



Moving towards the ideal way to manage research information in the United Kingdom

CROSS-SECTOR WORKSHOPS, UNITED KINGDOM, DECEMBER 2012

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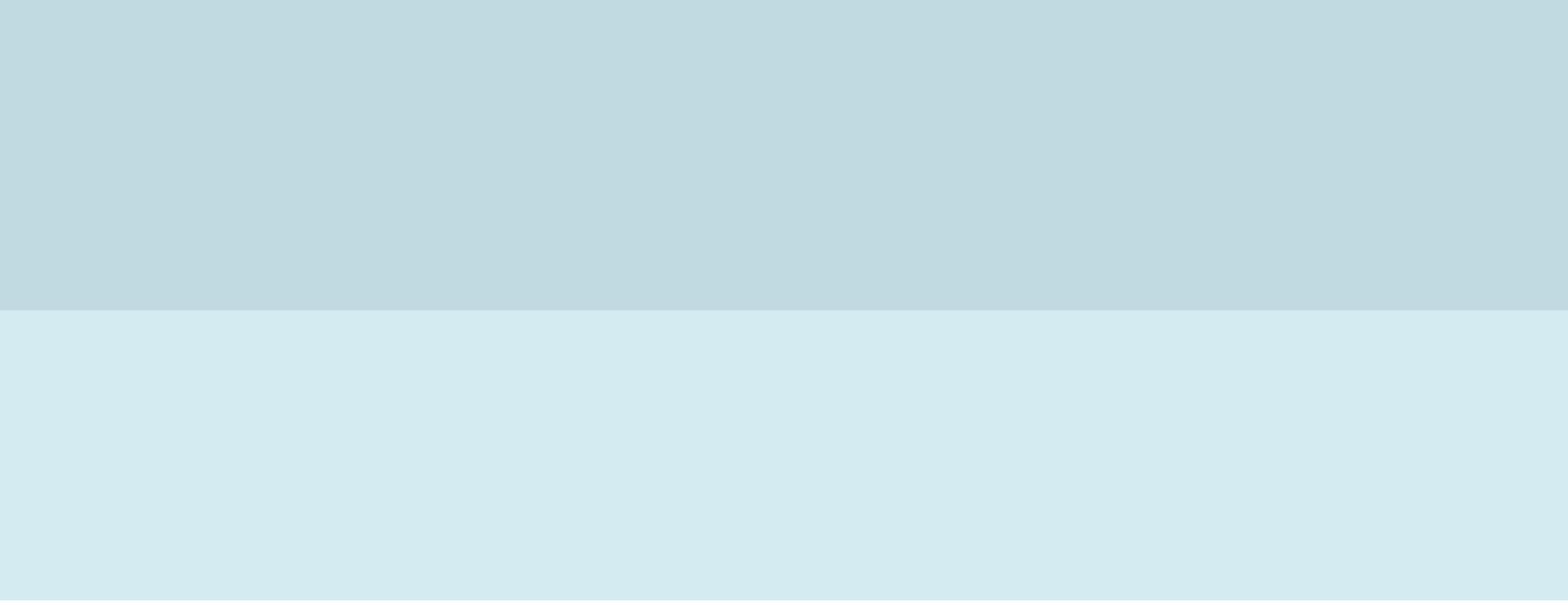
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Summary

Representatives from universities, funders, government agencies, and suppliers of research information tools came together in three regional workshops to share their perspectives on what would be the ideal way to manage research information across all stakeholders in the United Kingdom. Their motivation to participate in these workshops was the opportunity to improve how we currently use research information, with one delegate remarking afterwards that “*this feels like the start of something big*”.

All participants emphasised that adopting a common data standard throughout the whole sector is essential if we are to achieve increases in efficiency whilst also enabling different stakeholders to use standardised information in different ways. Two major areas of concern were highlighted in this area. Firstly, universities invest considerable resource in responding to multiple requests for information from funders, because the requests tend to have different nuances that prevent them being addressed generically or collectively. Secondly, there was general agreement that those collecting data rarely articulate upfront the purpose for, and the questions to be answered by, the collected data which often resulted in non-optimal preparation of data to be submitted. These activities were considered to create inefficiencies in the sector.

Universities that traditionally have only competed against each other for top academics and funds are now clearly willing to adopt a “collabative” approach and also collaborate so that, together, they can take control of their destiny through defining and establishing data standards. Funders and agencies confirmed that they would be eager to listen to a unified voice that spoke bottom-up for the sector, and would consider adopting universities’ recommendations; Snowball Metrics were mentioned as an effective unifying methodology.

Our global research economy increasingly requires efficiency in the use of resources. An economic case should be developed for the key stakeholders in the research sector to evidence the benefits of improving efficiency, and thereby position UK research as an effective and efficient research environment, key to driving the national economy.

Recommendations

- 1 There is a high priority need for universities, funders, government agencies and suppliers to recognise the benefits of a shared national data standard in driving efficiency and to support the increasing internationalisation of research. It is important for these groups to engage with each other in order to improve the data standard, and to ensure that it is adopted where appropriate.
- 2 Expand the number of universities using Snowball Metrics.
- 3 True sector-wide buy-in to common data standards requires engagement from all stakeholder groups. Academics, and Arts & Humanities disciplines, should be engaged as soon as possible, as well as industries which use research outcomes.
- 4 There is too much use of data as a commodity. All stakeholders should make efforts to be clear about the questions that need to be answered, before information to address those questions is collected or requested. Stakeholders should challenge requests for information which do not seem to make sense, are an unfeasibly poor fit to the data structure available, and / or which seem to request excessive amounts of data.
- 5 Case studies should be collected to highlight how universities have benefitted from strategic insights based on benchmarking against their peers.
- 6 Funders should collaborate to agree a single approach, rather than continuing to act somewhat independently in requests for data from universities.
- 7 Collaboration between funders and universities is most effective when it is based on the identification of excellence to benefit the higher education sector and society more broadly, and does not focus just on auditing efficiency.
- 8 Universities should develop clear strategies to define the boundary between useful collaboration amongst, and competition with, their peers.
- 9 Universities should co-operate to ensure they speak with one strong, common voice that is likely to be listened to by those who require data from universities.
- 10 Representatives from all sector stakeholders should prepare an economic case that places a financial value on efficiency¹, and which thereby positions UK research firmly as an attractive global product that drives the economy.

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- ¹ The report “Efficiency and Effectiveness in Higher Education: A Report by the Universities UK Efficiency and Modernisation Task Group” highlights, amongst other points, that the UK higher education sector is not realising its potential to generate the kind of savings that it should be able to demonstrate. It sets out a strategy for action and identifies how the higher education sector can lead change across these areas. <http://www.universitiesuk.ac.uk/highereducation/Documents/2011/EfficiencyinHigherEducation.pdf>

Introduction

Senior representatives of universities, funding agencies, government agencies, and suppliers of research information tools were invited to join cross-sector workshops, focusing on the vision for research information management in the United Kingdom. A total of 50 people participated in three regional workshops, representing all four stakeholder groups (Figure 1). The discussions aimed to identify what would be the ideal way to manage research information across all stakeholders in the UK, and the obstacles that would need to be overcome to achieve this.

These workshops built on work previously conducted by a number of cross-sector teams, whose reports provide complementary perspectives on the state of research information management. The UK is a leading research nation, despite its relatively small size, due to high and increasing efficiency in producing outputs from its investments, and a strong international network². However, there remain opportunities to improve efficiency and so help to sustain the UK's leading position within the increasingly turbulent global research economy.

The report “Research Information Management: developing tools to inform the management of research and translating existing good practice (2010)”³ identified significant opportunities to improve efficiency. One of these is a lack of consensus on the metrics that should be used for measurement and evaluation, even though universities and funders universally recognise data as an essential element in strategic

2 International Comparative Performance of the UK Research Base – 2011. This report was prepared by Elsevier for the UK's Department of Business, Innovation and Skills. <http://www.snowballmetrics.com/wp-content/uploads/11-p123-international-comparative-performance-uk-research-base-2011.pdf>

3 Research information management: Developing tools to inform the management of research and translating existing good practice (2010). This report was funded by JISC (www.jisc.ac.uk) and jointly conducted by Imperial College London and Elsevier. <http://www.snowballmetrics.com/wp-content/uploads/research-information-management1.pdf>

management and decision making. The report showed that, without clearly defined and shared metrics, research universities find it almost impossible to benchmark themselves meaningfully against their peers, and that this hampers their ability to establish and monitor strategic direction. The need for standardised performance metrics was also reported for US research universities, in “The Current Health and Future Well-Being of the American Research University (2012)”⁴.

The 2010 report cast some light on the reasons for the lack of consensus metrics. External data collection by funders and agencies tends to be undertaken by these stakeholders in isolation and in ignorance of each other’s demands. Similar data are often collected several times in different formats. The pressure on universities to respond in a timely manner to all of these data requests is high since money from funders and agencies is potentially at stake; as a result, universities have felt obliged to respond to these various demands irrespective of the data being requested and of the aspects of performance that they are intended to measure; universities have not taken the initiative to consider what would be best suited to their own purposes, and maybe to the needs of the sector holistically.

The report also emphasised the lack of consistency in approach between funders and between agencies, as well as between universities. This was especially noticeable across stakeholder groups, which poses a challenge to suppliers attempting to develop data systems that can be used efficiently across the sector; individual stakeholders often invest heavily in unique and complex bespoke implementations which is inefficient, both economically and administratively.

The high priority need for standard research metrics that support the benchmarking of research universities with their peers is being addressed by a collaboration between eight research universities and a supplier of research information, Elsevier: the publication of the Snowball Metrics Recipe Book⁵ is a milestone in this programme which arose from one of the programme’s aims, namely to share agreed and tested methodologies free of charge with the higher education sector and more widely in order to support peer institutions in benchmarking their performance. These cross-sector workshops aimed to work across boundaries not only between universities, but across multiple types of stakeholders.

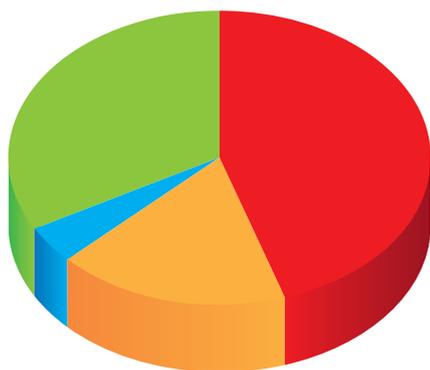
The summaries of the themes of discussion that follow are a collation of the discussions of each of the three workshops. There was a remarkable degree of

4 The Current Health and Future Well-Being of the American Research University (2012). This report was jointly conducted by the Research Universities Futures Consortium and Elsevier. http://www.snowballmetrics.com/wp-content/uploads/RIM_Report_Research-Futures-Consortium-.pdf

5 Snowball Metrics are global standards for institutional benchmarking. The first set of agreed and tested metrics is available free of charge at www.snowballmetrics.com/metrics.

similarity between the points raised in each of these workshops, which independently reinforced each other's conclusions. These collated themes were approved by all of the workshop participants prior to publication.

Figure 1. Participants in the cross-sector workshops



RESEARCH UNIVERSITIES 45% (23)

Representatives from 1994 group (1), Cambridge (2), Manchester (2), Edinburgh (3), Bath (2), Bath Spa (1), Kings College London (2), Salford (2), Warwick (1), St Andrews (1), York (1), Sussex (1), Cardiff (1), De Montfort (1), Nottingham (1), Wolverhampton (1)



FUNDING AGENCIES 18% (9)

Higher Education Funding Council for England (HEFCE) (1), Medical Research Council (MRC) (1), Wellcome Trust (1), Biotechnology and Biological Sciences Research Council (BBSRC) (1), Engineering and Physical Sciences Research Council (EPSRC) (2), JISC (2), Association of Commonwealth Universities (1)



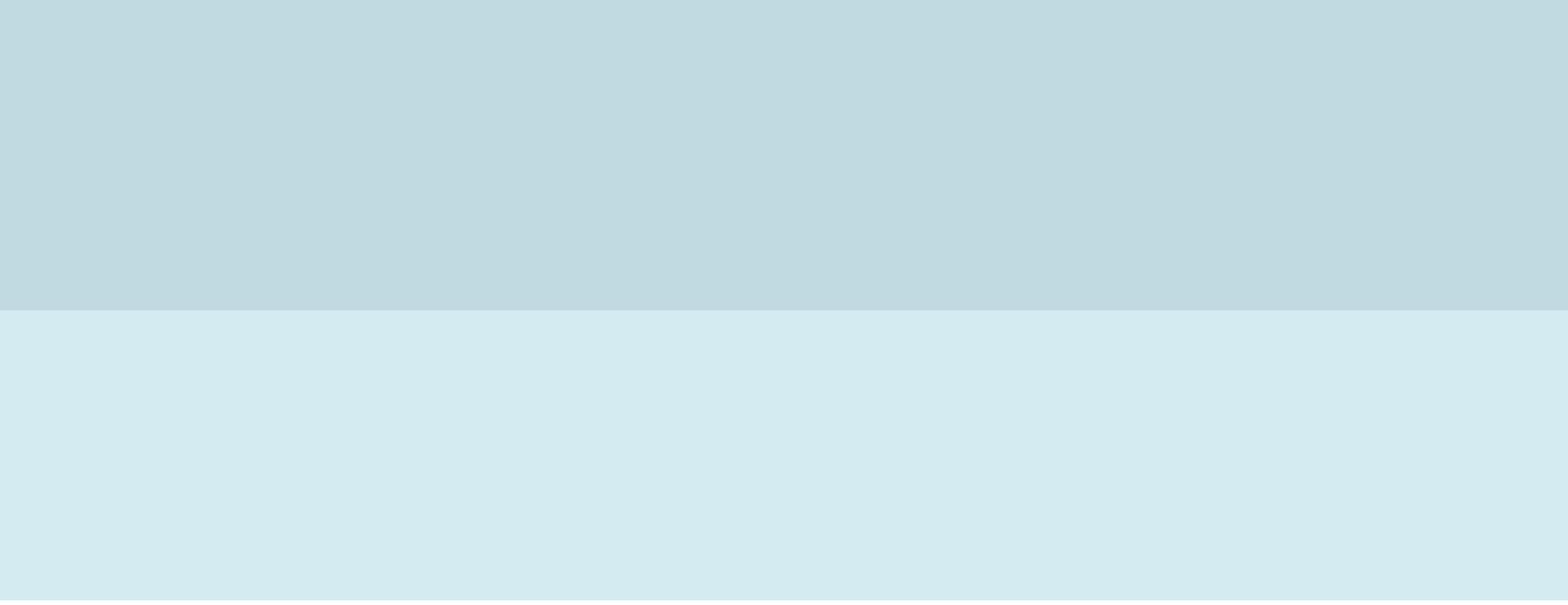
GOVERNMENT AGENCIES 4% (2)

Department of Business, Innovation and Skills (BIS) (2)



SUPPLIERS OF RESEARCH INFORMATION 33% (16)

Higher Education Statistics Agency (HESA) (1), Symplectic (1), RAND Europe (1), Academic Analytics (1), Thomson Reuters (3), Elsevier (8)



Data standards are essential to improve efficiency

All stakeholders emphasised that an adopted common data standard is essential as a link between databases and tools in order to increase efficiency and to ensure that data are as mobile as the researchers they represent

UNIVERSITIES

- A standard data format is central to our approach. We want to be able to exchange data between systems wherever it's needed, and make sure that a piece of data remains the same wherever it goes, whether a researcher is moving from one university to another, or a university is supplying information to a funding agency, for example
- *"We have systems and we're putting data in, and the funders are putting it in from the other end, in different forms, or whatever. That doesn't sound terribly efficient"*
- *"It would be great if we could stop all these small projects and just focus on sorting out the data standards, just that one thing, for the next two or three years"*
- The data standards euroCRIS' CERIF⁶, CASRAI's data dictionary⁷, and ORCID⁸ were highlighted as enabling the exchange of data elements from one place to another. Participants stressed that agreeing data elements would be a big step in the right direction, but was not enough; the semantics and calculations also needed to be agreed

⁶ euroCRIS is a not-for-profit organization that is dedicated to the development of Research Information Systems and their interoperability: www.eurocris.org. One output is CERIF (Common European Research Information Format), a freely available global standard data format that enables different systems to communicate with each other in this common language.

⁷ CASRAI, The Consortia Advancing Standards in Research Administration Information, is a non-profit standards development organisation: <http://casrai.org>. It aims to ensure the seamless interoperability of research information. It develops and maintains a common data dictionary, and advances best practices for data exchange and reuse between research teams, institutions, and funding agencies throughout the entire life-cycle of research activity.

⁸ ORCID (Open Researcher and Contributor Identifier) is a universal, persistent digital identifier that distinguishes between researchers: <http://orcid.org/>.

FUNDERS

- *“Every organisation has its own trials and tribulations in trying to join up its internal transactional processes. At the highest level, we need to make sure that research information data can move from one system to another, whatever those systems are. It is very obvious that we need an international open source data file for researchers, across all disciplines, because researchers can move between institutions, countries and disciplines, and their record should follow them”*
- The Research Councils use two research information systems: Research Outcomes System (ROS)⁹ and ResearchFish (formerly eVal)¹⁰. Both systems feed information to the Research Councils’ Gateway to Research¹¹, and a common data dictionary is being developed to improve interoperability

SUPPLIERS

- Our customers place a high priority on data that are structured in a standard manner: they welcome initiatives to standardise the structure of data, that are independent of tools and suppliers, so that suppliers can provide a more effective service to their customers
- It would be a huge gain to get different sources of data to work together, to the significant benefit of the analyses we could perform to generate insights

Recommendation 1: there is a high priority need for universities, funders, government agencies and suppliers to recognise the benefits of a shared national data standard in driving efficiency and to support the increasing internationalisation of research. It is important for these groups to engage with each other in order to improve the data standard, and to ensure that it is adopted where appropriate.

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- 9 Research Outcomes System (ROS) collects data on the outputs, outcomes and impacts of research funded by five participating Research Councils in the UK: <http://www.rcuk.ac.uk/research/researchoutcomes/pages/ROS.aspx>.
- 10 ResearchFish is a system for the collection of data on the outputs, outcomes and impacts of research funded by subscribing organisations. ResearchFish also includes services for researchers, funders and research-performing organisations to re-use and analyse these data. In early 2013, over 50 research funders across the public and charitable sectors were subscribing to ResearchFish (www.researchfish.com). The MRC has published several years of analysis using the approach (<http://www.mrc.ac.uk/Achievementsimpact/Outputsoutcomes/index.htm>), and uses the information to compile case studies and support the evaluation of its strategy.
- 11 Gateway to Research aims to provide a mechanism for businesses and other interested parties to identify potential partners in universities to develop and commercialise knowledge, and maximise the impact of publicly funded research. A final live system will be launched at the end of 2013, <http://www.rcuk.ac.uk/research/Pages/gtr.aspx>.

Data standards promote, and do not limit, competition

Participants emphasised that data standards should not be confused with standard data use – a data standard could be used in many ways. A data standard supports competition in the market place while allowing the various needs of different stakeholders to be addressed by distinct means.

SUPPLIERS

- *“A funding body, a city council, a small local charity, or a major international body, have completely different ideas about what a university is and does. The university has to be able to present itself in the most appropriate way for different interested parties under different circumstances. Conformity to a common information set is actually detrimental rather than beneficial. An unduly integrated and highly compliant system acts like a strait jacket”*

FUNDERS

- Our particular requirements might be different from those of other stakeholders, because we are answerable to the board of governors and the public
- *“We must not confuse data with data use. If you have a standard, you can still reuse it for many different purposes. The same core information can be used in many different ways”*

UNIVERSITIES

- It is a fact that information overlaps, and has some common structure. Some things don't change between organisations. *“HESA might want to cut the data one way, and my university might cut it by our school structure. You can slice and dice the same standard, core data in different ways to see different aspects of it”*
- A supplier-agnostic data standard still allows competition in the marketplace between universities and funders and suppliers, because tools and their use will be different even when they are based on standard underlying data

GOVERNMENT AGENCIES

- In the same way that four standard nucleotide bases can be combined in different lengths and orders to produce enormous variety in DNA sequence and the phenotypes of individuals, so can standard data elements be combined to create an enormous variety of metrics that represent the diversity of our national universities

Recommendation 2: expand the number of universities using Snowball Metrics.

Genuine sector-wide adoption of standards

The stakeholder groups present at these workshops all agreed on the need for data and metrics standards. They highlighted additional groups whose buy-in would be needed for true sector-wide adoption of these standards.

ACADEMICS

There is currently a difference in view between academics, university management and funders. Workshop participants from universities highlighted the importance of transparency about why data are being collected. Universities called for funders to return additional information that would help them to engage academics, alongside the comprehensive university-level reports that are already provided.

SUPPLIERS

- There is currently a significant difference in view between academics, university management and funders
- The differences seem to be based on extensive distrust from academics over what will be done with information that is based on their research activities. Those in leadership roles should better explain what benefits will result, so that academics are reassured that they will retain control over the direction of their research

FUNDERS

- Funders recognise the importance of explaining their needs to the research community, and are prepared to invest time in this, but probably need assistance with their messages and channels to ensure that their communication is effective
- There is a possibility that measuring something drives changes in behavior, and this outcome is not desired. If we do not communicate why we are evaluating something, academics tend to assume that they must improve it and we might accidentally trigger another behaviour

UNIVERSITIES

- There is a high degree of scepticism and controversy amongst academics over the value of metrics, and a consequent reluctance to share their data for benchmarking purposes
- Participants had found that being transparent about the use of data, for example by openly sharing metrics, was critical for a successful engagement
- *“The researcher is very focused on what they are doing in the lab, more so than on what the government is doing. If you don’t have communication about why data are being collected by the university and by funders, what is being done with it, and the benefits of these activities to academics’ careers, you might not get the engagement you need. Transparency makes our job of advocacy much easier”*
- *“Feedback loops, even if they seem relatively small, also have large impacts on the success of our engagements with academics, and in terms of getting hold of high quality data.”* Reports from funders at the university level were praised as being *“much more comprehensive than I was expecting for the university level”*, but nothing was provided that would be of interest to academics, who are not generally concerned with the policy environment. Case studies showing how information has made a real difference, from the point of view of top management and also of research centers and individual academics, would be useful

ARTS & HUMANITIES DISCIPLINES

These disciplines tend to “exceptionalise” themselves which is considered detrimental across the sector. There was strong support for Arts & Humanities to form part of the move towards data and metrics standardisation.

UNIVERSITIES

- Arts & Humanities disciplines tend to “exceptionalise” themselves, and consequently those of us in STEM¹² disciplines sometimes almost apologise on their behalf. *“I see many differences even in STEM fields, though, it is not only in Arts & Humanities that you find special cases.”* We must all be able to demonstrate the value that our fields bring to a university and the sector
- There are clearly differences between Arts & Humanities and STEM, but commonalities were also raised: museums and art councils are accountable to the Treasury; the Arts & Humanities Research Council (AHRC) uses the Engineering and Physical Sciences Research Council (EPSRC) model with only a few variations, and funding is lost if the discipline cannot adequately justify its value to society.

¹² STEM: Science, Technology, Engineering and Mathematics.

“We need to make sure that Arts & Humanities accountabilities are understood and take that into account when designing projects to evaluate the impact of our work”

- It would be extremely beneficial to all if Arts & Humanities disciplines were part of the standardisation. The British Academy was considered the most suitable body to drive convergence, interest and momentum

FUNDERS

- *“Qualitative information - I mean those pieces of narrative and accounts of things going on - is very useful and impactful, and of course it’s not only relevant in Arts & Humanities but across research. Therefore we pursue both quantitative and qualitative data. The current problem with trying to use qualitative data is that the researcher wanders over various topics in a one to two page narrative; I think you can structure this information so that it can be found easily, but we’re just not yet fully practiced in doing that”*

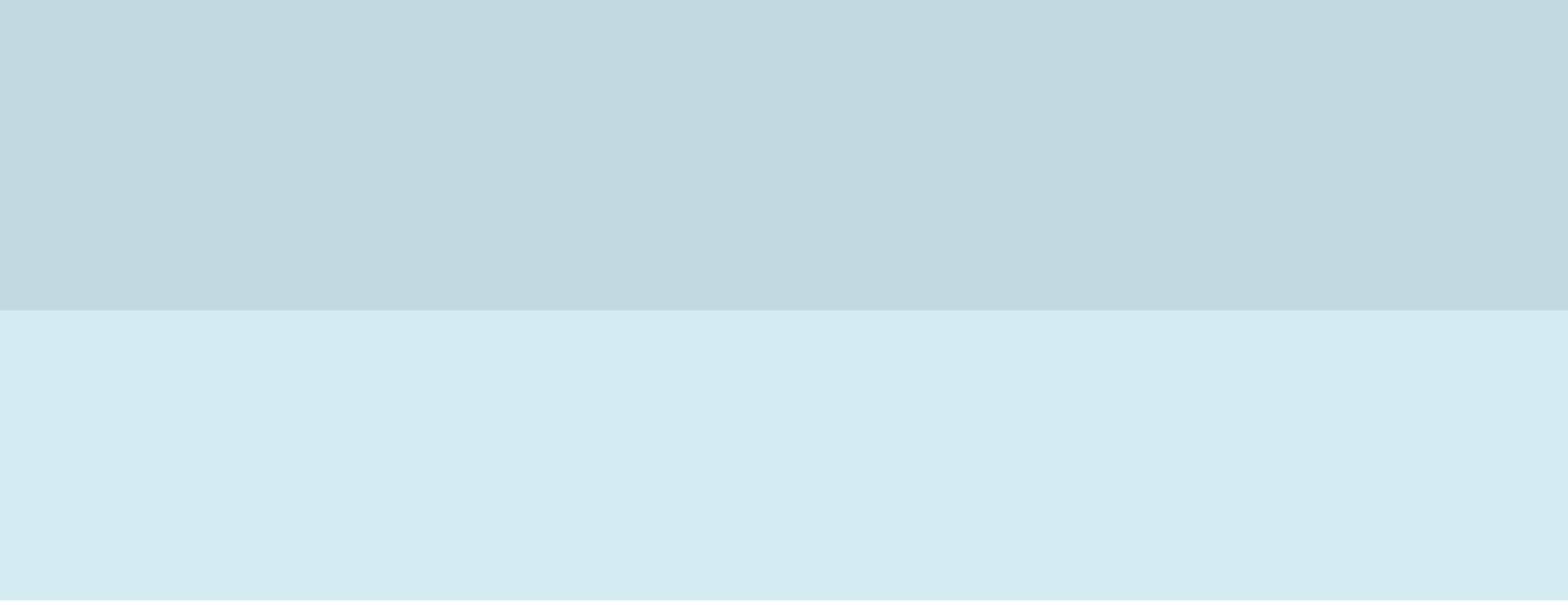
INDUSTRY

Industry uses research outcomes and is a stakeholder to bear in mind for the future.

FUNDERS

- *“We are not doing research for the sake of doing research. We are doing it for the sake of the end users in industry exploiting the information from the research”*
- Companies that use the outcomes of research are also stakeholders in the higher education sector
- It is too early to engage with them at this stage in the process, but we must bear them in mind

Recommendation 3: true sector-wide buy-in to common data standards requires engagement from all stakeholder groups. Academics, and Arts & Humanities disciplines, should be engaged as soon as possible, as well as industries which use research outcomes.



Research information tends to be used as a commodity, not as an asset

Information tends to be treated as a commodity, and there is often a lack of clarity over the purposes for which data will be used.

UNIVERSITIES

- Participants stated that, despite increasing internal requests for data and reports, they did not yet know the processes within their universities that would be driven by data
- *“We all want information, but not many of us know what we want to use it for. It’s a common problem that we value information as a resource, but having lots of information does not necessarily mean you have a better-run or more successful university. We want information as a commodity, but we often don’t know what to do with it”*
- Participants were concerned that information is not often used to drive improvement, but to score points and say we’re better than someone else. The elusive purpose is to improve what we do

FUNDERS

- *“We’re saying the data must be harmonised, but what is it that we want as a result of that?”*

Recommendation 4: there is too much use of data as a commodity. All stakeholders should make efforts to be clear about the questions that need to be answered, before information to address those questions is collected or requested. Stakeholders should challenge requests for information which do not seem to make sense, are an unfeasibly poor fit to the data structure available, and / or which seem to request excessive amounts of data.

Recommendation 5: case studies should be collected to highlight how universities have benefitted from strategic insights based on benchmarking against their peers.

Universities are frustrated by funders' requests for information

Funders are increasingly being evaluated, and many system requirements are imposed on them. Universities would like to understand what funders will do with the information that they request. The lack of upstream collaboration of funders with each other, and with universities, results in a lot of waste which could be avoided by agreeing and adhering to needs, and sharing information. Collaboration between funders and universities cannot be based around justifying our existence, but around the delivery of research excellence as a benefit to society.

FUNDERS

- The performance of funders is increasingly being measured, just as is the performance of universities. Many requirements in our systems “*came from the top*” without consultation with universities
- We don't need to burden universities with requests to collect information that we do not know or understand how to use. We do not want to build databases and only then find the questions we are trying to answer
- “*The current data we're collecting falls into three categories. First, we have data that we use in our discussions with government on a regular basis; this data is settled and only needs tweaking over the years. Then, there are a few things that seem useful now because we can't anticipate all the questions we might be asked, but we don't know whether we will continue to collect; we keep reviewing them. Finally, there are a few things that we're not very keen on collecting and don't use at the moment, but which researchers insist on reporting to us so we are happy to collect because we rely on good interactions with researchers. These are measures of esteem where at the moment we do not have good ways to analyse the data. So, we have used some of the data; some of it we have not yet found a use for, and some of it is up for discussion*”

- *“If people don’t understand why we are asking for data, they won’t bother to provide good quality data.”* We do not engage enough with universities, and it would be valuable to discuss, for example, the format in which it would be easiest for universities to supply data to us
- *“There’s a concern that we’re not necessarily using this whole area to drive improvement, but merely to look at one another and go, ‘I’m bigger, or better or wiser than you.’ We do have to keep coming back to the fact that the productive use is to drive improvement, wherever we want to make that improvement. The elusive purpose of this whole exercise is to improve what we do”*

UNIVERSITIES

- *“What amazes me is the sheer quantity of information that funders are logging. Is all this information ever going to be used? Wouldn’t it be better to focus on a smaller set of data than to try to go for everything?”*
- There is no clarity on the decisions that funders are making based on universities’ research information. *“What are you using it for? It is very difficult to get to the questions. We need to know what they are requesting information for and they need to trust that universities share their interests. Then we can contribute mutually”*
- There is a lot of waste because of a lack of initial collaboration of funders with each other, and with universities, to align with others’ needs. *“UK funders have historically been very good at coming up with their own reporting requirements. Now there are two camps, which from our perspective need very similar data to be reported in distinct, particular ways. There’s a lot of waste because there isn’t that initial collaboration up front. Every institution has to report against two systems¹³”*
- University participants commented further that the problem extends beyond these two camps. We supply similar information to not only multiple funders but also to government departments, and the requests are constantly changing; it would be smarter to agree and stick to the information that is necessary, and to reuse information across funders and agencies
- The opportunity to meet both local and external needs is exciting. It is frustrating to be asked to produce information for a funder that brings very little value to our university. Activities need to serve a dual purpose. We are happy to supply data when the aim is to identify excellence and not just to audit efficiency

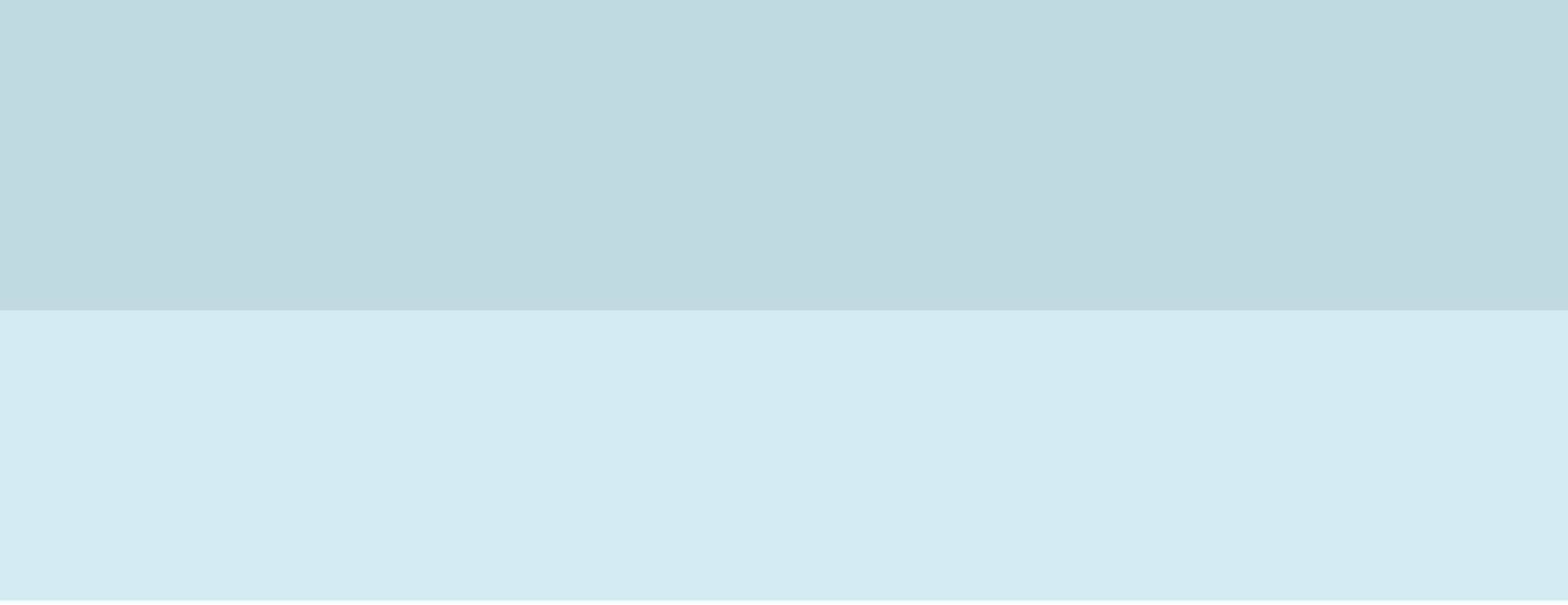
¹³ The Medical Research Council and Science and Technology Facilities Council have both used ResearchFish (www.researchfish.com) since 2008/09; the other five Research Councils introduced the Research Outcomes System in 2011 (<http://www.rcuk.ac.uk/research/researchoutcomes/pages/ROS.aspx>). All Research Councils feed information to the Gateway to Research.

SUPPLIERS

- *“There’s an analogy here with patient-level clinical audit. After spending two years of collecting clinical audit information in a standardised form and manner we found that units were happy to share data, and then we could understand why unit A was doing less well than B. We were able to set the boundaries for usual outcomes and fix services across units. This has taken 20 years, and it’s still not finished, but you must have standardised data to achieve the aim of improving outcomes and the strategy. If you do this, you inherently demonstrate your efficiency and accountability, but this is not in itself the aim. The aim has got to be analysis”*

Recommendation 6: funders should collaborate to agree a single approach, rather than continuing to act somewhat independently in requests for data from universities.

Recommendation 7: collaboration between funders and universities is most effective when it is based on the identification of excellence to benefit the higher education sector and society more broadly, and does not focus just on auditing efficiency.



Universities tend to compete, but everyone gains from commonality in a universal system

There is a lack of effective communication within and between universities. Universities have tended to compete for top researchers and money, but these difficult financial times of the new research economy are driving willingness to collaborate around standards; everyone benefits from improved efficiency, and the various uses that are made of those standards remain a competitive edge.

SUPPLIERS

- Suppliers want to make their customers happy by solving their problems, but *“success is only going to be possible in research information when universities, funders and suppliers work together. It’s good that we’re all sitting together around this table”*

UNIVERSITIES

- There is a lack of effective communication and sharing of information both within and between universities
- Within universities, there is a problem with data and system compatibility across corporate systems, and also boundary and ownership issues in convincing departments to look beyond their own immediate needs and store additional data that is of value elsewhere in the organisation
- A national framework of information sharing is of great interest, so that we can compare ourselves with our peers, but there is a huge amount of waste due to universities trying to solve problems in isolation and investing in incompatible bespoke systems
- Universities’ culture of operating competitively undermines our ability to act collectively. The financial climate is driving change, however, and there is more willingness to share when there are fewer resources. *“We are all working towards a collective vision. Where do we want to compete, and where can we co-operate? What is it that will get us all together in a room?”*

- Participants compete for top academics and money, and do not want to lose their competitive edge in these respects. Participants distinguished between collaborating to agree data and metric standards so that the sector could enjoy significant gains in efficiency, while retaining their competitive edge in how they use those standards. *“There’s a lot of collaboration potential here; we all gain from commonality, but that’s not to say that we don’t or can’t compete in this area. We can all buy the same hammer and saw, but how you use them is the important thing. I may have a particular way or looking at, or using, standard data that gives me a competitive advantage”*

Recommendation 8: universities should develop clear strategies to define the boundary between useful collaboration amongst, and competition with, their peers.

Funders and agencies will listen to a united voice from universities

Universities meet the many requests for data they receive, even when the reasons for the request are not clear, because *“we’re too scared to say no, there is too much money associated with these exercises”*. Snowball Metrics was proposed as an effective vehicle to unify the voices of the universities, and to open a dialogue between universities and those who need their data. Funders and agencies confirmed their willingness to listen to a majority voice from universities.

SUPPLIERS

- Universities return information to government- and funder-directed initiatives without complaining, and spend a huge amount of resource on this, even though you know that *“a nightmare is approaching”*

UNIVERSITIES

- *“We’re too scared to say no; there is too much money associated with these exercises. How can we control our destiny?”*
- We do not have a proper dialogue between the sector and the parts of the government that need data. There is an opportunity for universities to help BIS¹⁴ and HEFCE¹⁵ in their investments in higher education. The Research Councils have missed an opportunity with Gateway to Research¹⁶ to promote UK research and secure funding

¹⁴ Department for Business, Innovation & Skills, <https://www.gov.uk/government/organisations/department-for-business-innovation-skills>.

¹⁵ Higher Education Funding Council for England, <http://www.hefce.ac.uk/>.

¹⁶ Gateway to Research is being developed as part of the BIS Innovation and Research Strategy. It aims to provide a mechanism for businesses and other interested parties to identify potential partners in universities to develop and commercialise knowledge, and maximise the impact of publicly funded research. A final live system will be launched at the end of 2013, <http://www.rcuk.ac.uk/research/Pages/gtr.aspx>.

- *“We’re probably the biggest challenge as a sector; we are an engine of bureaucratic requirements, and our deep-set tradition of inefficient competition makes us poor at agreeing and organising ourselves. Somebody has to take the initiative. There needs to be a degree of leadership, but not many single institutions feel empowered to adopt that”*
- Snowball Metrics was praised as an example of a bottom-up approach with strong communication and leadership. Discussions highlighted that a clear shared goal that everyone agreed on from the beginning, together with developing trust in each other, had been essential to the success of the programme so far
- *“I would push Snowball Metrics as a useful vehicle to unify our voices and engage. It cuts across several areas, with dispersed responsibility across universities”*

GOVERNMENT AGENCIES AND FUNDERS

- *“Size matters, and a sector consensus will be needed to make things stick. Someone needs to get things to that stage, and then we will use it if it meets our needs. There are opportunities to build on university interest”*
- *“We absolutely need data for funding allocation, but it stops there. We will listen to a bottom-up approach provided that it represents an overall coverage of research nationally, and not, for example, only universities funded by a particular funding body”*

Recommendation 9: universities should co-operate to ensure they speak with one strong, common voice that is likely to be listened to by those who require data from universities.

Universities want to have influence on the use of their data and target the stakeholder leaders to highlight the benefits from gains in efficiency, and to position UK research globally

Universities can only influence the very fragmented research market by approaching key policy influencers, such as The Minister of State for Universities and Science and the Government Chief Scientific Advisor. All agree that a bottom-up approach, that unifies the voices of distinct universities, is needed, and that an economic case will be the most compelling strategy for driving change. The case should emphasise the benefits to education around improving the utilisation of resources, and the positioning of UK research as an attractive global product that drives the economy.

FUNDERS

- The shared vision must be absolutely clear and agreed for a collaboration between universities to have an effective outcome. Many organisations come up with solutions and then expect other stakeholders to adopt them, but the confusion on the scope of the problems being addressed has led to a very fragmented landscape

UNIVERSITIES

- *“The research market is massively fragmented compared to any other industries. At the end of the CERIF in Action¹⁷ project we desperately wanted to present a recommendation for a single set of data to be collected. We talked to the funding bodies but they are two independent camps which don’t have a unified person at the head of them. There was no one person in authority. It was quite frustrating.”* The Association of American Universities’ data sharing mechanism was mentioned as one example of a system that appears comprehensive and secure

¹⁷ http://www.jisc.ac.uk/whatwedo/programmes/di_researchmanagement/researchinformation/cerifinaction.aspx

- *“We need to educate the next generation of leadership about why this is important. We need to sell these issues to them, so that when they get into their positions of leadership they don’t have to be re-educated”*
- *“If we really want to get anything done, we have to go right to the top, such as The Minister of State for Universities and Science, and the Government Chief Scientific Advisor, with the support of senior university officials.”* Participants of these workshops praised the efficient approach of Dame Janet Finch on the topic of open access¹⁸, as an example of effective and collaborative leadership, regardless of their opinions about the outcome
- There are increasing demands for data in particular formats at the lower end of the food chain. *“The characteristics of academic research mean we are ready for standardisation.”* Data and metrics standards are central to our approach, with Snowball Metrics¹⁹ as the vehicle, but sharing information is a more useful approach at the top level. *“Standards need to be smuggled in through the back door”*
- The right approach is to make an economic case, and encourage the government to move away from measuring financial return-on-investment towards more useful information such as the unnecessary costs across the entire sector of how we are behaving now. How much time does each university spend on producing similar reports for multiple funders? It is important to emphasise the cost savings that can be made through preventing duplication, and consequent better utilisation of resources
- *“We could use the resource that we would save to do more teaching, and it could free up money for us to recruit, or to set up, another research group”*
- *“We also need a shared, non-competitive, international vision. I am worried we are being very complacent on this point. I am deeply concerned about China, and I am not aware of a discussion showing how we can position ourselves”.* We need compelling hard evidence that UK research is an exportable product that drives the economy, by offering unique benefits on the international stage

18 The Finch Report recommends to government how the UK should expand access to publicly funded research: <http://www.researchinfonet.org/publish/wg-expand-access/>.

19 Snowball Metrics are global standards for institutional benchmarking. The first set of agreed and tested metrics is available free of charge at www.snowballmetrics.com/metrics.

Recommendation 10: representatives from all sector stakeholders should prepare an economic case that places a financial value on efficiency²⁰, and which thereby positions UK research firmly as an attractive global product that drives the economy.

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- 20 The report “Efficiency and Effectiveness in higher Education: A Report by the Universities UK Efficiency and Modernisation Task Group” highlights, amongst other points, that the UK higher education sector is not realising its potential to generate the kind of savings that it should be able to demonstrate. It sets out a strategy for action and identifies how the higher education sector can lead change across these areas. <http://www.universitiesuk.ac.uk/highereducation/Documents/2011/EfficiencyinHigherEducation.pdf>.

