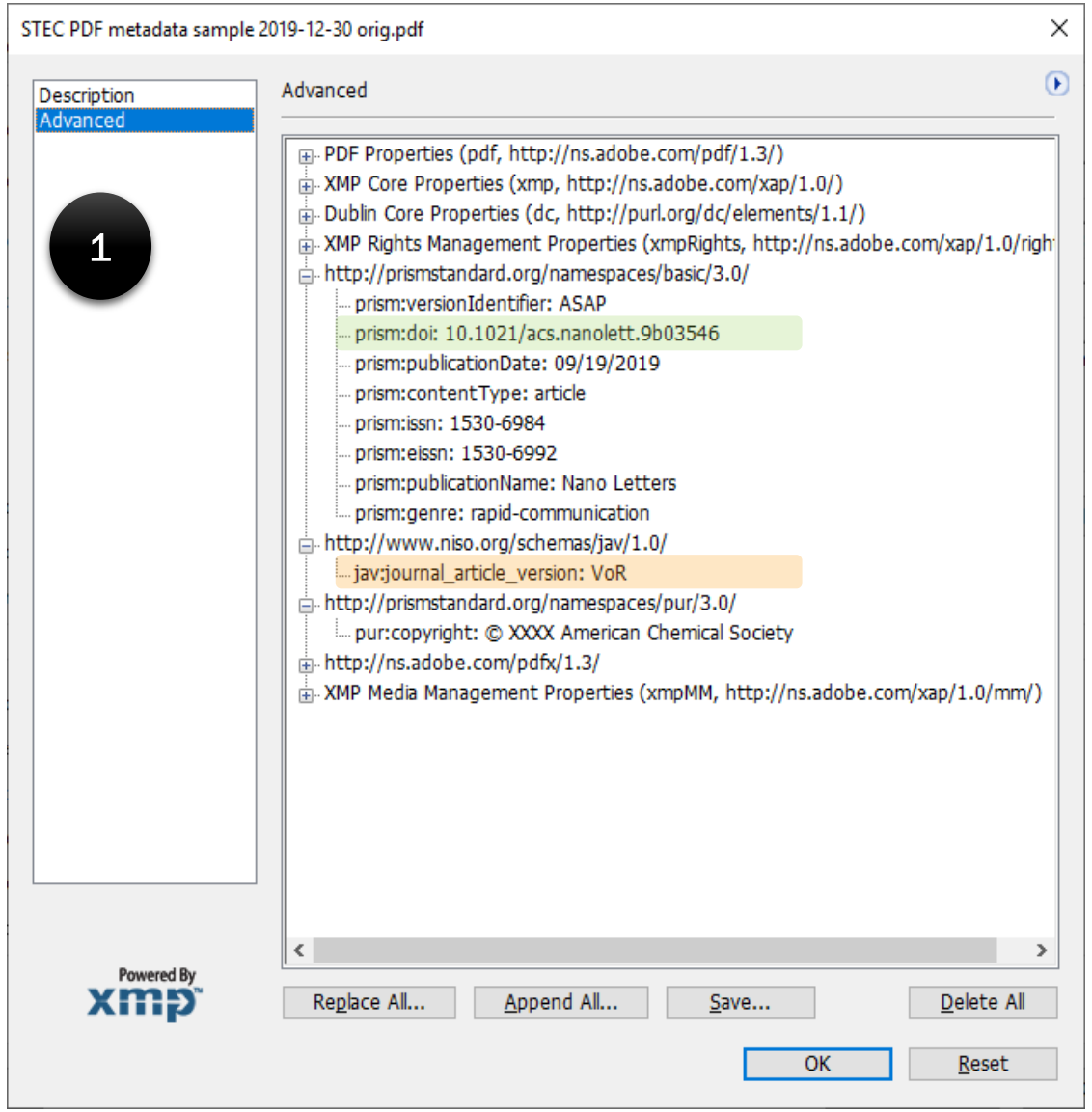
Two fields:

- Article DOI
- Journal Article Version

Two encoding methods

1. **Add to PDF's XMP metadata section**
2. Add JAV to DOI hyperlink

Two implementation methods



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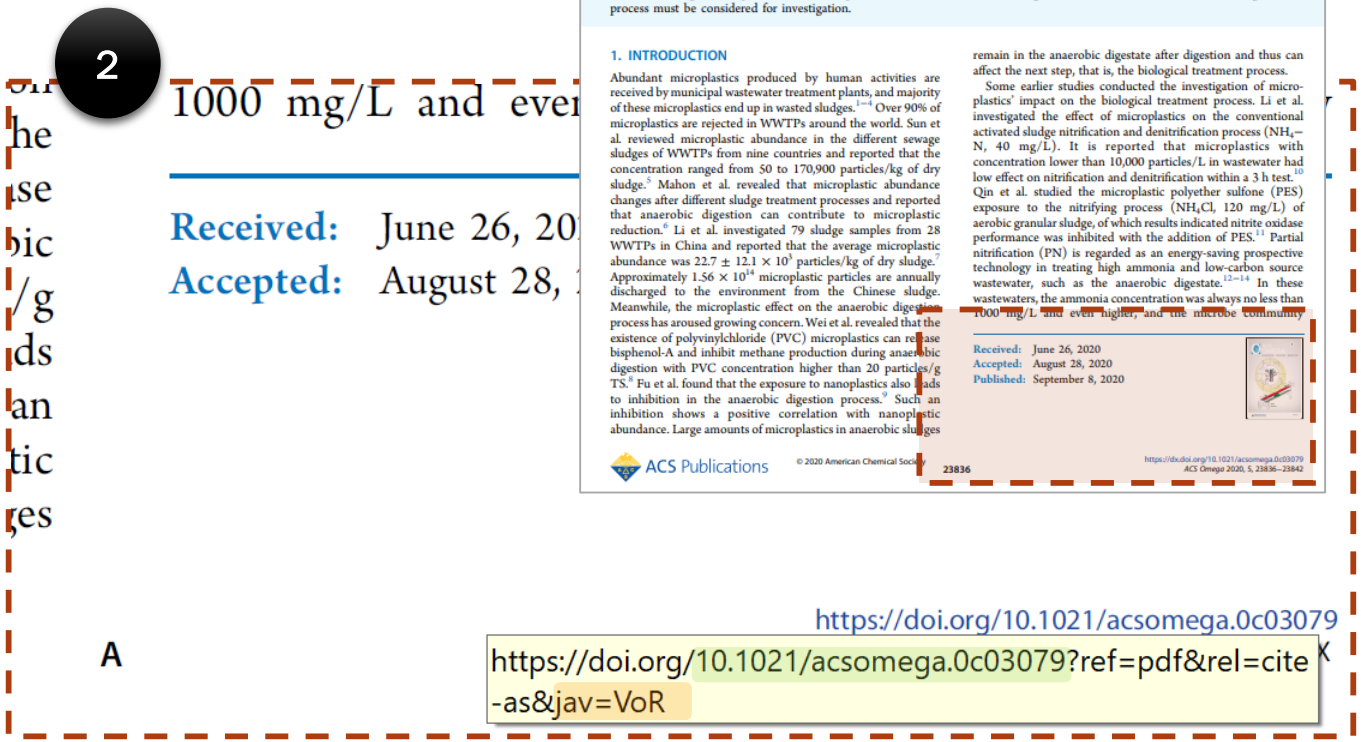
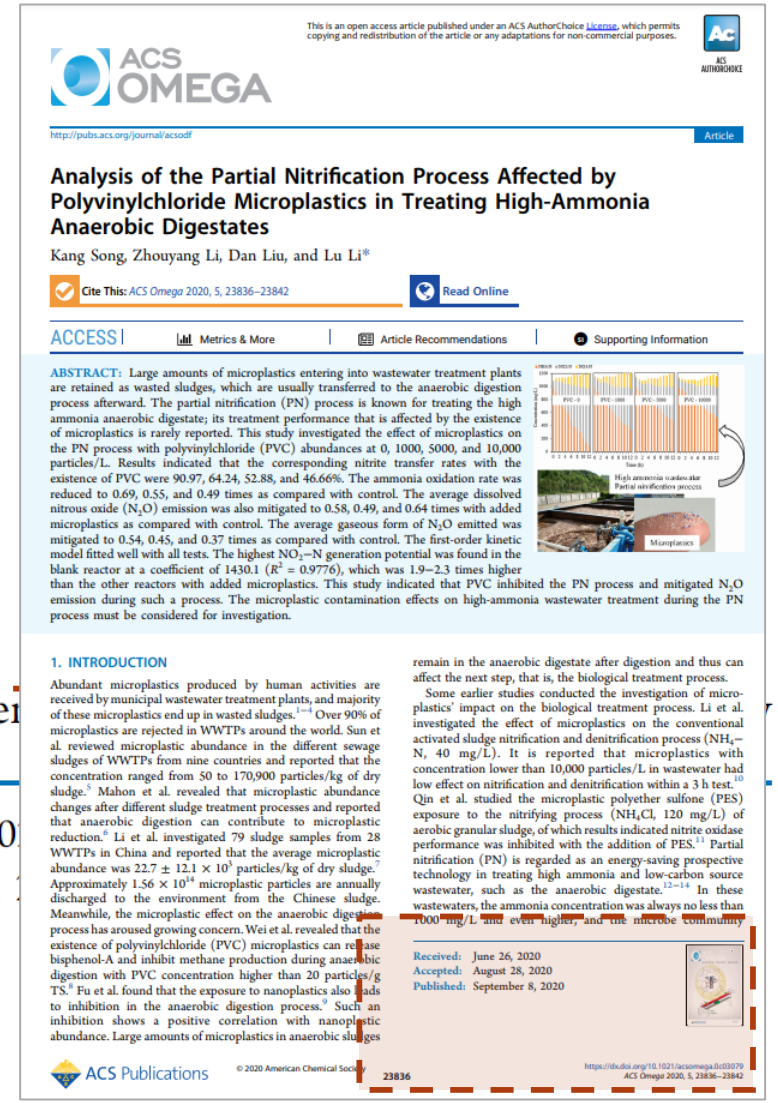




Quick Poll #2

Publishers:

Do you implement *any* XMP data in the PDF version of your articles today?

Publisher: Add Article Identifiers to PDF

Two fields:

- Article DOI
- Journal Article Version

Two encoding methods

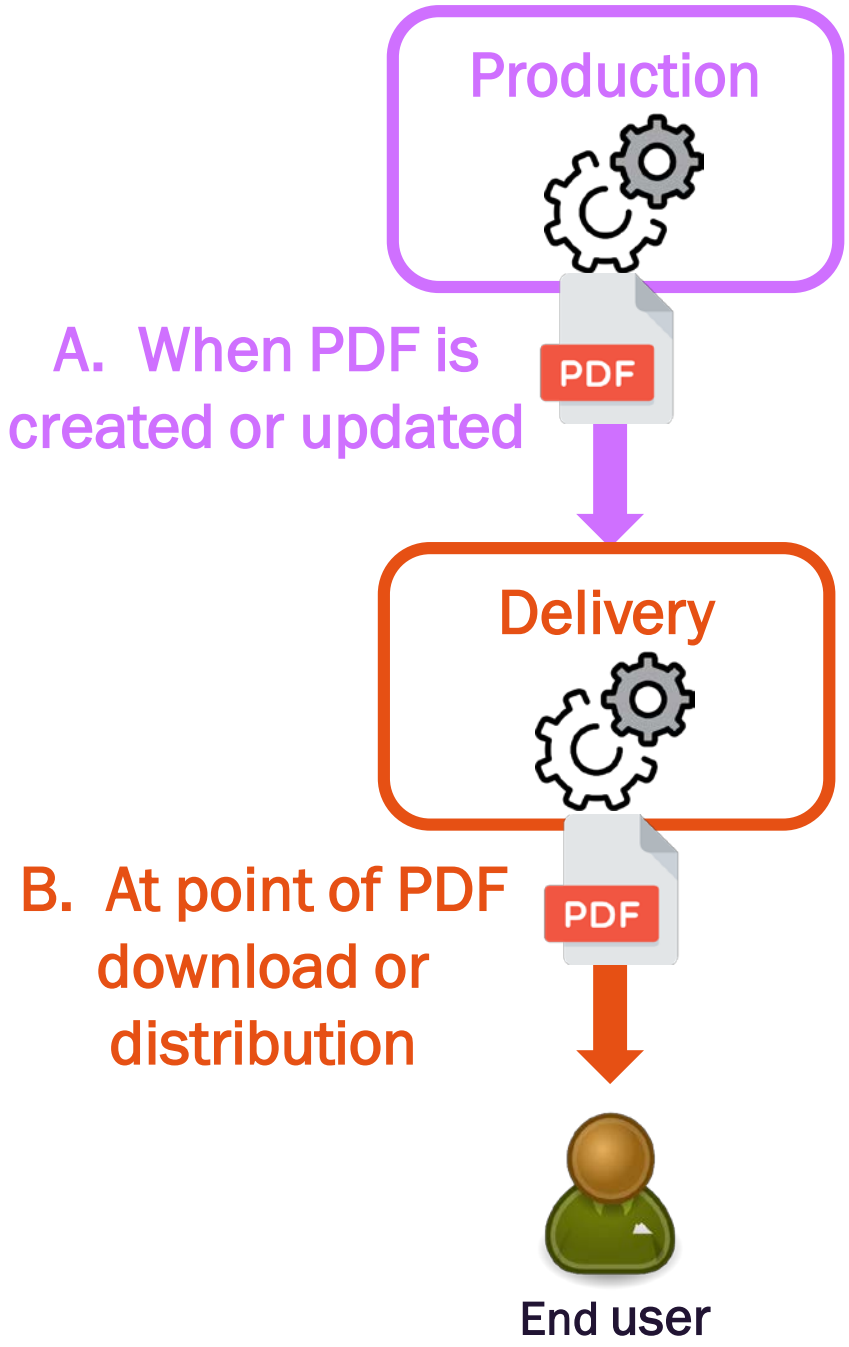
1. Add to PDF's XMP metadata section
2. Add JAV to DOI hyperlink

<u>Two implementation methods</u>

A. PDF generation or update *-OR-*

B. At delivery

Consideration: Frontfile vs Backfile

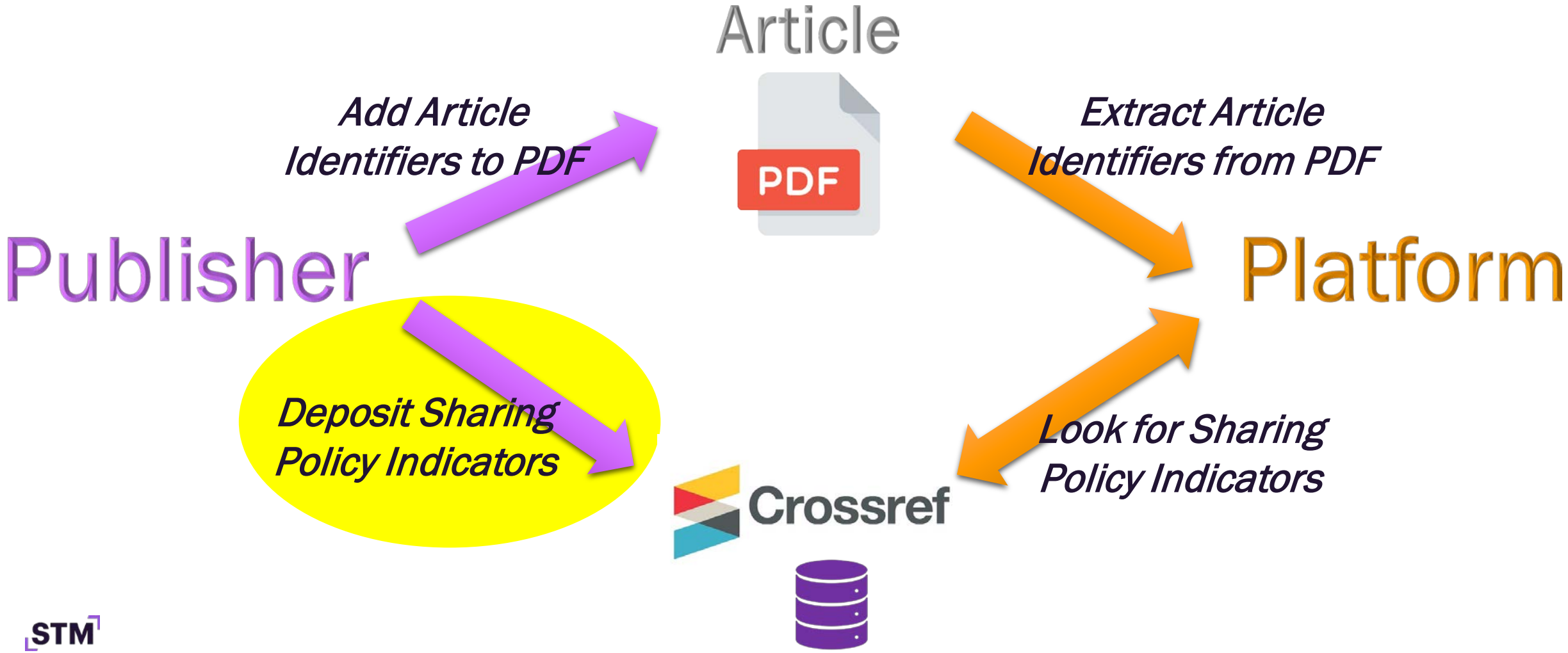


Quick Poll #3

Publishers:

Have you already implemented DOI and JAV tagging in your article PDFs (XMP)?

Implementation Overview



Publisher: Sharing Policy Contexts

Four Sharing Policy contexts defined

Each with 2 to 4 values

Platform Type	**pns**	Platform that **has not signed** or does not comply with the STM Voluntary Principles for Article Sharing
	ps	Platform that **has signed** and complies with the STM Voluntary Principles for Article Sharing
Displayable Elements	**ft**	Full Text
	ab	Abstract
	ref	References
	cm	Citation Metadata
JAV Article Version	**vor**	Version of Record
	am	Accepted Manuscript
	ao	Author's Original
Audience Scope	**ga**	General Access
	rcg	Research Collaboration Group

Publisher: Sharing Policy Indicators

Each permutation of sharing policy contexts = one STM sharing policy

Each policy has a unique identifier: a DOI expressed as a URI

- A “Sharing Policy DOI” (distinct from an Article DOI)
- STM is the “publisher”, using STM’s 10.15223 DOI prefix

#	STM ASF Context Attributes											STM ASF Policy DOI
	Platform Type		JAV Article Version			Audience Scope		Displayable Elements				
	pns	ps	vor	am	ao	ga	rcg	ft	ab	ref	cm	
1	x	*	x			x	*	x	*	*	*	Base: **https://doi.org/10.15223**
2	x	*	x			x	*		x		*	https://doi.org/10.15223/policy-001
3	x	*	x			x	*			x	*	https://doi.org/10.15223/policy-002
4	x	*	x			x	*				x	https://doi.org/10.15223/policy-003
5	x	*	x				x	x	*	*	*	https://doi.org/10.15223/policy-004
6	x	*	x				x		x		*	https://doi.org/10.15223/policy-005
7	x	*	x				x			x	*	https://doi.org/10.15223/policy-006
8	x	*	x				x				x	https://doi.org/10.15223/policy-007
9	x	*		x		x	*	x	*	*	*	https://doi.org/10.15223/policy-008
10	x	*		x		x	*		x		*	https://doi.org/10.15223/policy-009
11	x	*		x		x	*			x	*	https://doi.org/10.15223/policy-010
12	x	*		x		x	*				x	https://doi.org/10.15223/policy-011
												https://doi.org/10.15223/policy-012
39		x		x			x			x	*	https://doi.org/10.15223/policy-039
40		x		x			x				x	https://doi.org/10.15223/policy-040
41		x			x	x	*	x	*	*	*	https://doi.org/10.15223/policy-041
42		x			x	x	*		x		*	https://doi.org/10.15223/policy-042
43		x			x	x	*			x	*	https://doi.org/10.15223/policy-043
44		x			x	x	*				x	https://doi.org/10.15223/policy-044
45		x			x		x	x	*	*	*	https://doi.org/10.15223/policy-045
46		x			x		x		x		*	https://doi.org/10.15223/policy-046
47		x			x		x			x	*	https://doi.org/10.15223/policy-047
48		x			x		x				x	https://doi.org/10.15223/policy-048

Publisher: Deposit Sharing Policy Indicators to Crossref

Elsevier's sharing policy for subscription articles

Subscription incl open archive

		Audience Scope -->	RCG (collaboration group)					GA (public and requested access)				
		Displayable element -->	AB (abstract)	FT (full text)	CM (citations)	REF (references)	ASF policy #	AB (abstract)	FT (full text)	CM (citations)	REF (references)	ASF policy #
Platform type	*Document version*											
PS (signed & complies with principles)	AO (preprint)		Allowed	Allowed	Allowed	Allowed	**045**	Allowed	Allowed	Allowed	Allowed	**041**
	AM (accepted manuscript)		Allowed	Allowed	Allowed	Allowed	**037**	Allowed	Disallowed	Allowed	Disallowed	**034**
	VOR (version of record, incl proofs)		Allowed	Allowed	Allowed	Allowed	**029**	Allowed	Disallowed	Allowed	Disallowed	**026**
PNS (not signed & complies with principles)	AO (preprint)		Allowed	Allowed	Allowed	Allowed	**021**	Allowed	Allowed	Allowed	Allowed	**017**
	AM (accepted manuscript)		Allowed	Disallowed	Allowed	Disallowed	**014**	Allowed	Disallowed	Allowed	Disallowed	**010**
	VOR (version of record, incl proofs)		Allowed	Disallowed	Allowed	Disallowed	**006**	Allowed	Disallowed	Allowed	Disallowed	**002**

Example

ACS' sharing policy for subscription articles

Subscription (non-OA)

		Audience Scope -->	RCG (collaboration group)				ASF Policy #	GA (public and requested access)				ASF policy #
		Displayable element -->	AB	FT	CM	REF		AB	FT	CM	REF	
Platform type	*Document version*											
PS (signed & complies with principles)	AO (submitted mss)		Y	Y	Y	Y	**045**	N	N	Y	N	
	AM (accepted manuscript)		Y	Y	Y	Y	**037**	N	N	Y	N	
	VOR (version of record, incl proofs)		Y	Y	Y	Y	**029**	N	N	Y	N	
PNS (not signed but complies with principles)	AO (submitted mss)		N	N	Y	N		N	N	Y	N	
	AM (accepted manuscript)		N	N	Y	N		N	N	Y	N	
	VOR (version of record, incl proofs)		N	N	Y	N		N	N	Y	N	

Publisher: Deposit Sharing Policy Indicators to Crossref

Only a few policies DOIs needed to convey a Publisher's sharing policy for an article.

Platform Type		JAV Article Version			Audience Scope		Displayable Elements				Policy URI
pns	ps	vor	am	ao	ga	rcg	ft	ab	ref	cm	
x		x			x			x			https://doi.org/10.15223/policy-002
	x	x				x	x				https://doi.org/10.15223/policy-029
	x		x		x		x				https://doi.org/10.15223/policy-033

Leverages same "license-ref" structure in Crossref used for Open Access and CHORUS
(NISO Access & License Indicators)

One article DOI can contain multiple sharing policy DOIs.

Crossref

```
<license_ref>https://doi.org/10.15223/policy-002</license_ref>
<license_ref>https://doi.org/10.15223/policy-029</license_ref>
<license_ref>https://doi.org/10.15223/policy-033</license_ref>
```

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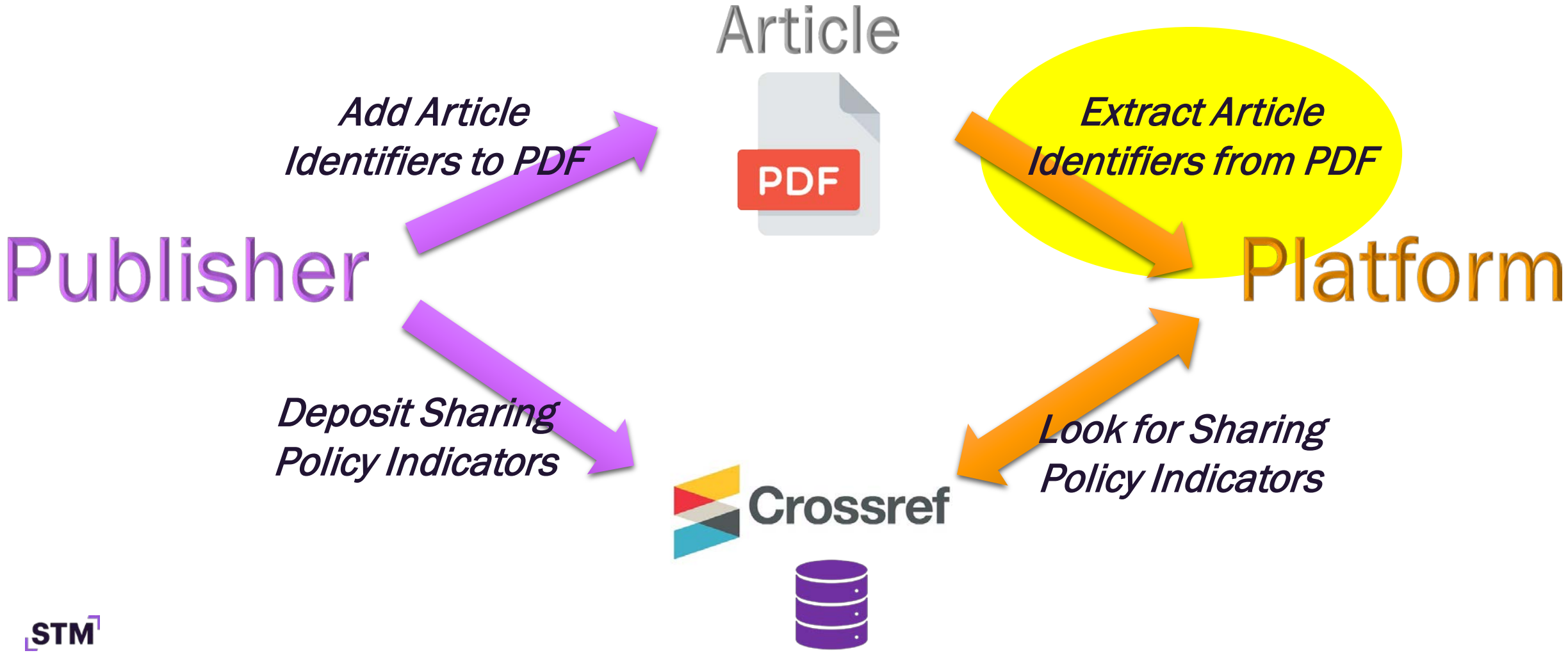
Quick Poll #4

Publishers:

Do you already deposit any "license_ref" metadata to Crossref, for example in support of CHORUS?

Implementation Overview



Platform: Extract DOI & JAV from PDF

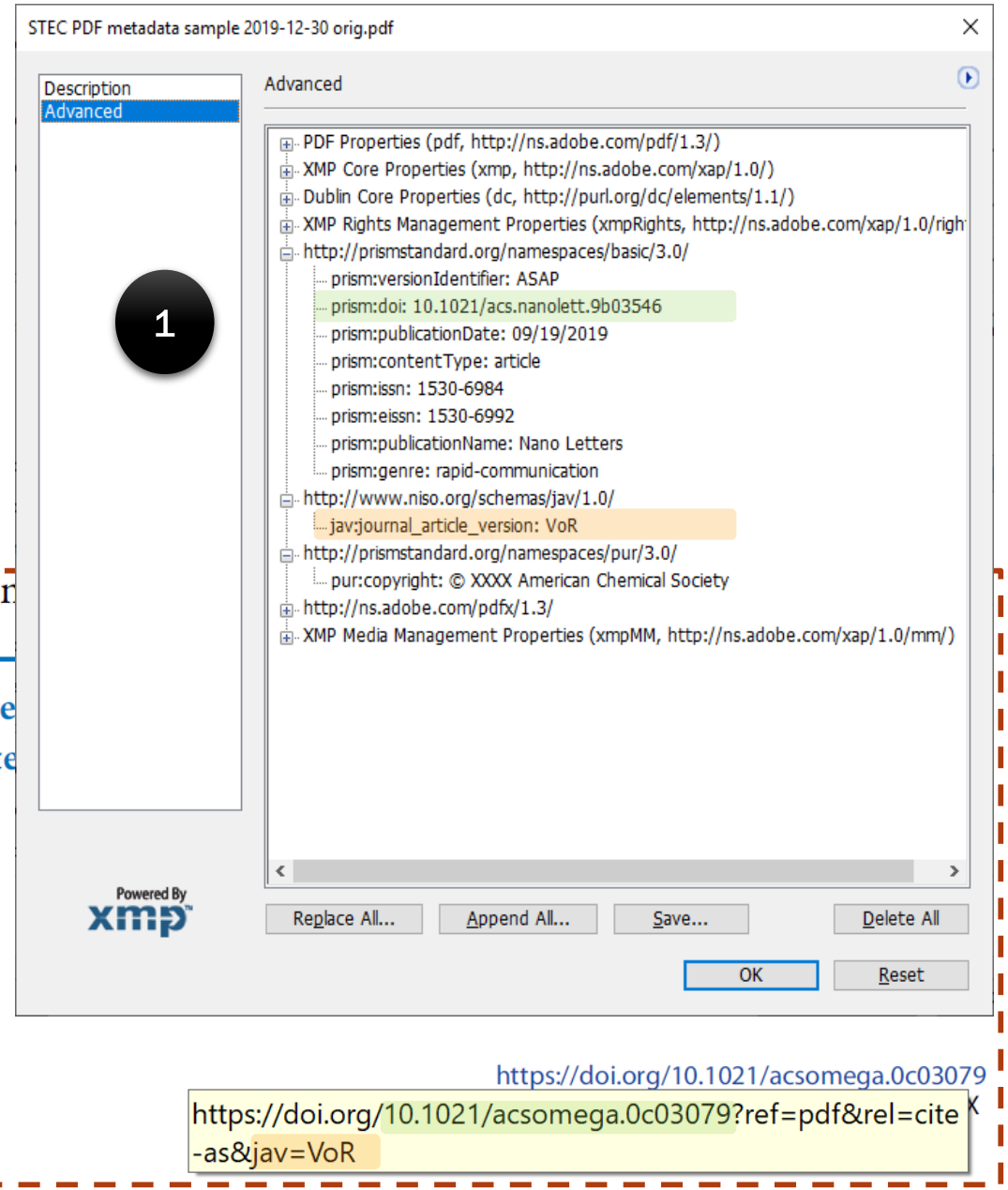
Two fields

- Article DOI
- Journal Article Version

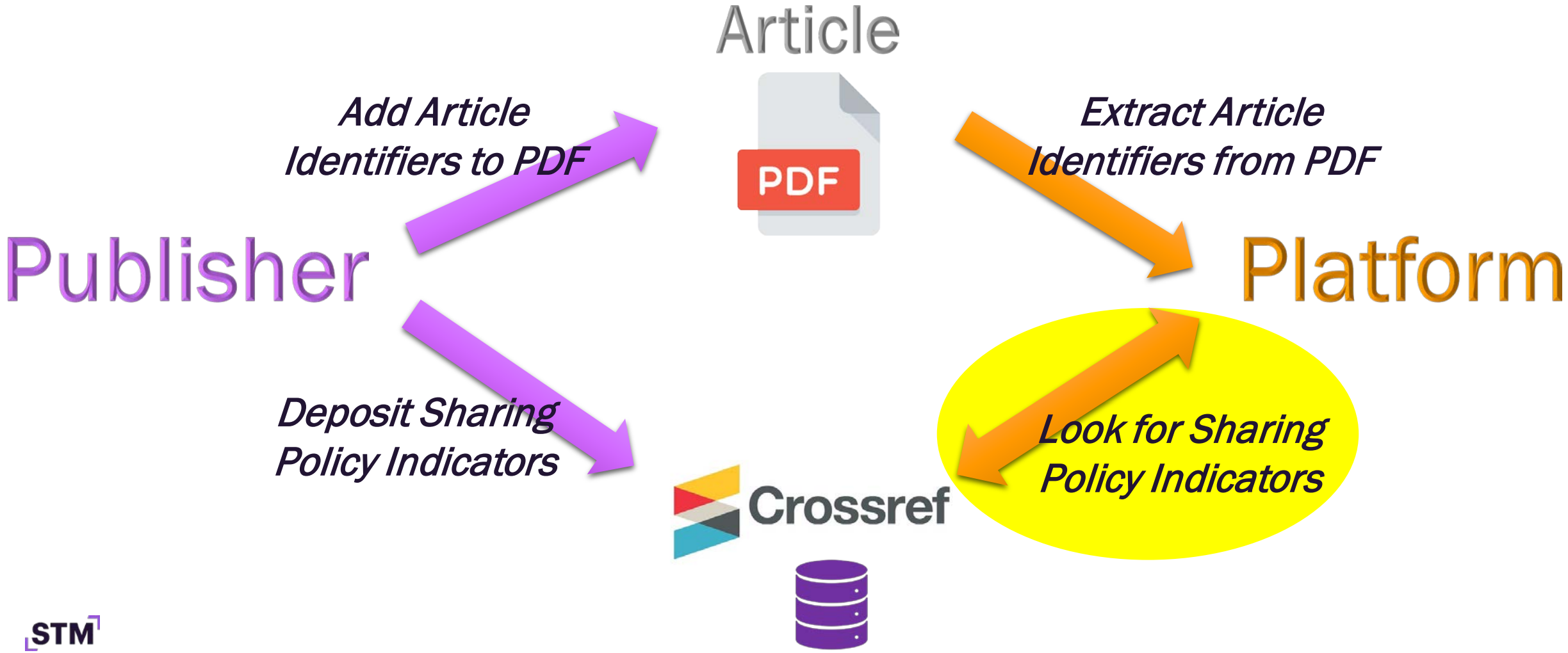
Both methods can be automated:

1. PDF's XMP metadata section
2. JAV within DOI hyperlink

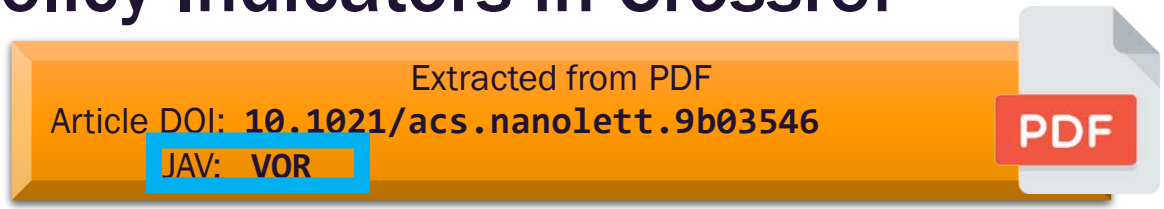
ACS developed a proof of concept to illustrate, source code freely available



Implementation Overview



Platform: Look for Sharing Policy Indicators in Crossref



Platform determines the requested sharing context

Platform Type		JAV Article Version			Audience Scope		Displayable Elements				Policy URI
pns	ps	vor	am	ao	ga	rcg	ft	ab	ref	cm	
	x	x				x	x				https://doi.org/10.15223/policy-029

Crossref has several metadata services and APIs

Example: Crossref REST API

https://api.crossref.org/works/{doi}

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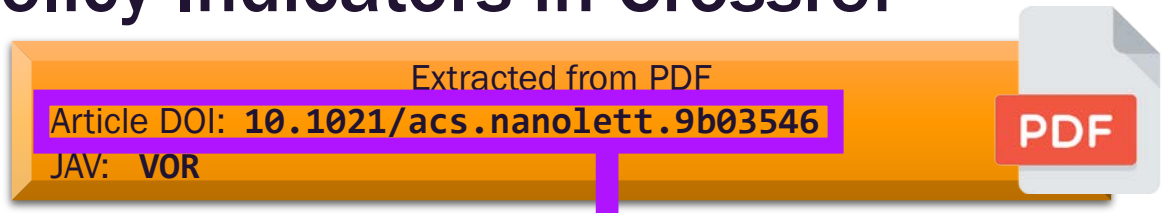
Platform: Look for Sharing Policy Indicators in Crossref

Platform determines the requested sharing context



Platform Type		JAV Article Version			Audience Scope		Displayable Elements				Policy URI
pns	ps	vor	am	ao	ga	rcg	ft	ab	ref	cm	
	x	x				x	x				https://doi.org/10.15223/policy-029

Crossref has several metadata services and APIs

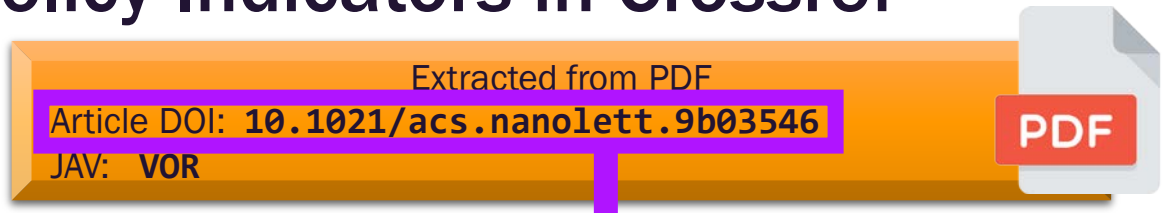
Example: Crossref REST API

https://api.crossref.org/works/{doi}

Crossref

Platform: Look for Sharing Policy Indicators in Crossref

Platform determines the requested sharing context



Platform Type		JAV Article Version			Audience Scope		Displayable Elements				Policy URI
pns	ps	vor	am	ao	ga	rcg	ft	ab	ref	cm	
	x	x				x	x				https://doi.org/10.15223/policy-029

Lookup to Crossref reveals a match…

Article may be shared.

Crossref API

*Present in **Crossref** for article DOI* **10.1021/acs.nanolett.9b03546** *:*

```
<license_ref>https://doi.org/10.15223/policy-002</license_ref>
<license_ref>https://doi.org/10.15223/policy-029</license_ref>
<license_ref>https://doi.org/10.15223/policy-033</license_ref>
```

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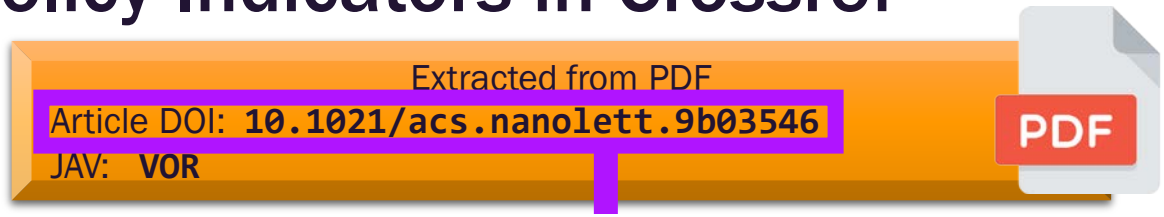
Platform: Look for Sharing Policy Indicators in Crossref

Platform determines the requested sharing context



Platform Type		JAV Article Version			Audience Scope		Displayable Elements				Policy URI
pns	ps	vor	am	ao	ga	rcg	ft	ab	ref	cm	
x		x			x		x				https://doi.org/10.15223/policy-001

Lookup to Crossref reveals no match...

Article may not be shared.

*Present in **Crossref** for article DOI* **10.1021/acs.nanolett.9b03546** *:*

```
<license_ref>https://doi.org/10.15223/policy-002</license_ref>
<license_ref>https://doi.org/10.15223/policy-029</license_ref>
<license_ref>https://doi.org/10.15223/policy-033</license_ref>
```

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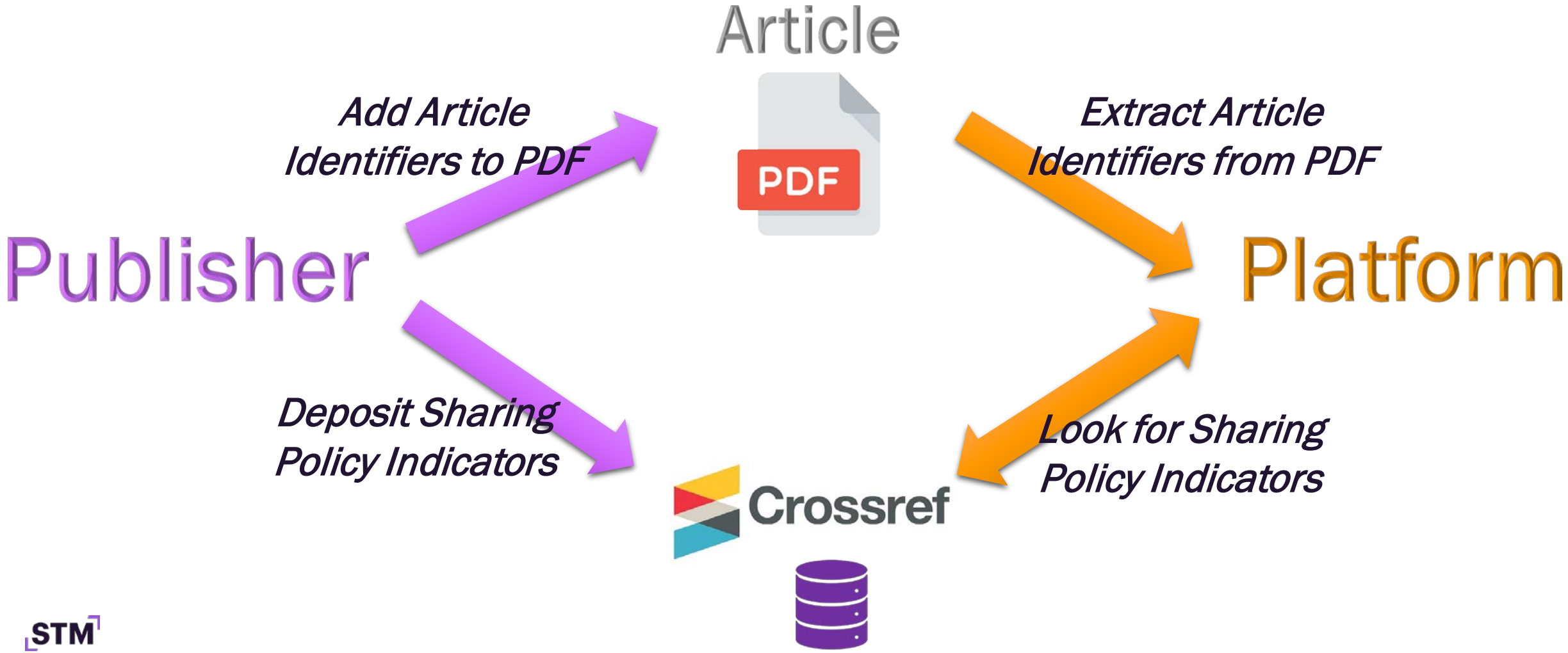
Implementation Recap



Resources

https://www.stm-assoc.org/asf/

- Implementation Guide
- FAQ
- Policy Information & lookup tool (spreadsheet)

Questions? asf@stm-assoc.org

Special Thanks

- Vincent Lizzi, Taylor & Francis
- Mirjam Kessler, Springer Nature
- Evan Prince, ACS
- Geoff Bilder, Crossref
- Patricia Feeney, Crossref
- Todd Carpenter, NISO
- Nettie Lagace, NISO
- Jeff Beck, NCBI/NLM/NIH
- Matt McKay, STM
- STEC Article Sharing Framework subgroup
- NISO ALI Revision working group

... and many more!