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Served on a Silver Platter: Working Towards an Academic Research Data Concierge Service

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ABSTRACT

This article will discuss the development of a research concierge service aimed at supporting the unique data needs of researchers at each stage of the research lifecycle. Although based on work at one institution, a North American academic 4-year research university, the presented strategies are transferable to many different types of institutions. The concept behind this service emerged when staff members from the Office of Research, Information Technology, and University Libraries embarked on an endeavour, by way of a newly formed collaborative working group, to identify disparate research support services around campus. Steps will be suggested to assess and align existing support services as well as uncover gaps in service within an institution. A review of organisational models from other institutions with complementary services will also be included. The article will also examine the challenges faced by our institution in creating this collaborative group and the new service approach.

Keywords: Research data lifecycle; Data science; Data management; Academic institutions; Services; Collaboration.

1. INTRODUCTION

Research institutions across higher education recognise the critical role of research and data management in the research lifecycle and in enhancing research productivity including the growth of extramural funding. As higher education research support professionals, including librarians, seek to devise the best approaches to data management and its impact on the research endeavour, collaborative relationships between units across the institution that provide research support represent pathways to effective service delivery (Yu 2017), (ARL 2006), (Tenopir, Sandusky, Allard, Birch 2014).

The article addresses the idea of a research concierge service at one large public university designed to better assist researchers in navigating a data support network. While the issue is framed around a scenario at one academic institution, the applications are transferable and adaptable across a spectrum of institutional types. The importance of a research concierge service is notable, and what is of particular interest and value, in the seamlessness of service to the end researcher, providing a more efficient service point without the need to contact multiple individuals and/or university units or departments. The overarching singular service point will be of value in expediting support of varying levels of existing university services to the individual researcher or research team. The practical and more functional piece of the service will be of the longer term value of providing tailored and individualised assistance to institutional researchers.

In the scenario presented in the paper, staff members from the Division of Research, Division of Information Technology and University Libraries at Kent State University (KSU) have assisted in an endeavour, largely through a newer university level working group, to better address and support research data needs. The article contains a review of the literature on data services, current research support practices and institutional collaborations, focused on the last five years. Furthermore, several organisational models are reviewed which inform the core services contained in the proposed concierge service model. Next, steps to assess existing support within an institution and better aligning these existing within the concierge model are outlined and suggested. Lastly, the article examines the potential challenges in creating such a service delivery model.

Implementing the idea of a research concierge service is one that the authors feel is a worthwhile pursuit for an institution of any size, and can be as versatile and robust as deemed necessary. The ultimate goal of the service is to eliminate or reduce potential delays, complications or issues that researchers may encounter at any portion of the research process and research data lifecycle. An issue could take the form of a simple request that an individual is unsure who to address a query to, or could also be a more perplexing, difficult issue that may require cross-unit coordination. The proposed model below is a step to reduce frustration and roadblocks for institutional research through the implementation of the concierge model.

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2. BACKGROUND

In the fall semester of 2017, University Libraries (UL) at KSU sought to understand the research needs of the University's faculty and the role UL could play in meeting those needs. KSU is a public research institution with around a 40,000 student enrollment. A research data needs survey was conducted (Dressler, Yeager & Richardson, 2019) seeking insight at the institution. It is outside the scope of this discussion to delve deeply into the results of the survey except to say that the analysis of the data revealed some general themes and issues surrounding research data support. The survey proved to be a very useful tool in providing a method of assessment and also providing a glimpse into current research data support and management at a large acaedmic unit.

Among those themes include a general lack of understanding of data management planning, differing notions of the concept of data, and multiple issues surrounding data storage. Furthermore, and the critical point here, a number of those themes involved the need for services that were beyond those that the library offered or could offer. It became immediately clear to UL that addressing those needs would require resources from elsewhere. In addition to the information gathered in the survey, many at the institution acknowledged that there were episodic and individual connections between multiple research support units across the institutions, but that those services had not been strategically aligned. Solving the malalignment of current research support that was detected in the survey is at the crux of the proposed research data concierge service.

Fast forward eight months and the time was right to capitalise on what UL had learned from the aforementioned survey. With the help of the Interim Dean, UL convened a meeting, inviting key players to inspire such a change. First, were those staff from the library which already played a role in our current research and data services including the Assistant Dean for Technology & Branch Libraries, digital librarian, and a subject librarian heavily involved in data management planning. Next, the Vice President for Information Technology (IT) and Chief Information Officer (CIO) represented a critical partner not only because of the scope of responsibility but also because of his stated focus on positioning IT as a strategic partner in advancing the University's research agenda. The person in this position had been on the job for approximately six months. Conveniently, the CIO had recently issued a mandate, which was tied to the University's strategic roadmap, from the campus president to improve research (technology) services for faculty at the institution. Armed with survey results showing a universal faculty need for robust research data storage options, UL knew the CIO needed a seat at the table. Finally, it was felt that an initiative that either UL or IT were to take on that impacted faculty researchers, in whole or part, would be best served if it had the endorsement and support of the Vice President of Research (VPR)/Division of Research and Sponsored Programs. Therefore, the VPR was invited to participate as well.

Soon thereafter, the group convened in the fall of 2018, with two to three members from each unit. It should be mentioned that the survey data was shared in advance with the members of this group (hereafter referred to as the "cross-unit group"). The members of this new-formed cross-unit group took pleasure in discovering that each of the three departments were currently working on related initiatives and/or delivering services for researchers. Yet, at the same time, this revelation illustrated a problem that needed immediate attention and one that the survey confirmed. In short, if the cross-unit group members were unaware of these disparate services already in progress, there is a strong likelihood the faculty that they were meant to serve were unaware of them as well. In fact, cross-unit group members shared story after story in which they did not know where to refer a researcher who was in search of a service the staff member knew was likely offered at the university. This seminal moment shaped the direction of the cross-unit effort, and further reinforced the value of a concierge approach.

The group agreed to formalise this cross-unit working group aimed at identifying, organizing, and aligning these disparate services. By learning about the other internal units at KSU, group members realised that the best service could be provided collaboratively. This realisation and newly formed relationship led to the concept of a concierge-oriented service focused on in-time and individualised referrals as well as self-service tools.

3. LITERATURE REVIEW

The literature reviewed in this essay focuses on data management and research data services, particularly focued on the last five years. Partly because of the model proposed in this paper, and because of the unique collaboration of the newly formed cross-unit group. Libraries have created similar models or conducted research on this type of university service; therefore, academic libraries also house most of these services. Libraries have traditionally held a unique position in support of researchers so this evolution seems rather organic. The variety of units that created this data concierge service at Kent State University offers a unique and challenging perspective from which to conduct a review of relevant literature.

Since 2011 when the National Science Foundation (NSF) changed its rules regarding data sharing, data science in libraries has become increasingly important. In the last eight years, since NSF's changes, academic libraries have found a place for themselves in the data landscape (ARL 2006). Several university and college libraries across the United States have added various data services, ranging from assistance with creating a data management plan to various forms of data visualisation. In an era where libraries are under constant pressure to prove their worth, data and many of its aspects have become a natural outlet for demonstrating that very thing to the university. While academic libraries have been leading the charge on creating data services, there have been university-wide responses to offering research data services.

Over the past few years, research data services in academic libraries have become a stagnant field; however, there has been a direct increase in the rise of the academic library led collaborations (Yu 2017). These services primarily focus on research data and research data management (Tenopir, Sandusky, Allard, Birch 2014) (Mannheimer, Pienta, Kirilova, Elman, Wutich 2019). One reason for this single focus is that

many librarians are hesitant to work on data services for fear of lack of expertise or inexperience (Corral, Keenan, and Afzal 2013), (Tenopir, Sandusky, Allard, Birch 2014). However, this challenge can be meet with more professional development opportunities for librarians wanting to engage with data management or data services (Conrad, Shorish, Whitemire, Hswe 2017).

Tenopir et al. (2014) disagree with the idea that librarians are not prepared and suggest that most academic librarians feel they lack the opportunity to interact with their faculty or subject areas in this regard. Moreover, studies that are more recent suggest that this is a key field for libraries. Mannheimer et al (2019), suggest that because of the increase in data sharing, libraries can be a logical partner for researchers with grant requirements.

Understanding the needs of researchers and then tailoring services or contact points to those needs has been, and continues to be, a struggle for academic libraries (Carlson 2012) (Hisle 2019). Each subject area served by an academic library will have a wide variety of research needs. With these unique needs, Carlson (2012) found that more tailored services where needed, or as suggested in this article, services with experts with an ability to work through the differences in communication. While many library led or library created research data services involve members of the library IT staff, communication issues with a larger university-wide IT unit can also develop and has a strong potential for collaboration.

Communication is not the only issue that often is a challenge or obstacle to overcome in a university-wide mandate. Other challenges can vary depending on the institution and its size; however, there tends to be common themes or threads that develop regardless of size (Cox, Kennan, Lyon, Pinfield 2017). Two such examples are technical infrastructure and the cost. Many library led or library created collations face this issue (Cox, Kennan, Lyon, Pinfield 2017), because of the lack of technical expertise. It is a high cost for libraries to overcome this lack of technical expertise; such as hiring someone with the ability, or a substantial investment by a library's IT staff, to overcome the lack of infrastructure (Cox, Pinfield, Smith 2016).

As the literature has shown, research data services are becoming integral parts of research support for academic and research libraries. There seems to be a natural fit for these types of services in academic libraries. However, there are hurdles to overcome to improve the support offered. Most librarians feel they have a lack of expertise, have limited access to research in this regard, or a fear of the cost associated with various aspects of a research data service point. Various models have been used to create and maintain a research data service. However, most of those models are library created or library lead. As this paper will suggest, a model that combines various units across the university landscape can help overcome many of these concerns.

4. REVIEW OF MODELS AND INSTITUTIONS

This section will provide a review of selected research lifecycle models that were heavily referred to during the initial review process at KSU. These models provide a high-level overview of the stages involved in successful ideation and completion of research projects. The models were useful in both

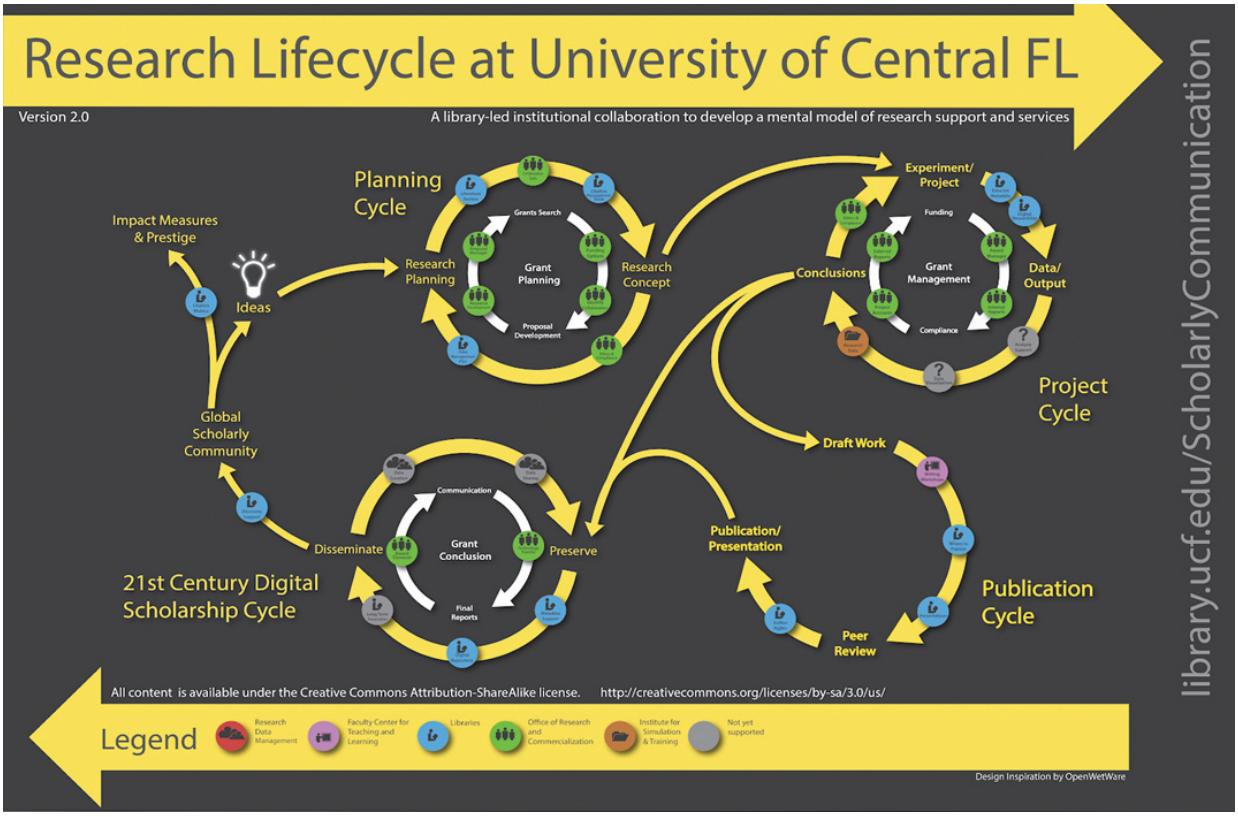

Figure 1. UCF research lifecycle (version 2).

reviewing and identifying areas of existing services in place at the institution, as well as helping brainstorm areas of potential growth and aspiration internally. This was an important step to peruse the landscape of lifecycle models to apply to the next steps of a research concierge service point.

4.1 University of Central Florida

The University of Central Florida (UCF) is a large public academic institution in Orlando, Florida that has a current enrollment of around 69,000 students. UCF outlines a Research Lifecycle (version 2.0) that highlights support services from five different departments at the institution that support research data activities (Fig. 1). These units include the library, Research Data Management, Faculty Center for Teaching and Learning, the Office of Research and Communication and the Institute for Simulation and Training. The model is a blend of a conceptual research lifecycle intertwined with specific service points.

The five main categories in this model are Planning, Project Management, Publishing and Presenting, Preserving and Disseminating, and Prestige, Impact, and Discovery. Of particular interest in the UCF model, five of the subcategories listed within the model are *not yet* supported at the institution. Additionally, on the web page containing the information about the research lifecycle, each main category has an adjoining brief informational section outlining the support available at UCF and provides contact information to the specific staff member(s) who support these services.

UCF is a strong model of how a larger academic institution provides a range of services through multiple units at the institution, and has also articulated these services into a single reference point for researchers to quickly gather more information and obtain contact information for future reference. Of all the models, it is also perhaps one of the easiest to navigate from the researcher's perspective, particularly by the way the stages have been simply labeled, and perhaps are more readily relatable to the research process in layman's terms.

4.2 Inter-University Consortium for Political and Social Research

The Inter-University Consortium for Political and Social Research (ICSPR) is a non-profit organisation, and asserts itself as the largest repository of digital social science data. The consortium also provides a number of leadership and training opportunities for its subscribing members, including topics on data access, curation and analysis. Members of ICSPR number over 760 international educational and research institutions, though notedly the majority of its data holdings are freely available.

The ICSPR model outlines six main phases of the data lifecycle: Proposal Development and Data Management Plans; Project Start-up; Data Collection and File Creation; Data Analysis; Preparing Data for Sharing; and Depositing Data. ICSPR also acknowledges that the process outlined in the model may not unfold as linearly as it is presented when applied to real-life scenarios. The six phases are more conceptual than the other models reviewed here; providing broad, overarching language and guidance for researchers. An adjoining Guide to Social Science Data Preparation and Archiving (2012) provides further information about each phase, and goes into great detail on each phase and subphase.

The ICSPR consortium stresses the importance of finding long-term storage for data that complies with the Open Archival Information System (OAIS), which is more of a theoretical model that outlines tenants of strong digital preservation planning within digital content management systems. This is an aspect of particular importance in regard to having researchers consider issues of file fixity and selection of a suitable and sustainable file format for long-term access and storage.

4.3 University of Virginia

The University of Virginia (UVA) is a public academic institution in Charlottesville, Virginia and has around 25,000 total students. There are eight main sections in the UVA data lifecycle: proposal planning, project start-up, data collection, data analysis, data sharing, data discovery, data archive, and end of the project. This model focuses on the core activities of a research project, and reiterates that data management principles run throughout the entire spectrum of the project. Additionally, the UVA model also encourages researchers to consider the long-term aspects of research data by recommending consultation with the archives during the planning and sharing stages, something unique among all the models referred to here.

There is no clear mention, or reference, of collaboration with other academic units, and the model is embedded within

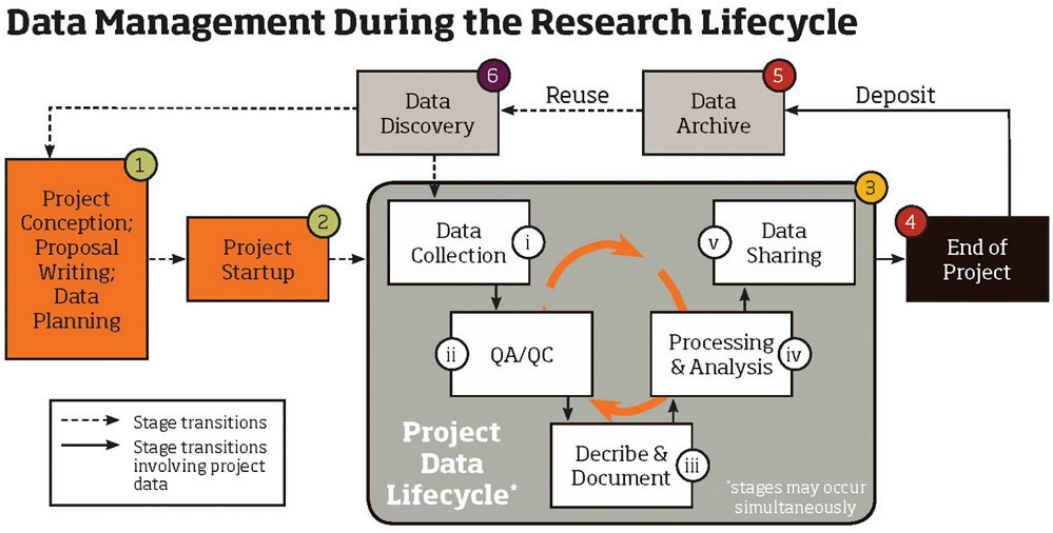

Figure 2. Oregon state research lifecycle model.

a UV library webpage within Research Data Services and Sciences.

4.4 Oregon State

Oregon State is a public land-grant research university in Corvallis, Oregon with a 28,000-student enrollment. Oregon State's model (Fig. 2) has been adapted from the University of Virginia model, with six main areas to its research lifecycle model: project conception, project start-up, project data lifecycle, end of project, data archive, and data discovery. The model also notes that the sub-stages of the project data lifecycle can take place concurrently, and may not always be linear in how they happen. Oregon State also stresses the potential of data loss, particularly within the transitions between the five project data lifecycle sub-stages, if good practices are not adhered to around data management practices. There are no apparent outside collaborations noted in the Oregon State model, which is presented via a digital library guide.

4.5 Colorado State

Colorado State is another public land-grant research university, with an enrollment of 34,000 students. The Research Data Lifecycle model from Colorado State is a compressed version of the model at the University of California (Santa Cruz). Colorado's model has five main areas: Data Management Plan, Data Storage, Retention, Promotion, and Data Search/Reuse. The Colorado model is a more simplified illustration of the research data lifecycle when compared with the other models here, but perhaps is the easiest to read and interpret from the point of view of the researcher. The model succinctly reflects the main areas of the research process without being overly cumbersome or verbose, particularly for the researcher who may not be as familiar with the more technical terminology. Again, no clear points of collaboration with any outside units, and the library has presented the lifecycle model from its website.

The review of other models was an important first step as the KSU research data-working group set out to assess existing services that serve researchers already active, and to think about future directions and remaining work. It also brought to light the distinction between the research data lifecycle and the more encompassing research lifecycle. This helped understand how cumbersome a researcher may find navigating such models to fulfil a need. It is also useful in the review to discover the modifications that institutions can make on a research lifecycle to tailor and adapt to their specific scenario, presumably to better serve their researchers. These lessons and the distinguishing features of each model reviewed here informed the model proposed by the cross-unit group at KSU and serve as guideposts in its implementation and refinement.

5. ORGANISATIONAL STEPS

The initial organisation and continued operation of this cross-unit effort can be described as occurring along a four step recursive process. The four steps of this process include: assess, identify, align and refine.

5.1 Assess

The first step, *assess*, includes review of the current state of research services and supports from the perspective of the individual user(s), support units, and from the university system as a whole. In the current case, this step manifested in a research survey conducted by UL, a series of in person meetings and workshops jointly offered by all three entities involved in the cross-unit effort, and in the gathering and sharing of anecdotal experiences and feedback received by cross-unit group participants.

Table 1. Provides a breakdown of the models reviewed with a list of the higher-level stages from each lifecycle

Institution Name	University of Central Florida*	Inter-university Consortium for Political and Social Research	University of Virginia	Oregon State*	Colorado State
Stages:	Planning	Proposal Development and Data Management Plans	Proposal planning	Project conception	Data Management Plan
	Project Management	Project Start-up	Project start-up	Project start-up	Data Storage
	Publishing and Presenting	Data Collection and File Creation	Data Collection	Project data lifecycle	Retention
	Preserving and Disseminating	Data Analysis	Data Analysis	End of project	Promotion
	Prestige, Impact and Discovery	Preparing Data for Sharing	Data sharing	Data archive	Data Search/ Reuse
		Depositing Data	Data discovery	Data discovery	
			Data archive		
			End of the project		

***** Denotes models focused the overall research lifecycle as opposed to specifically focused on data.

5.2 Identify

In the next step, *identify*, represents the work to determine both the support units and individuals who are critical to both the operation and improvement of the supports and services which emerge in step one and are seen as needing or allowing for improvement. In this current case, three support units had already emerged through their joint attempt to complete step one. However, identifying the individuals within those units who would continue on beyond step one occurred both in consultation with executive level leadership of those units and with the recommendations of core individuals who had initially committed themselves to the cross-unit endeavour.

5.3 Align

Next, the *align* step involves concerted exercise to apply the lessons and feedback from step one and leverage current best thinking from internal stakeholders and from external models and guidance to more effectively coordinate research supports across the university system. In the current case, the cross-unit group is squarely in this step as it, for example, builds systems to improve communications among the participating units and adjust workflows to link together resources and individuals. This step also, generally, includes holding regular meetings of the cross-unit group, building and maintaining support from university leadership, communicating the work to the broader university community, and creating systems that capture and document the impact of the cross-unit group's achievements.

5.4 Refine

The final step, *refine*, is very much so the looping back step in this cycle, which starts it all over again. The difference between this and the initial "assess" step, is where as the assess step has the primary goal of beginning a path forward, in the refine step the group has already made attempts to improve services and supports. Therefore, in the refine step, the group is now engaged in the process of determining the effectiveness of these changes and looks to both continue to improve processes and identify new processes for improvement. Additionally, the step likely includes the invitation of any entities identified as missing and/or essential to the emerging services portfolio.

6. PROPOSED MODEL

The newly proposed Kent State University Research Support Ecosystem (Fig. 3) will provide a method to funnel researcher requests, connecting an individual from any point of the research lifecycle to the proper staff member from the three respective support units. This model is not oriented to, or dependent on stages or phases, of a research lifecycle. Instead, it is designed to meet the investigator at their point of need. Our working group maintains that this as a strength of this model as it eliminates the presumption that research is always conducted along an orderly pathway of which the researcher is constantly aware. This is also a distinguishing feature of this model as some models have pointed to concurrent systematic processes already in play.

When a researcher interfaces with the Research Support Ecosystem through a service port, the proposed model sorts the issue/request to the correct expert without requiring the individual to be aware of this underlying structure. The ports of entry are numerous and may include direct contact (email, phone, in-person, etc.) with a member of the cross-unit research support group or could leverage a currently-in-development suite of technologies (online contact form, service request system, etc.) housed under a research support web portal or both.

Each unit provides unique support structures, such as the library providing reference or literature review support; the Office of Research providing an institutional review board application process, or Information Technology providing high performance computing infrastructure. Additionally, some services are jointly curated and provided, such as data analysis and visualisation, storage, or compliance. The strength of this support provision is in the interaction and shared knowledge among the members of the cross-unit group. In-depth knowledge of these unique and jointly supported structures allows the group to both direct researchers appropriately and, more importantly, align and adjust shared tools to improve service delivery.

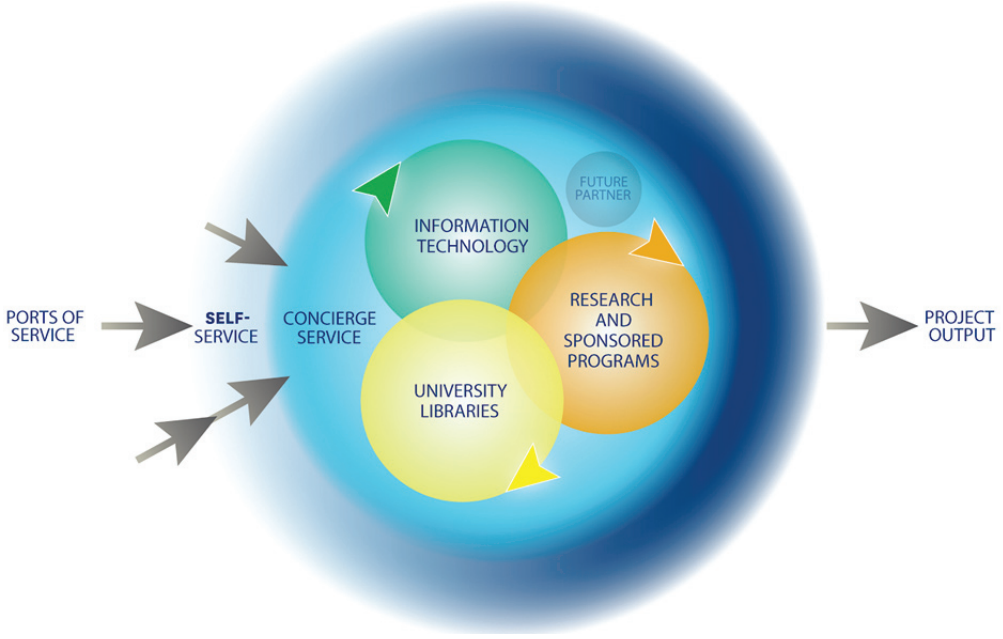

Figure 3. Kent State University research support ecosystem.

As this model continues to develop, the cross-unit group anticipates enhancements in both the delivery of services and operations of the model. These enhancements may come in the form of additional ports of entry, tracking group support activity, newtechnologies,communications to the university community about the concierge service and related research supports, expansion of

participating units, developing supportive institutional policies and procedures, justifying additional investment, forming advisory groups, etc. As an example of future enhancements, whereas the Center of Teaching and Learning and the Survey Research Lab at KSU are not currently represented on the cross-unit group, these two units will likely have representation in the future. Not only were analogous units included as core support service providers in some of the models reviewed above, but it is also clear that at KSU these entities provide critical research support and thus should be included in the cross-unit group in order to best align their services.

Parts of this model will also have the potential for adaptation, modification, and/or realignment over time. These changes will occur as new services are identified and developed in response to investigator requests and needs, as research and funding guidance shift, and as additional funding and resources (including personnel) are available. In the interim, the group will build on some early success stories including the guidance of a survey researcher through compliance of the gift reporting process used in our controller's office; educating a researcher on the specifications of data storage security requirements for Health Insurancce Portability and Accountability Act of 1996 (HIPPA) protected data; and clarification of data storage provision policies for graduate student research protocols. In all three of these examples, the researchers' first points of contact were not the department for which they ultimately needed to complete their work. The cross-unit working group was able to quickly and seamlessly refer the researcher to the correct staff member for assistance. The fluidity by which their needs were met had not been possible prior to this point in time.

7. CHALLENGES

As the cross-unit group endeavours to both develop and implement this service model, the team has run into barriers and challenges. The group organised its discussion of these challenges here into three categories for coherence. Those categories are institutional/structural, personnel/personalities and technology. In almost all cases, the group found these challenges to be interconnected, and often impacted or sometimes fueled each other. Additionally, while some contain unique characteristics tied to the setting and structure of KSU, they are not unique within the higher education landscape. Finally, the challenges and barriers of the kind presented below, and beyond, are inevitable in an effort such as this in which a group sets out to create a model that is both agile and adapts to changing environments of shifting funding guidelines, advances in technology, innovations in research, and institutional resource allocation adjustments.

7.1 Institutional / Structural

As research support evolves across the KSU system, numerous support structures emerge and dissolve in order to meet the needs of the research effort. These supports exist on the institutional level but also within divisions, colleges, schools and departments. However, these services and supports are not always integrated in a network of research support within the university, but can instead serve a limited and isolated set of needs and individuals. The evolution and, importantly, the level and nature of these supports and systems are tied directly to the profile of the institution. For instance, the presence of certain programs (e.g. medical, law, engineering and others) require specific research supports, expectations, procedures, technologies, safeguards, etc. Furthermore, other non-program specific profile components like proximity to certain industries, historical research performance, endowments, philanthropic priorities and other factors all have an impact on the types and availability of research support and priorities. Finally, internal budgets, specialisations, physical distance and a lack of communication about and sufficiency of pre-existing services can all lead to the evolution of a disjointed and inefficient state of research support services. This state can mirror or echo the sometimes siloed nature of academia at large. Initial efforts of this cross-unit group have allowed the three main entities to begin drawing together their collective services and have the potential to create pathways for further alignment. Much more work and shifts in current institutional culture and structures will need to occur in order to improve the cooperation and alignment of a significant number of the research support services at the institution.

7.2 Personnel / Personalities

The current undertaking at KSU to draw together more closely the range of research support services, or at least to document and communicate the range and options of support across the university system, is made possible in part by the efforts of willing and like-minded professionals who are interested in developing and maximizing these networks of support. This willingness spans the administrative levels of the university and includes the input and participation of faculty and staff. The executive level leadership of the University Library, Division of Research and Sponsored Programs, and Division of Information Technology have all supported the formation of the group, and have willingly committed personnel time and resources to its efforts. It should be noted that each of these unit leaders were relatively new to the roles at the institution at the time of the formation of this cross-unit group and the uncoordinated nature of the research support services long predated their tenures. This relative newness is mirrored in many of the individuals who make up the cross-unit group designing the service model. The initial steps around amassing the cross-unit group centered around some discovery of what each working members' role in the research data lifecycle was - from the day-to-day tasks of the individual to the longer-term unit goals that may segway into supporting researchers. This is all to say that both finding and recruiting the right mix of members and supporters was critical to success and required strategic effort (and certainly also speaks to the luck and good timing also at play).

However, the challenge is in designing the work of the cross-unit group so that its members can contribute while still meeting the demands of their professional roles and core positions. For some individuals, supporting researchers directly may not be a central part of their day to day job duties. Furthermore, the group is, by design, made up of a range of individuals with varied but admittedly limited perspectives. This range of perspective is critical in identifying systems across the

university that can be better aligned. As the perspectives are limited, however, the cross-unit group found that it needs to act and speak intentionally in order to help it move and progress in a unified direction. Issues ranging from the use of technical language, knowledge gaps between members about the function or constitution of services, and differential perspectives about effective alignment strategies have affected progress. As stated above, the group is also currently missing critical voices and perspectives. As the work and group evolves, it is absolutely the cross-unit group's intention to seek out and incorporate those individuals and entities. Finally, since the formation of the cross-unit working group, there have been new positions centered around research data created in two of the units (University Library and Information Technology). These new positions will add both new perspectives and considerations to the cross-unit group's constitution and functioning.

7.3 Technology

Both the operations of the cross-unit group and many of the research supports it works to align are driven by technological solutions. Everything from the collaborative software the group uses for its operations, to the multiple knowledge bases independently maintained by each represented entity, to the proposed and current interface points for those at the university seeking research support have technological solutions. These solutions, however, do not always integrate seamlessly or smoothly. Additionally, within the group there are varied levels of familiarity and comfort with the range of technologies which can lead to long adoption periods and disagreements about the best strategies for accomplishing the cross-unit group's goals.

Additionally, the university does not and should not support all technologies. This reality can lead to frustration from researchers, who have needs and preferences related to their research, when specific solutions are not available, allowed, or supported. Decisions around which technologies are available and supported are not, however, only driven by a need to maintain a portfolio of technologies that is both institutionally manageable but also effective. That is, the costly and sometimes cost prohibitive nature of a highly volatile and rapidly changing technology offering presents a real limitation for institutions that work within strict budgetary constraints. Dealing with these realities coupled with identifying research needs and preferences around technology to help inform the work of this group, are challenges in this undertaking.

Again, the challenges outlined above are likely not unique to KSU. Their impact on the progress of this effort are real and, as the group continues, additional issues will emerge. For instance, finances have not yet appeared to be a large barrier for this group in its early phases, but as it identifies more comprehensive ways to make research support services more effective it is almost guaranteed that the cross-unit group will face hard decisions due to budgetary constraints. The group, if it is to find success in the future, needs to not only stay attuned to the challenges it faces, and utilise collective and creative efforts to navigate them, but will also need to look to the future to anticipate the new challenges to come.

8. DISCUSSION

The practical implication of the new concierge service as outlined here is rather straight-forward— identify existing research support service points in a more seamless, organised entity and reduce barriers that may prevent researchers from attaining their goals or objectives. The work to convene a core group of staff and faculty within a working group is an attainable goal, and has had immediate benefits of better connecting knowledge and resources to the individual need. Depending on the individual institution, this may be a number of units and individuals who can be invited to the collective table for regular discussion.

The steps taken to assemble the service were to first conduct a survey to establish needs around research data. To note, the survey was not orchestrated specifically to this purpose, but was a data point that was exceedingly useful in identifying the need for increased resources and support to be addressed to campus researchers through its findings. Other methods of assessment would also be valuable here, as well as repeating a survey at a later point in time to ensure work is on track and goals are being met.

Next, the results were presented to the three identified unit heads at KSU who were most likely to have existing personnel in place to support research data and/or researchers directly, and also highlight the need to convene these individuals. A working group charge was then drafted and the first group members were assigned by unit heads to meet on a regular monthly basis. Within the first month of the newly formed group, we found the communication and ability to better connect researchers directly to the needed assistance was taking place, and as such, issued were resolved more effectively as by-product of the group.

The first months of the working group centered on identifying core needs and issues from the survey that were ones which could be addressed in the inaugural year with existing resources and staffing. These first months were also valuable in familiarizing group members with the current work and initiatives already on-going at a large state academic institution.

At another size or type of insitution, this type of proposed working group may very well take a different shape or form depending on the existing department structures and staffing. However, we have found the benefits of identifying individuals to regularly meet and collaborate on the common goal of better assisting researchers are compelling and valuable even at the end of the inaugural year.

9. CONCLUSIONS

The research support ecosystem proves to be a continuously evolving organism at KSU and other universities throughout the academic landscape. As data becomes more and more prevalent within the purview of the university portfolio, research data services and support will become key components to university growth and success of its researchers.

At KSU, a model has been developed that works for the size, budget, and research scope of the institutional profile; one that is agile, adaptable to change where and when appropriate,

and open enough to allow for other stakeholders to enter as needed.

This flexibility for the researcher and stakeholders ensures that every possible tool or resource can be leveraged. Given the newness of the model presented here, it is clearly still improving and formulating. Furthermore, it will take time to fully understand its impact and effectiveness. However, early evidence here suggests is the new service is a compelling, useful new entity and will, in fact, allow the services to grow and adapt as research and data needs change.

As we continue to adapt and build out services around the concierge model idea, the core goal will continue to focus on better supporting research and related research activities. The service will periodcially and routinely need to be assessed as staffing or services may change over time, but there has been a commitment from university administrators to continue this work. We feel the process that was used at KSU can be replicated at other types of scenarios and institution types, so long as a mantra is followed to more seamlessly and smoothly assist any and all levels of research support.

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