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Visions of value: Leading the development of a view of the University Library in the 21st century



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ABSTRACT

Over the course of 2018 the University of Sheffield Library conducted a series of interviews and workshops with stakeholders as part of a strategic project to reflect on the value of the university library in the 21st century. Using a mixed methodology, participants were asked to reflect upon the future Higher Education (HE) environment for the university and, for academic participants, their discipline. In this context participants were also asked to reflect upon the future value of the University Library in a series of questions designed to elicit value statements using a tool which the project group have called the 'Wheel of Value'. The resulting reflections upon the future environment have been grouped into four categories reflecting the drivers for change; Digitalisation, Student Experience, Diversification and Collaboration recognizing that there is considerable overlap and interconnection between these. The reflections on the future value of the library are presented by Wheel of Value higher order categorization. This approach proved useful in eliciting responses from participants in the face of recognized difficulty in getting beyond current views of the library and the approach is recommended to other universities looking to carry out a similar project. The results of this research will be used to inform the development of a view of the library for the purpose of engaging with our university community and key partners.

Introduction

University libraries do not operate in isolation from their host institutions. Their development strategy needs to align closely to that of their institution and their vision of the future needs to fit that of their institution. Thus it is reasonable to assume that the changes currently affecting the HE sector in the UK should be having some impact on university libraries and this should not only be reflected in changing practices and priorities but also strategic direction and visions of the future library.

In a recent report for SCONUL, Pinfield et al. (2017) note that whilst there is widespread agreement on the above point amongst both library and non-library commentators there are few major differences in priorities between institution types and furthermore that whilst there is considerable recognition of the challenges facing both universities and their libraries there is little difference in their collective visions of the library of the future.

"Having said that the participants in our research recognized many of the challenges identified above, emphasized the complexity of the environment and saw many trends as offering potentially transformational change, it is, paradoxically, interesting that many of them nevertheless

clearly conceived of libraries of the future as very similar to libraries of today."

(p. 22, Pinfield et al., 2017)

This leads us to ask why there exists such a persistence of the current view of university libraries in an increasingly turbulent HE sector? Is it due to a particularly entrenched library brand which defies alignment with institutional strategies, or are our institutional future visions inextricably anchored to existing and previous practice¹?

The answer, unsatisfyingly, may well be a bit of both. Pinfield et al. themselves suggest that academic libraries need to question the mantra 'The Library is a strong brand':

"That the Library is a strong brand may be true in many institutions and our survey participants agreed that it was; but it is clear that the brand is often narrowly conceived...and increasingly seen as less important...it can sometimes get in the way of communicating the message of what the library currently is as well as what the library might become."

(p. 49, Pinfield et al., 2017)

A review of the current literature² will reveal that there is considerable agreement that university libraries are struggling to communicate the value that they currently deliver to their institutions,

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¹ Griew et al.'s (2018) recent study of Australian Universities interestingly makes the claim that the model of *research-informed teaching* 'shackles' institutions into uniformity.

² See Cox (2018) for a recent example.

let alone that which they may bring in the future. Indeed, Matthews (2013) argues that traditional ways in which libraries attempted to prove their value, which tended to be internal measures of library provision and usage (e.g. size of collections, expenditure on information resources, building gate entrance statistics), are not seen as meaningful by stakeholders outside the library profession. But equally there is frustration in policymakers' minds about the lack of change in the HE 'marketplace' as a result of changes introduced around student fees and entry criteria for University title;

"The competitive market between universities which the system of variable tuition fees envisaged has simply not emerged."

(Prime Minister Theresa May – Derby College 19.2.18, Speech launching a review of post-18 education.)

The importance of demonstrating library value in relation to the strategic goals of the parent institution has been rehearsed by others.³ However, against this political backdrop it might be hard for UK university libraries to see how they can lead in aligning their vision of the future with that of their institution.⁴

In this paper we outline the approach taken at the University of Sheffield during 2018 as part of a strategic project titled: "Our Value, Our Future, Our Offer." The purpose of the project was to:

...reflect on the value of the University Library in the 21st century and who benefits from what we offer, and to develop a view or views of the library of the future for the purpose of engaging with our university community and key partners.

The project was initiated mid-way through the Library's current strategic plan; "Our Library, Our Information Future." and the outputs will form the basis for our next strategic plan & five year vision. It was intended that the research undertaken would deliver useful stakeholder views on the future value of the library. The research team was led by the Head of Faculty Engagement & Partnerships and had representatives from the Customer Services, Learning Services, Special Collections, Digital Services and Communications functions within the library.

Methodology

Data collection involved face-to-face, semi-structured, qualitative interviews and focus groups with senior academics, professional services staff, university executive staff and student representatives at the University of Sheffield. Ethical approval for the project was gained via the University of Sheffield's ethics review procedure. Potential participant groups had been identified through a stakeholder analysis process and a purposive sample of members of these groups was identified. Individuals identified as having most relevant experience and knowledge were included in the sample.

The questions for the interviews and focus groups were developed based on a literature review and stakeholder analysis process. Distinct interview schedules were formulated for the different groups (see appendix A) but all followed a similar structure. First, the participants were asked their thoughts about the future of the University of Sheffield and higher education more generally and, in the case of academic participants, their discipline. Second, they were asked for their thoughts about the future value of the library given the wider context they had discussed.

In order to elicit meaningful responses from participants the project group sought to avoid asking participants general questions about 'the future value of the library'. Instead, the set of questions the project team

devised, based on the stakeholder analysis, were more specific and focused. During the initial stakeholder analysis the project team considered, for each of the library's stakeholders, how the library might deliver value in its broadly stated mission of 'facilitating intellectual discovery and knowledge creation'. A higher order characterisation of these potential stakeholder benefits of future library service was considered and it was decided that all identified possible future value could be considered as falling in one or more of the following categories:

- Motivational: A library may motivate or inspire intellectual discovery and knowledge creation.
- Authentic: A library may ensure the authenticity of, or quality assure, the knowledge creation process.
- Convenient: A library may make intellectual discovery and knowledge creation easier, more convenient.
- Efficient: A library may make intellectual discovery and knowledge creation more efficient, less costly.

This 'lens' was named 'The Wheel of Value' by the project team (Fig. 1).

To this end the participants were asked to reflect on each of these four categories in order to drill down to how the library of the 21st century might deliver value. In total 26 staff (16 academic and 10 professional services and executive) were interviewed and two focus groups with student representatives were held between March–June 2018. Most participants gave full expositions and the interviews lasted on average 1 h each.

In addition to the interviews and focus groups, three workshops were held with library staff during July–August 2018. A total of 71 staff attended. Staff were grouped into discussion tables and given a set of anonymised quotations from the interviews with academics. These were selected by the project group to provoke discussion rather than necessarily reflect the full range of themes discussed by participants. Project group members acted as facilitators and discussions were captured on flipchart paper and sticky notes. A Padlet board was also created to enable staff to contribute additional ideas after the events. Staff who had expressed an interest in attending, but were not able to, were also encouraged to contribute and given access to the same provocative extracts from the interviews.

The analysis of the participants' contributions followed the thematic analysis model outlined by Braun and Clarke (2006). NVivo 12 was used to code the interview and focus group transcripts and the outputs from the library staff workshops. The coding process was inductive and data driven rather than being driven by a predetermined theory. Queries were then run using NVivo 12 to gather the coded extracts for each theme across each different stakeholder group: academics (split by faculty), professional services and executive staff, student representatives and Library staff. A thematic summary for each group was then written including illustrative anonymised quotations from the interviews. The summaries were then shared with participants for them to check and give input.

Results

The themes arising from our participants' thoughts about the future of Higher Education at the University can be broadly grouped into 4 categories:

- 1. Digitalization
- 2. Student experience
- 3. Diversification
- 4. Collaboration

Digitalization

The themes in this category are all concerned with the increasing

³ See Connaway, Harvey, Kitzie, and Mikitish (2017) & Oakleaf (2010).

⁴ Pinfield et al. (2017) point to considerable agreement with the view that Libraries should provide leadership in their efforts to align with their institution rather than just fulfill the role of service provider or partner.

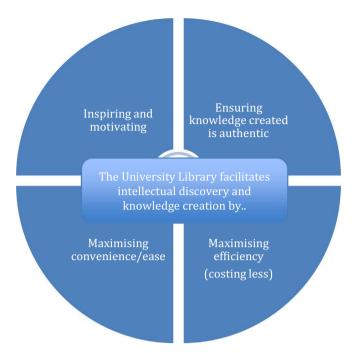


Fig. 1. 'The Wheel of Value' higher order characterisation of potential future value of university libraries in the 21st century.

digitalization of the higher education environment. This is more than just the use of digital content, which might more accurately be called 'digitization' although that is a significant part of it:

"...I guess that in 15 years' time...[]...there will be little that won't be in a digital environment."

The consequences of the continued march of the digital on the HE modus operandus were considered by many of our participants. In particular the skills needed by both staff and students to successfully operate in this environment. Although there was some agreement that the pedagogical fundamentals would not change significantly there was widespread agreement that the disruptive influence of digitalization would need addressing in the form and/or content of teaching:

"But what we need to be teaching people are basically, thinking critically with digital content – you know that's not a sexy name for a course but that's what we need."

There was considerable recognition that the library and other non-academic staff had a role to play in this through the teaching of Information and Digital Literacies:

"it's absolutely [a] key skill, that they know how to begin to manage and filter and choose and read critically and all of that kind of thing. What I would like to see is more embedding of that in modules and with departments so that it's...more of a partnership rather than just coming along to the library and having a session..."

Over and above this recognition there was also some consideration of the opportunity afforded by digitalization in the form of Virtual Reality, Artificial Intelligence & Machine Learning applications for course delivery or research:

"We could set some kind of intelligent algorithm a task and it would go and do the spadework and it would give us, you know, a lot of the sifting and sieving."

There was also recognition of the opportunities afforded for informing course design:

"...presumably we will have more data analytics....[].... And then we should know a little bit more about how people are using different

devices, how they log in in different ways, and what they read in the library, but also when they hand their assessments in and all those things."

"So I think, when we go to distance, you know thinking in the future, we're not going to be talking to those students, any insight that comes from their access to services will help us to inform curriculum design would be really helpful. I think, sat on a big pile of big data, the library could be really, really important in insight."

Participants also made reference to the increasing need for 'embodied engagement' in a digital environment:

"We need somewhere for students to feel at home, you know somewhere to hang their coats and the locker to put things in if they're going to put a lab coat on and go into a lab. And those are the things that really have an impact on students...."

This is more than a nostalgic nod to the university experience of the past, in an increasingly digitalized experience there is real value in the physical experience.

"I think that's the same in all forms of culture where there seems to be a move towards much more embodied notions of participation and engagement as an act of resistance and I think libraries are hugely important within that and I always say to students 'the most transformative experiences you will have will be on your own, in a library, reading a book in silence'."

Student experience

In this category we have grouped together themes which are to do with the student experience. Although the notion of 'embodied engagement' above might be considered to come under this category, the driver for that theme was digitalization whereas the more significant driver here is the changing relationship between students and Higher Education, in particular due to the introduction of student fees and a nascent 'marketplace' in UK Higher Education.

The increasing focus on the provision of 'value for money' is a key theme:

"I think the students have become more alive to these sorts of questions with the increase in tuition fees. So they're much more likely to think in terms of: Am I getting a good enough service compared to what I've paid for? But I don't know that they are entirely, or as focused on the eventual job as government are, so I think they are to a greater extent interested in the experience that they will have at university..."

The general experience was felt to be of increasing importance:

"The pleasantness of environment I think is becoming increasingly important. 'Cos we used to joke about American universities spending a fortune on making their campus look beautiful with stripey lawns and all this sort of stuff..."

The specific experience that the student receives through the course was picked up more by participants, in particular how the student may feel that a course has prepared them for life after University:

"I think that we could do more around the way in which skills and employability are embedded within our programmes in a more holistic manner..."

"...it's about thinking through, I don't want to say 'employabilities', but kind of 'student futures' which is the phrase we sort of use, that we've developed which is thinking about the humanities in a more applied context."

Some participants noted how they had already changed the way they deliver their courses:

"I've given up teaching half my lectures and I give them research seminars

and then tell them to go away and read the papers and tell me...[]...what the problems are in the areas, what would be the way forward."

Others explored what the changing external environment for HE might mean for the design of courses in the future:

"...we'll have to learn from colleagues in engineering and medicine and so on...[]...that have accreditation for their programmes..."

"the other big... issue is around assessment and it feels as though we're beginning to rethink quite fundamentally what... why we assess and how much assessment we do and I think that will play out over the next... medium term, over the next 3 to 7 years or so we might see in that time quite big shifts in assessment practices, possibly less assessments or more formative assessment, greater emphasis on feedback and so on..."

Participants also mentioned internship, placement and apprenticeship models.

Perhaps understandably the focus of most participants was on the students' needs in a changing environment rather than those of their future employers or the policy makers:

"So rather than simply turn up at university, as I did, and be told this is what you're going to study, go away and revise it and do an examination, we're very far from that, but again, that transition is still continuing where I think the voice of the student...[]...is being listened to."

There was considerable empathy for students' position in the current HE environment and the pressures that student fees and the evolving market place are placing upon them. This led to participants identifying student welfare as a significant theme for the future of universities:

"in the news you're always hearing about other universities and how their mental health funding and support systems are being slashed, and the rise in...[]...rent prices and various things and I think all these things are just going to deter students from even wanting to go to university. Rightly so because this is a big transition in any person's life, not just an 18-year-old, any person at all, and if there's no support there for you then it's just going to be the most difficult 3 years of your life."

Participants noted that this theme has potential impacts for both course design and library service delivery:

"...there's all this stuff about wellbeing and mental health which does seem to be a bit of a rising crisis so maybe, we're starting to think we should embed that in the curriculum."

"For me I think the main role of the library is in its potential for supporting people's welfare."

The importance of the need to define the narrative and influence the political agenda in the future was not, however, lost:

"Well politically it's become quite clear that we have to be seen to be preparing students for careers...on the one hand, how can you object to that? And on the other hand...the debate is unnecessarily narrowing as a narrow idea of what a university is for - university has many more benefits for the individual than vocational training, and that sometimes gets forgotten."

Diversification

This category applies to increasing differences in student backgrounds, increasing variation in programme delivery and expansion in modes of scholarly communication. This disruption to 'business as normal' is, however, only felt by institutions attempting to account for such diversity and therefore 'inclusivity' might well be an alternative category title. In particular the need to cater for students with different backgrounds and expectations:

"I think you're going to get students who are really on the game, creators, they're all over the digital stuff but then we're going to have students that are right down the other end and my worry is that we're going to see a bigger diversity."

"...we might actually start to understand about this incredible diversity among young people...and we might start - actually be able to tailor and prescribe things that are designed deliberately to help them."

How this will affect university delivery was considered with some participants noting a possible change in teaching delivery and expansion in course types:

"I think that it should be, teaching and learning should take a number of different forms. This goes back to what I was talking about student centred learning."

"We may find that...[]...the kind of education that we offer in the university broadens out from purely undergraduate and masters degrees towards much greater provision of CPD."

More flexible programmes that respond to individual differences in students rather than target audience differences was considered an issue:

"I think an area that's likely to grow is...[]...personalised learning or programme type learning whereby...[]...students will come in with a document saying this is my learning style, you've got to teach me according to that learning style."

"students...[]...who come to the institution from maybe [widening participation] background and all the rest of it and they're still having to do a lot of stuff on their own and they don't necessarily have the resources to [do] stuff on their own so we need to be much more attentive to those potential inequalities and we need to have a much more robust structure to deal with that and address those inequalities and make sure that all students have access to opportunities...[]...it's not just purely in terms of graduate destinations; it's about giving our students a set of skills for life."

There was also a recognition of the extra-curricula support requirements of a diverse student demographic:

"we might expect...[]...the potential for students to be based off site all around the world or elsewhere in the UK...[]...and with that the expectations that students will have access to learning resources and support 24 hours a day."

Student participants noted a role for the library in personalising the university study experience:

"finding information [could use] push technology, the phone message, you can send them, like, updates and new arrivals to their personal preference."

This perceived need to cater for such diversity and provide personalised services and targetted course design is echoed in the research sphere with participants identifying the disruption in scholarly publication and the expansion of modes of scholarly communication as being key themes for the future:

"So I see in the future being far more around a kind of flow of communication rather than a set of, set piece fixed based things. So, contributing more data and interpretations on an ongoing basis. So even the article itself, not being a fixed thing, being far more a set of, kind of, versions of an artefact that you distribute and that being subject to far more ongoing quality control through things like ongoing, or even open, peer review, part of a conversation. I see that far more. That can incorporate things like rich media, ongoing data simulation and production, so it's just far more dynamic than it is today. Now we've got a long way to get there I think but that's the way things are going."

"I think we have to find pragmatic ways forward and certainly a more diversified publishing market, greater use of different, green and gold OA routes, more plural publishing outlets..." The disruption being currently felt across both teaching and research fields amongst participants is the result of policy drivers, from student fees to the Open Access agenda and it is unclear how universities should respond to the changing environment and expectations of students, funders and politicians. This is keenly felt by the participants in our study who are clearly grappling with the implications of a diversification of models of teaching, learning and research dissemination.

Collaboration

The need for increased collaborative working across both teaching and research was a recurring issue for participants. Collaboration between students and teachers was seen as important in the face of a consumer model of higher education, from staff participants:

"I'm hoping as well...[]...that potentially learning and teaching in 10-15 years time is much more driven by partnership working. Not a consumer model but about students and staff meeting in the middle..."

Students also picked up on this:

"Universities are being scrutinised now more than they have done for a long, long time in history so I think that's creating an environment and culture in the university where you're, you're a customer who's buying a product, and it's wrong because that's not what education is about, it's not what learning is about. Learning is about working together, to try and further you own academic endeavour and further the cause of humanity, to speak in grandiose terms."

Increasing collaboration between students was recognized as important and as having significant consequences for both estate and service delivery:

"I want them all to participate in a group project which means they need to take responsibility for turning up, setting agendas, apportioning tasks, all of that stuff which is actually - they're the skills I need as a researcher..."

"they need baggy space, as it used to be called, whereby students can go and sit...[]...They'll sit down and they'll share questions. They might share it through texts even though they're sat opposite each other...[]... they might sit down with a laptop and have a Skype with another member of their tutorial group. You know we need to be aware of this, we need to get away from the idea that we've got fixed 1 hour slots in the timetable but we might need a fixed 40 minute slot and then breakout spaces, we need estate to match the way of teaching."

"moving to digital devices is going to be very important, again we need the software then to help students collaborate. Because collaboration is what we're expecting."

There was a focus on interdisciplinary approaches to both teaching and research in response to the increasingly digital environment:

"So we see some courses are going to change quite a lot, I would have thought, the need for like, data understanding, digital stuff, in the legal field is going to change, there's going to be a shift on some courses. I suppose. And maybe that will, from our point of view, mean more collaboration with those disciplines, possibly."

The focus of the policy makers on grand challenges and the targetting of research funding towards interdisciplinary, collaborative research was picked up on by some participants:

"So it's all interdisciplinary research. All of my grants are with other people; all the way through from clinicians to chemists, physicists etcetera. So, the way that it's going is that my work within the discipline is getting bigger because we're able to ask bigger questions by interacting with people from very disparate disciplines."

"The research councils [are] driving more and more towards impact and

interdisciplinarities. So I'm involved in a project at the moment which is bringing in lots of sort of different social science methodologies and digital humanities methodologies."

Collaboration between universities and industrial, community, charitable and commercial partners for the purposes of research was a recurrent theme and seen as applicable to all disciplines:

"...a lot of these larger bids aren't just done in isolation, they're done with maybe 2 or 3 other partners, university partners. They may have 2 or 3 other companies."

"...all of the faculties and departments have activities within them that are of value to industry, absolutely from the depth of the most philosophical people in English and Literature right through to medicine, you know, everyone has got skills and knowledge and expertise, elements of which, with the right industrial or indeed other partner, charities for example, you know, can synergise new exciting things."

Collaboration also came up in the context of public engagement with research outputs, both in the process of publication and the need to make research digestible for non-academic audiences:

"so you're seeing the pre-publication stuff, you're seeing people put things out in social media or prepublication, trying ideas out...[]...which is great because it's more collegiate, collaborative."

"there will be a lot more in terms of social media, in terms of graphical representation, things that can be easily understood and hit many people not just the elite of your mates but also the more general public, the politicians, the policy maker."

The drivers behind the many themes in the category of collaboration vary from student experience, research impact, innovation and digitalization but the consequence for future research and teaching practice will be a more collaborative environment facilitated by both physical spaces and digital services.

These themes can be seen as the background or context for participants' views on how the library can deliver value to the university in the future.

Future value of the library

Table 1 summarises the ways in which participants envisaged that the library was seen to be able to add value in the future, organised by higher-order value category from the Wheel of Value: Efficiency, Authenticity, Convenience and Motivation, and identifies the groups that mentioned it. It is accepted that some value statements may fit more than one higher-order category, for ease of presentation they have been allocated to the category seen to most capture their value.

Although the interview questions were explicitly designed to probe the four higher-order value categories it should be noted that the value statements listed here were not exclusively elicited by the interview questions but were distributed throughout the interview. The purpose of the table is to capture all the future value statements rather than define at which point in the interview they arose.

Discussion

Prior to discussing the utility of this research project it is important to make two caveats. Firstly, no conclusions should be drawn from the different focus of the various groups as outlined in Table 1. In particular the mode of engagement for non-library staff was significantly different to the other groups involving workshops in which participants were asked to consider the provocations of other participants rather than 1-2-1 interviews. Secondly, no conclusions should be drawn from the thought-leaders' focus as to the strategy or plans of the University of Sheffield. Although the identified participants were deemed by the project group as having 'most relevant experience and knowledge' their

Groups who mentioned this^a

Value

Table 1Topics discussed by participants arranged by higher-order value categories.

value	Groups who menuoned this
Motivational Contribute to the University's student recruitment activities.	Faculty – SS
Support student wellbeing and welfare.	STU, PS/Exec, LIB
Safeguard and provide access to unique and distinctive collections e.g. Special Collections and NFCA.	STU, Faculty - SCI/ENG, SS & AH, LIB
Provide opportunities for exploring the literature of academic disciplines in an oblique way - independent, non-directed - enabled by opportunities for serendipitous discovery.	Faculty - AH, LIB
Enable quiet, contemplative, individual intellectual discovery and learning through the provision of appropriate physical library spaces.	STU, Faculty - MDH & AH, LIB
Enable development of creative skills through the provision of appropriate physical library spaces (e.g. makerspaces). Facilitate collaboration and interdisciplinarity.	Faculty - MDH & SS STU, PS/Exec, Faculty - SCI/ENG, AH, MDH & SS, LIB
Make a distinctive contribution to the University's civic mission by welcoming the broader community, including local Post-16 students, into the Library and by providing services tailored to their needs.	STU, Faculty - SCI/ENG, AH & MDH, LIB
Support the University's civic mission by fostering collaboration between South Yorkshire archives, libraries and museums and the University - supporting these in time of reduced funding.	LIB
Act as centre of University's academic culture and history and scholarly identity. Support academics' public engagement activities.	PS/Exec, Faculty - SCI/ENG & AH, LIB LIB
Support publication and dissemination of research at UoS including student research - make research more accessible to public through showcases.	Faculty - MDH & SS, PS/Exec, STU, LIB
Support innovative modes of research dissemination - multimedia etc.	LIB
Authenticity Lead University support for IDL - especially for students but also staff & externals.	STU, Faculty - SCI/ENG & SS, LIB
Provide support for students to develop their critical thinking capabilities.	Faculty - SCI/ENG & SS, LIB Faculty - SCI/ENG & SS, PS/Exec, LIB
Encourage staff and students to access appropriate support to keep developing their IDL by providing personalised support	Faculty - MDH, LIB
recommendations (for workshops, tutorials, etc) automated through machine learning or other analysis of user behaviour.	LIB
Support students' development of skills for lifelong learning and employability. Provide 'quality-assured' access to a breadth of research literature in all disciplines including material which is intellectually challenging.	Faculty - SCI/ENG & SS, PS/Exec, LIB
Provide University with professional expertise in copyright and intellectual property. Provide University with expertise in information ethics e.g. discussions of 'pirate' sites.	Faculty - MDH & SCI/ENG, LIB LIB
Help to protect the quality of a University of Sheffield degree by ensuring the authenticity of student work, in partnership with academics.	Faculty - SS & AH
Convenience	
Support effective research data management, storage, visualisation and preservation.	Faculty - SCI/ENG, PS/Exec, LIB
Provide personalised information resource recommendations (inc. AI/machine learning driven).	STU, Faculty - MDH, SCI/ENG & SS, LIB
Make exploration of research literature more convenient by adopting latest technology in this area. Maximise access to breadth of research literature held across the world's libraries.	Faculty - SCI/ENG, SS & MDH, LIB LIB
Advocate (with other libraries) for digital access to eBooks which gives usability and accessibility greater emphasis.	STU, LIB
Support teaching through the management of an easy to use resource list system.	Faculty - AH & SS, LIB
Provide access to materials which are only or more appropriately used in print form.	STU, PS/Exec, Faculty - SCI/ENG & AH, LIB
Efficiency	Paralles on portain
Provide University with professional expertise and horizon scanning in information/knowledge arena. Work effectively in partnership with academic and professional services colleagues to maximise impact of services.	Faculty - SS, PS/Exec LIB, Faculty - SCI/ENG
Deliver financial efficiency through large scale information purchasing.	PS/Exec
Provide insight into student learning behaviour (physical and digital) - learning analytics.	Faculty - MDH, PS/Exec, LIB
Enable innovative research methods through supporting text and data mining of large digital corpora.	Faculty – AH
Support industrial and commercial partnerships through information provision and intellectual property expertise.	LIB
Advocate externally (with other libraries and relevant organisations) for more a sustainable scholarly publication model.	PS/Exec, Faculty - SCI/ENG, LIB
Encourage culture change within institution around scholarly publication by leading and facilitating discussions amongst academic community; including challenging connections with academic prestige.	Faculty - SS, LIB
Reduce University dependency on commercial publishers by facilitating an independent peer-review process.	LIB
Reduce University dependency on commercial publishers by offering in-house publication options.	LIB
Maximise use of Open Access materials by facilitating discovery of Open Access materials.	Faculty - SS, LIB
Provide expertise on tracking research impact through bibliometrics and Altmetrics.	LIB
Support creation of open educational resources.	LIB

^a SS = Social Sciences, MDH = Medicine Dentistry & Health, AH = Arts & Humanities, SCI = Science, ENG = Engineering, STU = Students, PS = Professional Services, Exec = Library Executive Board, LIB = Library staff.

focus should in no way be taken as necessarily indicative of current or future strategy.

Although the methodology was intentionally designed to elicit thoughts about the value of the University Library in the 21st century it is interesting to note that participants were more inclined to focus on the issues they were attempting to address today. Often observations on future value were expressed as extrapolations from current trends either within the university approach to teaching and research or in the wider Higher Education sphere and comparisons with the past were not uncommon. This is not necessarily an indication that the approach taken was not fruitful but it is worth considering whether other approaches could be taken that would generate more 'future thinking'. It should not

be assumed that colleagues, academic or otherwise, in Higher Education institutions are comfortable engaging in blue-sky thinking outside of their field of expertise.

Many areas of future value that were mentioned by most participant groups are what might be considered 'core' current library business (e.g. access to quality research literature and unique collections, leading university support for information and digital literacy, provision of quiet, quality space, supporting effective research data management). Other areas, although not core current library business, are definitely areas where the library, and the sector as a whole, are already developing and improving service models (e.g. learning analytics, text and data mining, extending community access.)

The personalisation of services was flagged by most participant groups and is the sort of functionality that is seen to be facilitated by modern technology in the commercial sphere. Personalisation of content is seen across the internet in search engines, advertising and online shopping, for example. The personalisation benefits of digitalization in society have been widely experienced and therefore it is perhaps unsurprising that this should be considered a fruitful area of future value delivery. The extent to which libraries can deliver on this will in part be determined by the sophistication of their digital infrastructure (and that of their parent institution) and in part by the appetite of both institution and individual programme leaders to respond to diversification with service personalisation.

In considering the delivery of value to fee-paying students, the maintenance of the non-digital experience, the 'embodied experience', is an interesting focus. For the library this might not resemble the embodied experience of the past but careful attention needs to be paid to how the library delivers an 'embodied experience' in the future. As universities in the UK grapple with how they deliver value through experience⁵ this is an area where libraries can offer considerable input as many students will spend a significant amount of time in the library whilst attending University. This is presumably why they consider that 'good study facilities' are the main factor in determining whether or not a course is good value for money.⁶

That the increasing digitalization of the HE environment is such a consistent theme for participants is perhaps unsurprising. The disruptive nature of digital and the opportunities afforded by it are at the forefront of many academics' minds as they are for the policy makers:

"Most importantly, students continue to express concerns that their courses do not fully prepare them for a digital workplace. This issue must be addressed as a matter of urgency if universities and colleges are to deliver for students, employers and the country as a whole."

- Sam Gyimah

Libraries have played a significant part in the current digitalization of Higher Education, leading the way with campus wide access to electronic content, but in their support for further digitalization across Higher Education they should consider the role they play in providing an 'embodied experience' as part of the whole university offering. This does not give libraries a free pass to keep the physical status quo, rather it gives them a fresh lens through which to consider the value offered by the spaces they develop and maintain.

By understanding what value the physical space brings to all stakeholders university libraries should avoid becoming just glorified study halls. By considering the full range of stakeholders and focusing on the four areas of 'The Wheel of Value' for each stakeholder, libraries can ask rather more penetratingly what sort of value their spaces can bring to all parties. For example, physical libraries have often focused on convenience of use for students but have they paid equal attention to how they motivate students? Library spaces have evolved to make collaboration amongst students more convenient but does the library have a role to play in helping to quality assure such collaboration? This consideration can be seen against a backdrop of increasing diversification of student background, programme delivery and mode of scholarly communication.

The student wellbeing theme is worth noting as there is considerable recognition that universities need to respond to the pressures that fees are placing on students. Libraries have a key role to play here given the amount of time that students spend within them. How libraries respond will be interesting; it would be simple to dedicate space within libraries to student wellbeing, with facilities such as sleep pods or

exercise bikes perhaps making an appearance. Alternatively one might consider the library as a whole as a wellbeing space and use this notion to design future spaces and services. For example; many university libraries are imposing buildings and the effect of such a building on students with an increasing diversity of backgrounds and a non-student user community may need to be considered. How comfortable are university library spaces for such users?

Conclusion

In this paper we have outlined a research project approach taken at the University of Sheffield during 2018 as part of a strategic project to reflect on the value of the university library in the 21st century. The results of this research will be used to inform the development of a view of the library for the purpose of engaging with our university community and key partners.

The participant views give an insight into the issues which participants considered to be most impacting the university and their discipline/studies. More than this though the process itself has engaged and enthused participants, many of whom remarked, in post interview discussions, that they welcomed this initiative from the library. In addition, some participants, unprompted, felt that the library should do more to communicate the value that it does, and can, bring to the university.

The project itself has been an opportunity to lead the process of alignment between the library and the university. The vision that will ensue will support the communication of future value of the library to the university. The method used, a research project, will lend authority to the vision developed. More than this, the method has had the effect of communicating the value of the University as a leader, as a partner and as a service provider (Pinfield et al., 2017).

As this work progresses we expect to see real benefit from 'The Wheel of Value' lens generated by the project team and recommend its use to others as a tool for considering the value that a given service delivers to a given stakeholder and indeed may deliver in the future.

Appendix A. Interview questions for academic participants

A.1. Introduction

- 1. Please describe your role and how long you've been doing it.
- 2. How do you see teaching and research in your discipline developing in the next 10–15 years?
- 3. What's missing to support this?
- 4. How do you currently share your research?
 - a. What influences your decisions about how to share your research?

A.2. Specifics about the University of Sheffield

- 5. How do you see the practices of teaching and learning across the University of Sheffield changing in the next 10–15 years?
- 6. What role do you see for the University in preparing students for the future and their lives after graduation?
- 7. How do you feel the University of Sheffield should ensure the sustainability of its mission in the new Higher Education marketplace?
 - a. Does the increasingly competitive and global HE marketplace have additional implications?
- 8. How do you see research being communicated in the future?
- 9. What if the publishers, as we currently know them, no longer existed?

A.3. Library focus

Through its services, staff and spaces the Library enables intellectual discovery and facilitates the creation of knowledge. We see four ways in

⁵ Appleton, Stevenson, and Boden (2011).

⁶ UUK (2017).

⁷ In his foreword to JISC's Digital Experience Insights Survey (Newman, Beetham, & Knight, 2018).

which the Library might do this in the future:

- By motivating or inspiring the development of knowledge.
- By helping to ensure that knowledge created is sound or authentic.
- By increasing the convenience or ease of intellectual discovery and knowledge creation.
- By making finding and using information more efficient (less costly).

Taking each of these in turn, I'd like you to think about the future of Library provision in the next 10–15 years.

- 10. Thinking about the library's contribution to the academic endeayour:
 - a. How do you imagine the University Library motivating and inspiring intellectual discovery and knowledge creation in the future?
 - b. What contribution do you imagine the University Library making to ensuring the creation of authentic knowledge in the future?
- 11. We see a key strand of our activities being geared towards reducing the burden associated with research and teaching for academics and helping students to navigate a more challenging learning environment. With that in mind:
 - a. In what ways do you think the University Library could make the use of information and the creation of knowledge more convenient (easier) in the future?
 - b. How do you imagine the University Library will make finding and using information and creating knowledge more efficient (less costly) in the future?
- 12. What would you miss most if you didn't have access to a library, its

people, and all the services and resources they provide?

References

- Appleton, L., Stevenson, V., & Boden, D. (2011). Developing learning landscapes:

 Academic libraries driving organizational change. *Reference Services Review, 39*(3), 343–361
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. https://doi.org/10.1191/1478088706qp063oa.
- Connaway, L. S., Harvey, W., Kitzie, V., & Mikitish, S. (2017). Academic library impact: Improving practice and essential areas to research. Chicago, IL. Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/ academiclib.pdf.
- Cox, J. (2018). Positioning the academic library within the institution: A literature review. New Review of Academic Librarianship. https://doi.org/10.1080/13614533. 2018.1466342.
- Griew, R., et al. (2018). Diversity in Australian tertiary education: Turning words into action. Retrieved from Nous Grouphttps://www.nousgroup.com/insights/diversityaustralian-tertiary-education/, Accessed date: 26 October 2018.
- Matthews, J. (2013). Valuing information, information services, and the library: Possibilities and realities. *Portal: Libraries and the Academy*, 13(1), 91–112. https://doi.org/10.1353/pla.2013.0000.
- Newman, T., Beetham, H., & Knight, S. (2018). Digital Experience Insights Survey 2018: Findings from students in UK further and higher education. A report for JISC. Retrieved from http://repository.jisc.ac.uk/6967/1/Digital_experience_insights_survey_2018.pdf, Accessed date: 26 October 2018.
- Oakleaf, M. (2010). The value of academic libraries. Chicago, IL. Retrieved from http://www.ala.org/ala/mgrps/divs/acrl/issues/value/val_report.pdf.
- Pinfield, S., et al. (2017). Mapping the future of academic libraries. A report for SCONUL. London: SCONUL. Retrieved from https://sconul.ac.uk/sites/default/files/documents/SCONUL%20Report%20Mapping%20the%20Future%20of%20Academic%20Libraries.pdf, Accessed date: 16 August 2018.
- Universities UK (UUK) (2017). Education, consumer rights and maintaining trust: What students want from their university. London: Universities UK. Retrieved from https:// www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2017/educationconsumer-rights-maintaining-trust-web.pdf.