College of Agricultural Sciences UNIT STRATEGIC PLANNING UPDATES MARCH 2, 2009

Information Technologies

UNIT STRATEGIC PLANNING UPDATES – MARCH 2, 2009 Information Technologies

Executive Summary

Challenges and opportunities for Penn State and the College of Agricultural Sciences are significant, and growing. Our planning decisions today must reflect a comprehensive vision and understanding of the inter-related changes facing IT in the college, at Penn State, and globally. Because information technologies are indispensable to the functioning of our research, teaching, communications and business processes, our decisions regarding IT are critical to the success of the college as a whole.

The 2009 strategic plan update for Information Technologies (AgIT) underscores the numerous opportunities for enhancement, cost avoidance, and value that AgIT brings to support the goals of the college. To the extent possible, this update represents IT issues and needs for the college in general, not just AgIT. The college is fortunate to have a dedicated group of IT professionals across numerous departments who collectively sustain infrastructure and enhance the mission of the college. The college strategic plan identifies four central themes, including "identifying priorities", "achieving excellence through an interdisciplinary and multifunctional approach", "developing networks", and "educating the public". Information technology encompasses the core set of tools that will enable the collaborative environments required to successfully address these challenges.

In meeting the IT-related needs of a large and diverse college, AgIT faces a number of "change-drivers". These drivers include: 1) Collaboration and communication with geographically dispersed teams 2) Budgetary constraints which are altering traditional program delivery and operational behaviors 3) Digital native student populations 4) Security and regulatory mandates 5) Innovation and information management within a secure and sustainable environment. These factors in some way impact everyone in the college on a daily basis.

AgIT's four strategic initiatives support unit goals and the college strategic plan. These initiatives are:

- 1. Expand the use of communication and collaboration tools
 - will enable the college to function more effectively in a team environment and will foster enhanced communication with stakeholders.
- 2. Enhance the efficiency of the IT operational infrastructure
 - addresses the need for cost avoidance and cost control while serving to reduce the colleges carbon footprint through consolidation of appropriate services.
- 3. Address the growing demands of network and data security
 - operational best practices as well as a response to a number of university and regulatory mandates. Failure to adequately secure the college's informational resources has the potential for significant financial and reputation loss for the institution.
- 4. Engage the college in improved dialog addressing IT needs and services
 - is an important opportunity to direct resources and focus to the most critical needs of the college.

During 2009, AgIT will utilize the services of the university ITS consultants team to conduct a collegewide IT assessment to better understand the IT needs and priorities of the user community. We will incorporate findings from this assessment into our strategic plan, as part of our on-going process to identify services and prioritize needs. Information technologies have become indispensible tools for the 21st century workplace. The updated plan is designed to enable maximum impact of our IT resources in support of the college mission.

Strategic Challenges and Strategic Advantages

Challenges:

- 1. Meeting the IT requirements of a diverse, multi-functional college
- 2. Managing college IT as a system, with shared responsibility
- 3. Effective communications with internal and external stakeholders
- 4. Increased IT security and regulalatory demands
- 5. Identifying and managing priorities
- 6. Cost and rate of change of technology

Advantages:

- 1. Broad knowledge base and expertise among college IT staff
- 2. Diverse suite of communication and collaboration tools
- 3. Enterprise level hardware and software management tools
- 4. Strong collaborative relationship with university IT staff and administration

Mission

The mission of Information Technologies is to provide IT leadership, research, and service to the College of Agricultural Sciences to support and advance its broad research and educational mission. In providing this leadership, IT applies technology expertise tailored to the characteristics and needs of our diverse clientele within and beyond the college.

Core Values

- Understanding of college mission, infrastructure, and priorities
- Leadership in the application of information technology to meet the needs and priorities of the college
- · Creativity, innovation, and customer service
- Improved efficiency in the use of college resources
- Prioritization decisions driven by systems approach and common good needs
- Teamwork, openness, honesty, relevance, and flexibility
- Commitment to professional growth and development

Vision

Information Technologies creates and fosters proactive, ongoing change integrating college and stakeholder needs. Through appropriate and innovative applications of technology, we enable the college to sustain and improve its core strengths and excellence in the agricultural and related sciences.

Strategic Initiatives

- 1. Expand the Use of Collaboration and Communication Tools To Enhance College Networking and Interaction
- 2. Enhance the Efficiency of the IT Operational Infrastructure, Including Consolidation of IT Services at the Unit, College, and University Level
- 3. Address Growing Demands of Network and Data Security
- 4. Engage the College in Improved Dialog Addressing IT Needs and Services

Unit Goals and Strategies

Goal A: Provide a Robust Electronic Communication and Collaboration Network

Provide increased interoperability with Email, Calendaring, SharePoint, Video Conferencing, WebConferencing. *Addresses Planning Update item 5: a,b,d,e*

Goal B: Enhance the Availability of Computational Science Tools and Data Storage

Virtual machine environments, data storage capacity, reliability, and redundancy. *Addresses Planning Update item 5: b, d*

Goal C: Support Excellence in the Workforce by Promoting Competencies and Innovation in the Area of Information Technologies

User training, application use consultation, and evaluation. Addresses Planning Update item 5: a, b, f

Goal D: Create and Maintain a Stable, Secure, and Sustainable IT Environment for the College

Data Security, appropriate consolidation of college IT services, cost avoidance (limit duplication of services) and cost savings (leveraging the purchasing power of the College). *Addresses Planning Update item 5: a, b, c, d, e, f*

Performance Indicators

Goal A: Provide a Robust Electronic Communication and Collaboration Network

Performance Indicators

- Number of Adobe Connect and videoconference sessions held and estimated number of participants
- Number of SharePoint sites established
- Number of individuals included among SharePoint user lists

Goal B: Enhance the Availability of Computational Science Tools and Data Storage

Performance Indicators

- Measure of data storage utilization by volume and number of users
- Number of faculty and graduate students accessing computational data center

Goal C: Support Excellence in the Workforce by Promoting Competencies and Innovation in the Area of Information Technologies

Performance Indicators

- Number of training events offered by AgIT
- Number of individuals receiving training
- Number and audience of technology application consulting sessions
- Evidence of program delivery impact with technology tools

Goal D: Create and Maintain a Stable, Secure, and Sustainable IT Environment for the College

Performance Indicators

- % of unplanned outages and downtime per outage
- Number of security compromises on college systems
- Number of computers scanned for PII
- Number of computers encrypted
- % of computers with current critical updates and patches
- Evidence of meeting the university data security standards

Opportunities for Enhancement

- 1. Promote increased financial sustainability through development of EN Program, and Computational Sciences enterprise
- 2. Implement an IT services model including services catalog and resource allocation
- 3. Increase data and network security
- 4. Expand Systems Approach to Intake and Production Decisions
- 5. Expand Research and Development for IT Systems
- 6. Increase Web-based Training and other Self-Help Resources

Opportunities for Reduction

- 1. Eliminate projects, initiatives, and efforts that divert limited AgIT resources from higher priority college or state-wide needs
- 2. Reduce the duplication of services at the department, college, and university levels
- 3. Reduce training and consultation-related travel through the use of video or web conferencing
- Eliminate practices, procedures or policies that are not conducive to a secure or sustainable IT environment