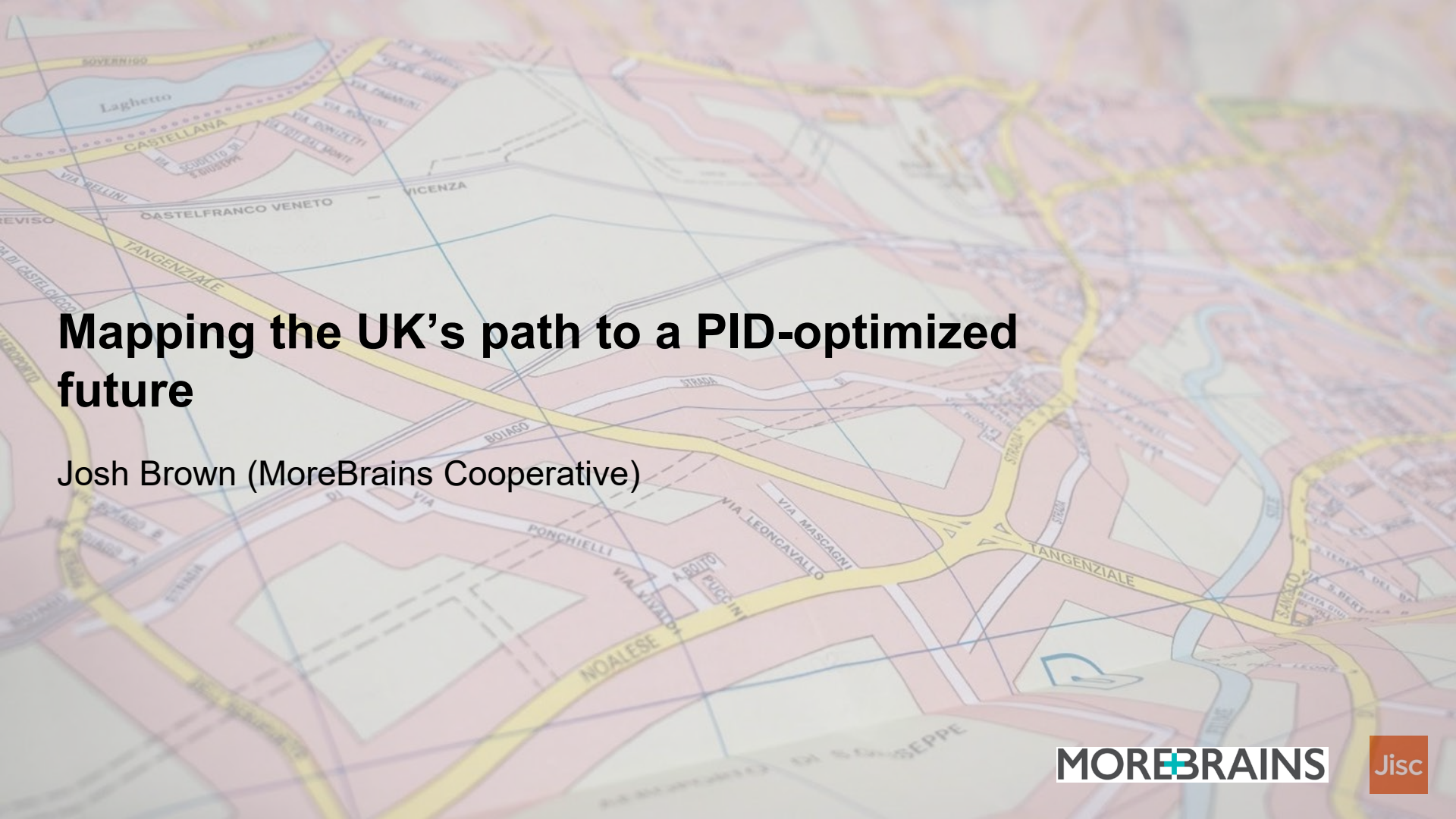
Mapping the UK’s path to a PID-optimized future

Josh Brown (MoreBrains Cooperative)



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Why does the UK need a PID roadmap now?

…after all, we've been talking about PIDs for a while

Plan S
Making full and immediate Open Access a reality

Mandatory technical conditions for all publication venues:

- Use of persistent identifiers (PIDs) for scholarly publications (with versioning, for example, in case of revisions), such as DOI (preferable), URN, or Handle.

Strongly recommended additional criteria for all publication venues:

- Support for PIDs for authors (e.g., ORCID), funders, funding programmes and grants, institutions, and other relevant entities.

GO FAIR

F1. (meta)data are assigned a globally unique and eternally persistent identifier.

I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.

OECD

Recognises Identifiers as a key component of digitisation or science
https://doi.org/10.1787/1b06c47c-en

EOSCFAIR Executive Board Working Group

EOSCArchitecture Executive Board Working Group

Second draft Persistent Identifier (PID) policy for the European Open Science Cloud (EOSC)

DOI for version 2: https://doi.org/10.5281/zenodo.3780423

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Jisc to lead on selecting and promoting a range of unique identifiers, including ORCID, in collaboration with sector leaders with relevant partner organisations.

Funders of research to consider mandating the use of an agreed range of unique identifiers as a condition of grant. (Recommendation 8)

Open access to research publications - 2018
Independent advice to the UK government
Prof Adam Tickell

Developing a PID Roadmap

A series of workshops October 2017 – July 2019

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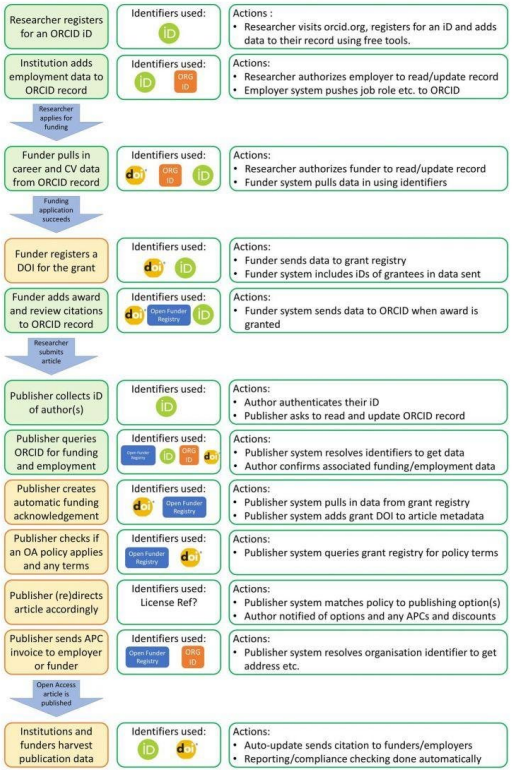
Identifying priorities based on workflows

Workflow gap analysis:

1. Started with the real-world workflows and pain points
2. Imagined ‘ideal’ workflows based on gold open access
3. What are the priority PIDs?
4. What are the points of integration needed?
5. How does information flow through the system?



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Five priority PIDs

Grants

Projects

Persons

Organizations

Outputs

Sketching the roadmap

The first outline of the roadmap suggested five areas of activity that would help the UK to optimize its use of PIDs:

- A mega-consortium - ensure equitable access to PIDs by sharing the burden across the sector and building a multi-PID consortium
- Targeted interventions - boost coverage and adoption with high-value integrations with PID infrastructures
- Benefits analysis - justify engagement by evidencing and evaluating the impact of PID adoption
- Governance engagement - coordinate involvement in PID governance (boards, working groups etc.) to mitigate the risk of depending on a small group of PID-providing organizations
- Sustainability - think about the ‘P’ in PID… Will these providers be around for the long term?

For more information, see the original 2019 report at: https://repository.jisc.ac.uk/id/eprint/7840

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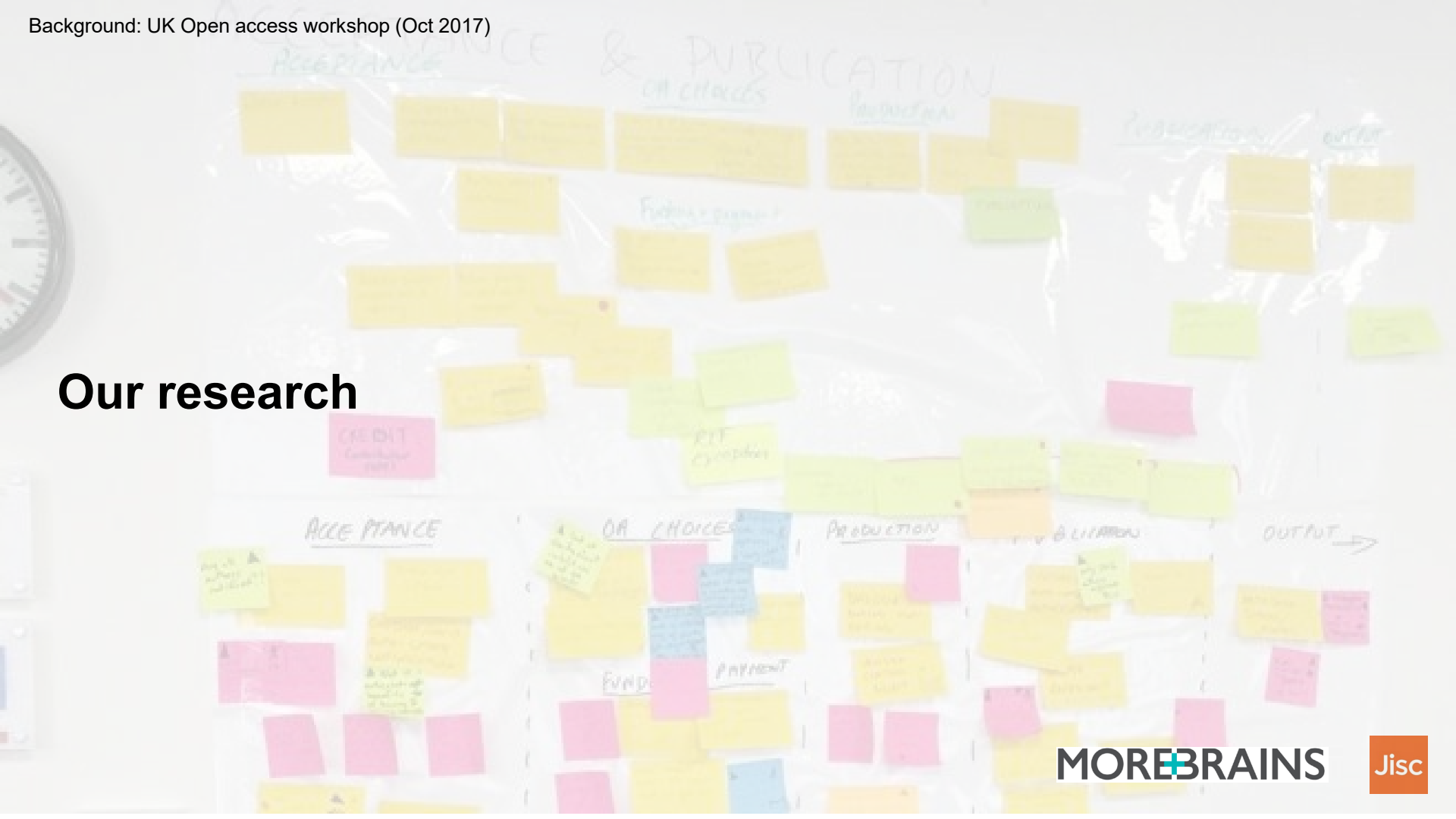
Background: UK Open access workshop (Oct 2017)

Our research



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Focus groups

28 attendees across 5 groups
19 different organizations – from publishing trade groups to infrastructure providers to libraries
Read more at https://repository.jisc.ac.uk/8166/

KEY FINDINGS

Governance

A model needed that is sustainable and community driven

Interventions

Prioritize easy wins that add value to multiple PIDs

Think globally to maximize followership

Leadership

Get conversations to happen at high levels

Jisc and UKRI might set an example by using mandates

Outreach

Provide support to all stakeholders

Bring clarity i.e. projects and grants are not the same

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Survey

We ran a survey through July and August 2020, which drew 93 responses.
75% from the UK, 70% from research institutions, with the rest drawn from a range of community groups. *Read more at https://repository.jisc.ac.uk/8107/*

KEY FINDINGS

Adoption

The technical burden and costs of integration are too high, and the perceived value of PIDs is too low.

Metadata

Metadata needs to be predictably present, contain more consistent elements, and be reliably maintained and updated.

Benefits

PIDs are desired across the sector for their potential to enable better interoperability and data re-use for reporting and analysis.

Priorities

Respondents want to see PIDs being used optimally in funding systems, content platforms which host research outputs, and RIM tools.

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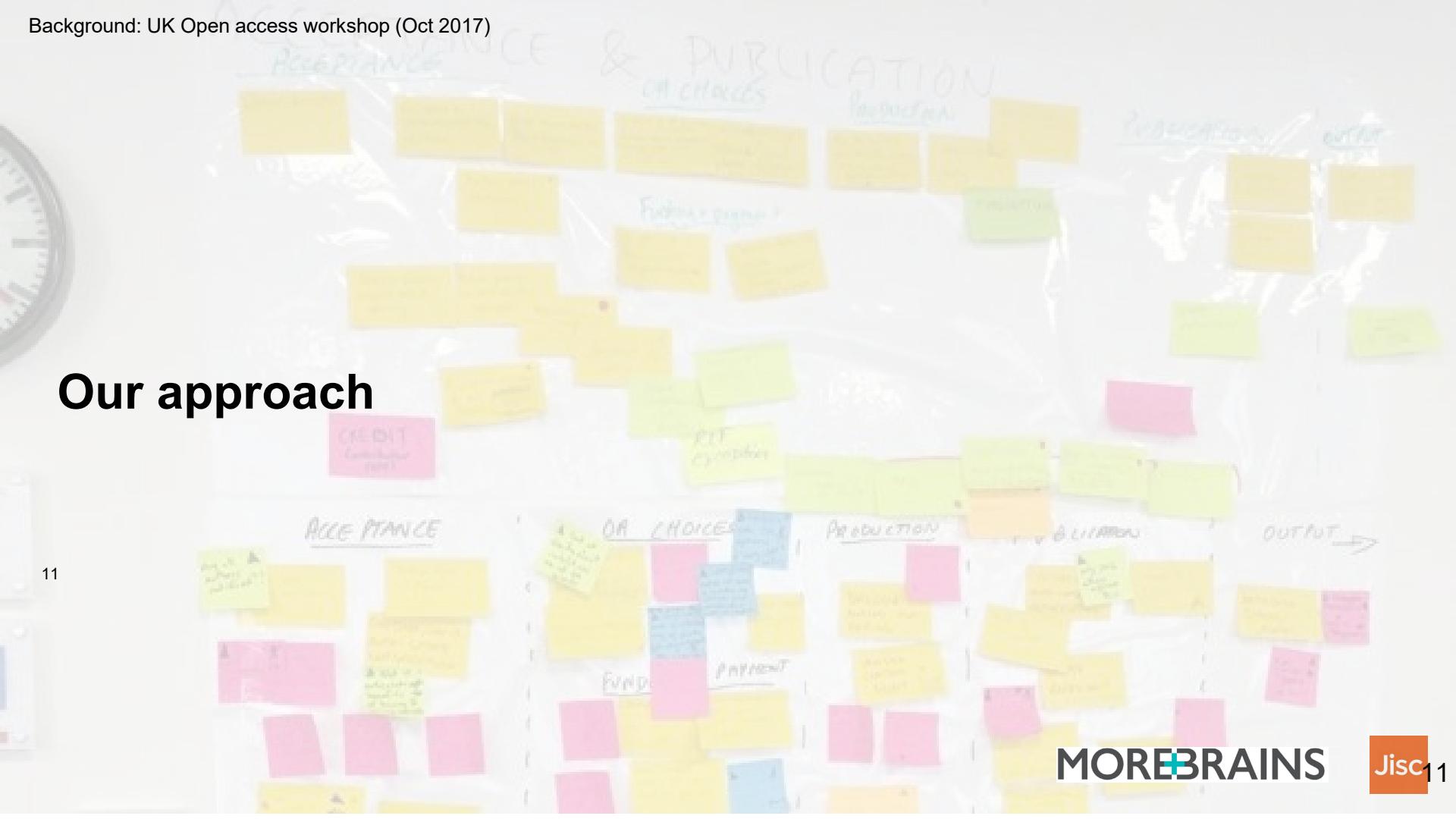
Our approach



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Bringing the community together: consortium

Adoption and coverage = access and support

Our Consortium Task Group brought together national agencies, funders, institutions, research managers, publishers and PID providers to explore the business case for a ‘multi-PID’ consortium to lower barriers to PID adoption

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Bringing the community together

Assembling a business case for a consortium: the value propositions

"A value proposition is a promise of value to be delivered, communicated, and acknowledged. It is also a belief from the customer about how value (benefit) will be delivered, experienced and acquired."

We took these to the highest level possible to get to the root of the need for PIDs for each group.

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Bringing the community together

Assembling a business case for a consortium: illustrative use cases

We have identified several use cases that cut across groups. These include:

- Enhancing interoperability and data re-use across internal and external systems
- Reductions in administrative burden, cutting overhead and potentially releasing expertise and resources for higher value activities
- Improving data quality, with consequent benefits for evaluation, assessment, analysis and decision support.

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Bringing the community together: consortium

Assembling a business case for a consortium: findings and next steps

“To deliver these efficiencies, we need people with technical and community expertise… providing rigorous and robust technical support for new and existing PID integrations. The value of the consortial approach is that it would provide a framework to deliver this support for every research organisation in the UK, maximising returns on a national investment in PIDs.”

“The question is: will the benefits of that adoption justify the costs of the consortium? The answer to this should be provided by a rigorous cost-benefit analysis.”

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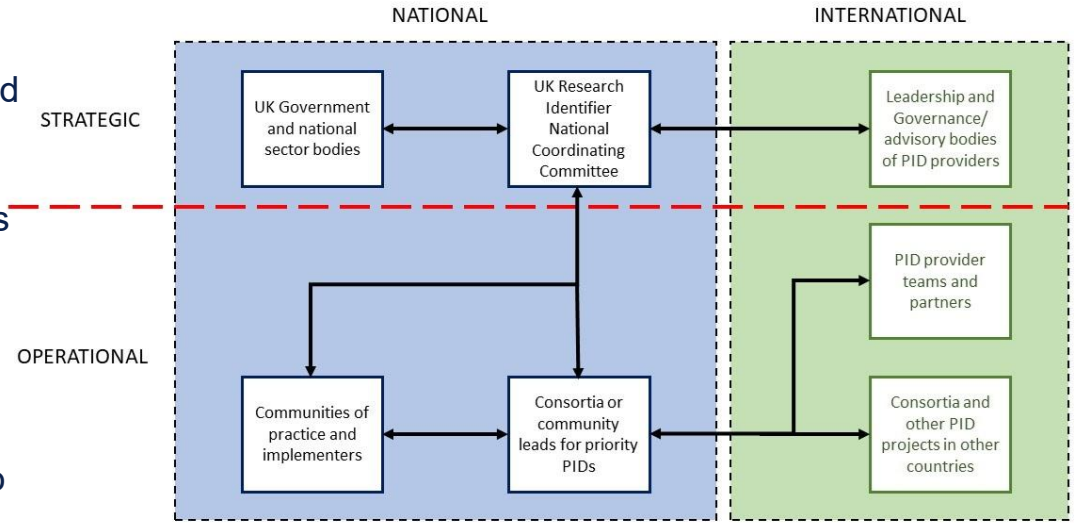
Bringing the community together: governance

Long term strategic engagement

Our Research Identifier National Coordinating Committee will:

- Provide strategic insights to shape the priorities and focus of PID-related activities and policies in the UK
- Liaise with international PID providers and governance structures
- Align PID integrations and developments across sectors to optimise interoperability
- Ensure that all individuals and organisations in the UK research community have equitable access to the PIDs they need



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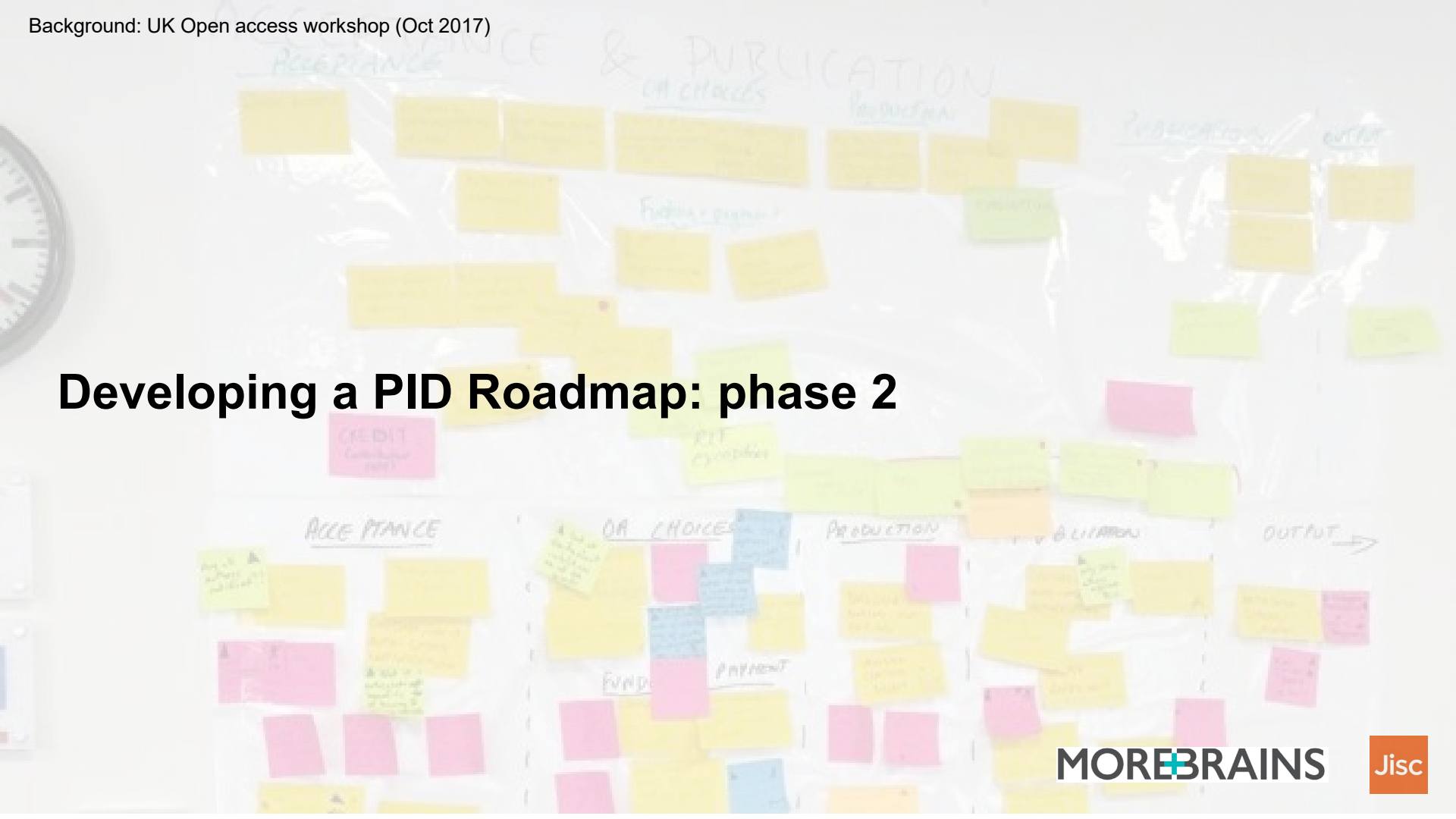

Developing a PID Roadmap: phase 2

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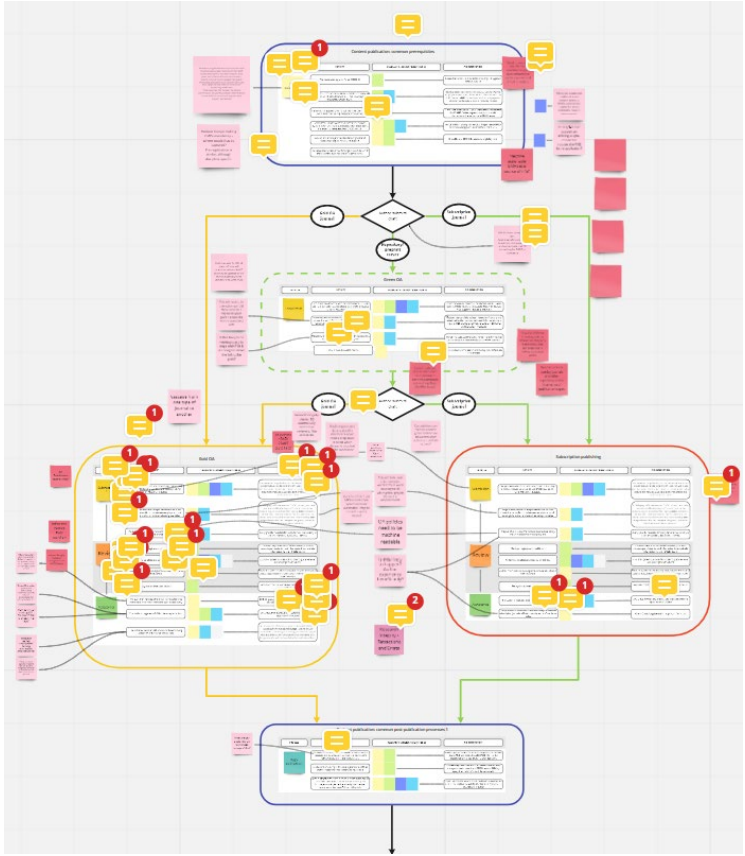
PIDs roadmap phase 2 work in progress:



Understanding the perfect PID flow

We are mapping out perfect world PID-enabled workflows for our priority areas

- Funding
- Institutional Research Management
- Content publication (articles and data)

Searching for the perfect point in real-world activities to plug PIDs in and gather metadata

Uncover how every participant in the chain can add value for all the others

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PIDs roadmap phase 2 work in progress:

Cost benefit analysis (highlights)

We have pinpointed three areas where benefits accrue: Metadata re-use, automation, and aggregation/analysis.

We are currently collecting data and conducting interviews to enable us to quantify current and potential benefits from the use of PIDs.

- Workflow analysis - identify pain points in existing workflows
- Data exchange mapping - scale and distribution
- Benefit quantification - time and effort savings from PID optimisations
- Modelling - different adoption scenarios and timelines
- Community impact analysis - identify edge cases, unsupported needs and gaps

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PIDs roadmap phase 2 work in progress:

Understanding the pathway to our ‘perfect world’:

- Take our model workflows and work backwards…
- Identify quick wins
- Locate dependencies and essential integration points
- Create community action plans - with justifications for action!

Establishing community oversight with the RINCC

- Setting up the Research Identifier National Coordinating Committee (RINCC) to focus on governance and community accountability
- Establish balanced community representation (different organization types, international partners etc.)
- Facilitate agenda setting and activity design

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