INDIANA UNIVERSITY

27 – Human-centered IT Support

Action Item Template Response

General Action Item Information

Lead Division/Office: Communication and Support

Action Item Number: 27
Action Item Short Name: Human-centered IT Support

Dependencies with other EP Action Items: 28 (IT News), 29 (Community Engagement)

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I. DESCRIBE YOUR PLANS FOR IMPLEMENTING THIS ACTION.

The *Empowering People* Strategic Plan, Action Item 27 states: "IU should continue to pioneer and provision effective means of user support through advanced tools for self-service and connection to IU experts to help faculty, staff, and students effectively use IT. IU should continue its work as a support infrastructure provider for national research projects and services."

At most institutions, the pervasiveness of information technology is reflected in across-the-board increases: in number of users, in time spent using technology, and in the proliferation of types and brands of devices and systems. But financial and human resources often fall short of the ability to fund and staff 1:1 interactions. As a result, forward-thinking institutions leverage their existing support resources, enhancing self-service systems to serve more people and using more devices 24x7x365, regardless of their location.

The following projects will be initiated to achieve Action Item 27 goals.

Project 27a - Tools for self-service: <u>Knowledge Management System.</u>
Early in 2010, IU in partnership with the University of Hawaii was approved to develop a new Knowledge Management System (KMS) as a Kuali IT Support incubator initiative. The KMS will be hosted on IU's Intelligent Infrastructure and will modernize and extend IU's existing Knowledge Base capabilities using new paradigms. The first phase of this project will focus on building a Knowledge Management System that uses IU's Knowledge Base as a foundation and adds collaboration features to enable other institutions of higher education to share code and content.

The focus of a Knowledge Management System (KMS) as a key asset of the

customer/technical support organization is that the best people to capture and maintain support knowledge are the people who create and use it every day. As such, the acts of identifying and collecting content are driven by demand and usage. The software developed in the KMS project will enable the practices and processes needed to identify, collect, maintain, and make accessible the information people need in order to accomplish goals defined by the community or organization. IU's Knowledge Base currently includes 15,500 documents, supporting 100 distinct IT-related services, and is accessed via the web 17.7 million times a year, or once every 1.8 seconds.

The goal of knowledge management can be described as delivering the information people need at the point and in the format it is needed. The content of the repository is driven by efforts to solve the problems people have accomplishing tasks and is dynamic. IU has an opportunity to build a Knowledge Management System that directly meets the varied needs of all IU constituents who use information technology. The Knowledge Base (KB) of yesterday was about searching for and retrieving what experts compiled. The Knowledge Management System of tomorrow is about two-way communication, collaboration, and shared content generation. Along with certifiable expert answers and content, there is an enormous potential for IU's communities to contribute support to each other. IU needs a software platform for relevant, collaborative knowledge sharing and just-in-time content delivery that supports the entire enterprise 24x7x365.

A Knowledge Management System is the foundation of modern support organizations and is the primary building block for a larger set of support projects, potentially including ticketing systems, online software distribution systems, network configuration systems, IT systems status notifications, IT facility management, service desk ticketing and integration, and network access management.

Project 27b - Tools for Self-service: Tools for Self-service.
As information technology applications are created, there is a need for tools to enhance the customer self-service experience and thereby empower students, faculty, and staff by creating "just-in-time" solutions when and where they are needed. As technology has developed, many self-service tools have also been developed, but they have been offered in locations that are not always logical or easy to access. Along with developing self-service tools for customers, this action item will also address options for embedding tools within the applications in which they are used and bringing tools together into a conveniently located IT toolkit.

Project 27c - Leveraging Expertise
IU is fortunate to have a wealth of IT professionals across all of its campuses. Students, faculty, and staff benefit daily from their expertise as tasks are performed on systems maintained by these professionals and new systems and services created by these professionals are deployed. In addition, IU's IT professionals regularly provide support solutions in the form of KB documents, training materials, self-service tools and personal assistance through the Support Center, campus Help Desks, and departmental support providers. Tapping further into these resources to provide new and expanded opportunities to leverage the expertise of IU's IT professionals for the benefit of all is the goal of this action item.

UITS currently is working on two projects that will leverage IT expertise in a new location and using a new tool. The desk in the IUPUI ICTC main lobby will be remodeled to become

the new location for the IUPUI Support Center walk-up desk. This central location will provide easy access to the Support Center consultants and give customers additional opportunities to leverage consultant expertise. In addition, the Support Center chat tool will be replaced in May 2010 with dynamic new software that provides remote support for all platforms and remote support for smartphones. The chat service hours were increased in January 2010 to meet a growing demand for this service. The new chat tool will allow the Support Center to meet additional demands for the chat service and it is scalable to departments on all IU campuses.

Project 27d - Research Support.
IU has supported research in many ways over the years, including offering a Knowledge Base option for research grants, such as the TeraGrid and FutureGrid. IU is now ready to further enhance research support through the development of a Knowledge Management System (KMS) that will offer all grant writers and researchers a KB that can be customized to meet the specific needs of each grant. The goal of this action item is to facilitate IU's success as a research institution by providing a support infrastructure that meets the needs of grant writers and researchers as they seek grant and research funding.

II. WHAT ARE THE POLICY AND PRACTICE IMPLICATIONS OF YOUR PLANS?

A gap and needs analysis was done for the Knowledge Management System and the system specifications have been determined. As the new KMS is introduced usage, data certitude, and other policies will need to be reviewed. In addition, the information in the current KB will have to be transitioned to the new system. During this process a determination will need to be made regarding how much and which data will be moved.

Faculty, staff, and students will need to be engaged to assist in identifying self-service tools for development. Once the self-service tool requirements have been determined, policies surrounding appropriate access, authentication, data security, approval process routing, responsiveness, transparency, and other standards will have to be created, appropriately applied to these new tools and maintained.

Dynamically identifying and tracking individual areas of expertise, including the addition of new skills, will require the creation of a skills matrix, self-identification through social networking, or some other system that can be easily updated and maintained. In addition, a determination of appropriate sharing mechanisms (wikis, infoshares, blogs, forums, virtual networking, social network sites, etc.) will need to be made and levels of required certitude for each area of expertise will need to be determined. As well, determinations will need to be made about what constitutes acceptable resource use when leveraging the identified experts' time and knowledge is an acceptable use of resources.

Much of the need for a continued and improved research support infrastructure will be met by the new knowledge management system. The TeraGrid KB is a good example of IU filling a research support need; however, it is essential the KB infrastructure be completely redone using currently available technology before the KB can be further leveraged in support of research. With a new knowledge management system, additional tools and services can be offered to the TeraGrid and many other research projects in a scalable format.

III. IDENTIFY STAKEHOLDERS.

- KB editors
- Research Technologies
- IU grant writers and researchers
- All IU departments and schools that leverage the UITS Knowledge Base
- All IU departments using centrally delivered services for which self-service tools can be developed
- External partners - FutureGrid, TeraGrid, Sakai, Kuali
- Open source community
- IT experts from all campuses
- Faculty, staff and students who use self-service tools, the KB, and IT expertise