





Institutional Research Systemwide Council Scorecard, Last Updated: October 2, 2017

Strategic Pathways Action Item	Task	Implementation Status	Articulation to Council Scope		
			CKN	Data Architecture	Education & Advocacy
Level 1: Best Suited to Centralization	1.1 Streamline queries and applications for database extraction, business intelligence reporting, and advanced analytics.	 Implementation possible following successful identification and adoption of prioritization criteria, common method for documenting and sharing. Committee Comments: Need a consistent method/language for sharing. Criteria for identifying the most impactful, priority items that should be focused on for this work are not mutually agreed to and should be established before this work begins.	✓	✓	
	1.2 Centralize most database queries and views in a new database schema that links directly with automated reports. A new operational database analyst--complementing the existing DSDMGR database analyst--manages this schema and co-develops queries, views, and tables with each IR office to ensure that they are accurate and meaningful.	 Conditional on base funding for an IS Professional position being made available through reallocation or new source. Committee Comments: UAA and UAS indicate this investment is important but not a prerequisite to successful implementation of the CKN components over a longer period of time; UAF and UA/SW indicate it would not be possible to implement the CKN without the additional staffing for level 1 functions. Regardless of whether an expansion occurs to add operational data warehouse support, all agree the current level 1 function is understaffed and may represent a single point of failure. There is 1 FTE at UA/SW staffing all of Level 1 now, with a backlog of work, and the only backup staff for this position is the Associate VP.	✓	✓	
	1.3 All IR offices will work from the same applications, server, and database.	 Yes, pending assessment and understanding of impacts and resource requirements. Committee Comments: Eventually, reduction or elimination of duplication of effort occurring now at UA and UAA will free up staff capacity for other activities. It may also help address some performance issues occurring now with required daily transfers of large amounts of raw data between the two systems, by performing data transformation and load processes on the same server. Other technical solutions that have functionality similar to the SAS Data Management tool may need to be considered if consolidation to one set of applications, server and database is not possible due to resource constraints.	✓	✓	
	1.4 Significant improvements in documentation related to IR-produced tables, queries, functions, procedures, etc.	 Yes, dependent on clear, sustained executive commitment, resource dedication, and necessary process improvements are required to implement. Committee Comments: Gaps in documentation for data definitions are more apparent and easier to identify when data are actually used. UAS and UAA expressed concern that identifying this as a prerequisite element will hinder progress on CKN implementation, while UA/SW and UAF identify this as a critical step towards advancing a more coherent and accessible data service to the broader university community. Documentation of this kind of information will aide in new IR employee onboarding. Much of this information exists today in an undocumented manner, a kind of institutional memory that is lost when IR professionals retire or otherwise move on. This step is perceived to be best accomplished over time in an iterative, incremental way, i.e., documentation is constantly improved as new knowledge is obtained and old systems/methods fade.	✓	✓	✓
Level 2. Systematically move from semi-automated/manual work toward fully automated work products in this area, freeing up staff capacity for Level 1 and Level 3 work.	2.1 Identify a core set of reports developed by each IR office.	 Pending mutual understanding and agreement on what is appropriate to share. Committee Comments: This step seems to be the inventory work that is frequently identified as a need.	✓	✓	✓
	2.2 Share report designs, benchmarks, best practices, etc. so that each IR office can focus on improving the quality of reporting for their institution instead of completing from scratch a report that already exists elsewhere in the system.	 Pending mutual understanding and agreement on what is appropriate to share. Committee Comments: A queriable repository needs to be used for these kinds of outputs. Work products may not always be adopted without modification, however having direct access to the library of work completed by others would be helpful in seeing "how they did it". Such sharing sometimes occurs easily now for reports and data products in cases when one office is aware a report exists and/or the authoring office is willing and able to share. On the flip side, there are situations where sharing does not occur for unknown reasons, or when the product may be considered proprietary (recruitment plans, proposal applications, etc.), sensitive or potentially damaging to the university now or in the future.	✓	✓	✓

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	2.3 Well-designed database-linked automated reports can--over time-- replace some of the efforts that currently consume a significant amount of time for daily reporting and open/close freeze reporting. This will allow IR offices to develop new and higher quality reports, increase data literacy at each institution, and focus on complex research projects and advanced analytics.		Results from implementation of previous Level 1 and Level 2 elements. Committee Comments: Data literacy will flow if Level 1 data services are well constructed. Believe an expectation of the President is that under the CKN the direction the BOR sets for UA will be a priority and focus of most analysis efforts at every IR office, along with university-specific needs.	✓	✓	✓
Level 3. High institutional ROI for IR capacity applied in this area, utilizing complex analysis and predictive analytics, machine learning, and data visualization.	3.1 Determine the appropriate applications that should be used at each IR office to conduct advanced analytics.		Committee Comments: There were a spectrum of reactions to this item, summarized here. <u>Supporting</u> : Having a standard set of technology for this purpose makes development of training easier, lowers cost of software and infrastructure, ensures portability of technical pieces like code, and promotes collaboration. <u>Neutral</u> : This could be implemented later after earlier steps are established. <u>Not in support</u> : To dictate what software should be used is not appropriate. IR offices should take advantage of the different skills of IR employees, not lock people into learning something new just for the sake of standardization of software; the skills set of IR type people in Alaska are narrow.	✓	✓	
	3.2 Identify examples of past advanced analytics projects conducted in IR offices.		Yes The university perspective was that research questions are often unique to each institution, and research conducted at one university is not appropriate for another university. UA/SW's perspective was that some research is applicable across campuses or universities if of interest to the BOR or legislature or if considering student populations that attend more than one campus or university. There is support to have a forum to share information, for example the "PAIR Share" one-hour sessions -- it's helpful to explain to colleagues what we do and how we do it. Knowledge in this way expands and collaboration strengthens.	✓	✓	✓
	3.3 Share the models, methodologies, final reports, etc. with the other IR offices so that each office can focus on improving the quality of reporting for their institution instead of completing from scratch a model, methodology, final report, etc. that already exists elsewhere in the system.		Pending mutual understanding and agreement on what is appropriate to share. Committee comments: A queriable repository needs to be used for these kinds of outputs. Work products may not always be adopted without modification, however having direct access to the library of work completed by others would be helpful in seeing "how they did it". Such sharing sometimes occurs easily now for reports and data products in cases when one office is aware a report exists and/or the authoring office is willing and able to share. On the flip side, there are situations where sharing does not occur for unknown reasons, or when the product may be considered proprietary (recruitment plans, proposal applications, etc.), sensitive or potentially damaging to the university now or in the future.	✓	✓	

Implementation Status Key



Not ready for implementation at this time. May be revisited.



Once noted prerequisites and/or alignment issues noted are resolved, ready for implementation.



Ready for immediate implementation.