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Introduction

April 30, 2018

A comprehensive Strategic Information Systems Plan is a valuable instrument used to communicate information technology priorities within any complex organization. The University of Pennsylvania Division of Finance (DoF) is no exception. To ensure DoF leaders can achieve their business goals, the DoF IT Services (ITS) team completed a detailed analysis of customer feedback in order to define the division’s technology objectives. This strategic plan reflects the strategic goals and actions to be undertaken by the DoF ITS staff during the FY 2019-2022 period.

Currently, the DoF ITS staff of 9 technology professionals supports:
- more than 3,500 service desk tickets and service calls annually
- nearly 300 customers residing in three campus locations
- over 50 software applications
- data center and server infrastructure housed in five locations

As FY18 draws to a close, DoF ITS experienced a more than 35% increase in service desk ticket requests compared to FY17. This increase is attributable to DoF ITS absorbing support and infrastructure responsibilities for the Student Registration and Financial Services (SRFS) organization in 4Q17. The organizational change resulted in shifting 90 new customers to the DoF ITS customer portfolio, and the merging of both legacy IT support functions. In addition to replacing substandard computers used by the SRFS staff and other infrastructure upgrades, two existing full-time positions will be reorganized into the DoF ITS staff organization in 1Q19. The additional staff will help address additional SRFS support needs. To help with management of the merged IT support function, the newly-created IT Technical Director position will focus on strategic planning, customer service, DoF ITS team development, and infrastructure planning activities.

During the months of February through April, 2018, customer survey data and information gathered during in-person conversations was reviewed by DoF ITS management. Customer feedback and lessons learned were summarized and shared with the DoF ITS staff during an extended staff meeting in March. This staff meeting resulting in several FY19 performance objectives related to improving customer service and project management.

While developing this plan, five clear strategic goals emerged based on customers’ expressed needs and identified development opportunities for the DoF ITS staff:

1. Enhance and elevate customer service levels
2. Harmonize the legacy DoF and SRFS computing environments
3. Increase DoF ITS team knowledge-sharing, communications, and technical skills
4. Consolidate DoF ITS business operations, vendor relations and contract management
5. Develop a technology roadmap, modernize DoF technology, and plan for what’s ahead

The goal of this plan is to memorialize operating objectives that will sustain DoF ITS planning activities over the next four years. A mid-plan review is expected toward the end of FY20, the output of which will be used to revise and reissue this Plan for a subsequent, overlapping four-year period.

The DoF IT Services team thanks our customers and extended stakeholders for their feedback and collaboration while developing this plan. We look forward to supporting the Division of Finance with the technology solutions necessary to provide exceptional financial services to the university’s customers and stakeholders.

Thank you,

Division of Finance, IT Services Team

Brent Friedman, IT Technical Director
Joe Shannon, IT Director

Division of Finance ITS Customer Portfolio

<table>
<thead>
<tr>
<th>EVP</th>
<th>VP</th>
<th>Treasury</th>
<th>Comptroller</th>
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<tr>
<td>Office of Budget and Management Analysis</td>
<td>Office of Investments</td>
<td>Global Support Services</td>
<td>Office of Research Services</td>
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<tr>
<td>Risk Management</td>
<td>Student Registration &amp; Financial Systems</td>
<td>Financial Systems and Training</td>
<td>Finance Communications</td>
</tr>
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Penn
Division of Finance, IT Services • Strategic Information Systems Plan • 2019-2022
Division of Finance Technology Facts

Over 3,500 service desk support tickets per year
290 Customers, 12 business areas, in three locations

$5M+ in annual technology infrastructure, software, supplies costs

Over 100 terabytes of data stored
1,000+ Network port connections
350+ Phone lines

125 Networked printers
90 PCs deployed in FY18; 83 planned for FY19
80 data center servers
60 IT vendors
55 supported software applications
20 Ricoh & Xerox MFPs

Dozens of mobile phones and MiFi wireless devices
The Planning Process
Three key steps have been taken to understand the strategic objectives and actions DoF ITS should take to support DoF customers. Information gathered during the planning phase (February – April, 2018) has been synthesized to produce this strategic plan. As part of the plan output, customer service KPIs will be defined and monitored for continuous improvement. The division’s technology standards, IT policies and procedures, and customer service level agreement will all be reviewed, revised and recommunicated prior to the conclusion of 1Q19. The technology roadmap will be used for technology evaluation and refresh planning.

1. Customer Meet and Greets
To develop a meaningful, comprehensive strategic plan, meetings were held with more than 50 DoF customers, including all DoF senior leaders. One-on-one meetings with DoF ITS staff were also held to understand internal team dynamics and professional development needs of the group.

2. Customer Experience Survey
A short customer experience survey was issued to the entire customer base (277 recipients), not including the DoF ITS staff. Data was tabulated and used to identify business areas requiring additional focus of DoF ITS support and customer service efforts. A response rate of 46% (128 survey responses) was received.

3. Technology Roadmap and Information Security Inventory
A technology roadmap has been developed to capture all supported software applications, installed server and data center infrastructure, and critical third party services. The roadmap will undergo review and adjustment twice per year to reflect emerging technologies and critical update, upgrade, implementation and system decommissioning milestones.

A current-state inventory of all information security measures in place will be conducted and reviewed against best practices. This review will address relevant software, infrastructure, policies, procedures, and business processes employed to manage information security needs. Ongoing consultation with ISC Information Security is expected as security tools and requirements evolve over time.

Each four-year strategic plan captures two years of planned work, followed by two years of forecasted work that is pending finalization and funding. The four-year plan is reviewed, revised, and reissued every two years with an updated four-year plan.
As part of this plan, DoF ITS will develop new performance measures around customer service. In addition, current policies, procedures, technology standards, and Service Level Agreement (SLA) will be reviewed, revised, and re-communicated to our customer base. The SLA will be simplified with staffing and work hours adjusted as customer needs and project work dictate.

A specific performance objective of the DoF ITS team going forward will be to evaluate and consider adoption of best practices. Increased engagement with other university IT departments is anticipated. New technologies, particularly software applications, will be assessed against prevailing technology solutions already deployed on campus.

Broader campus engagement will help to ensure DoF ITS is adopting technologies in consideration of implementation and product selection best practices, as well as previously identified risks. The DoF ITS team will continue or expand its involvement in various campus collaboration groups for the university’s IT community, including IT Roundtable, Common Solutions Steering Group, and The Centers working group.

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**Strategic Planning Methodology**

1. **Strategic Goals**
2. **Strategic Actions**
3. **Tactical Actions**

**Inputs**
- DoF Business Priorities & Objectives
- Customer Feedback & Survey
  - DoF ITS team feedback
  - Internal/External business environments
  - Vendor technology options
  - Current IT contracts
  - IT best practices
  - Internal IT environment
  - Current IT products and services
  - DoF ITS team processes, tools, methods

**Outputs**
- DoF ITS Mission and Vision Statements
- DoF ITS Guiding Principles and Values
- Customer Service Key Performance Indicators (KPIs)
- Customer Service Level Agreement (SLA)
- IT policies and procedures
- Technology product and service portfolio
- Technology standards
- Technology Roadmap: evaluation & change-out pipeline
Crafting the DoF ITS Mission and Vision Statements
The new mission and vision statements for DoF ITS were developed with the division’s goal of providing exceptional financial services in mind. Nearly all daily operations across the Division of Finance have technology requirements and implications, making services and support provided by DoF ITS mission critical for effective university operations.

The Division of Finance also has strategic relationships with third parties, including government officials and regulatory agencies. Reliable technology infrastructure enables the university’s compliance with financial regulations and data management requirements. The DoF ITS team works closely with the Student Systems and Financial Applications groups to ensure high quality customer service and technology business continuity.

In consideration of these customer traits and technology requirements, DoF ITS has developed a mission statement to reflect the overall business needs and mission of the Division of Finance.

Mission Statement

The DoF IT Services team provides technology solutions that enable the Division of Finance to engage and serve parents, students, university and external stakeholders with exceptional financial services.

As work begins under this strategic plan, steps will be taken to increase campus collaboration with other Penn IT groups. A go-forward objective of the DoF ITS team will be to identify and evaluate best practices and prevailing or leading-edge technologies, with a focus on solutions deployed across the Penn campus. The DoF ITS team seeks to increase its peer familiarity and engagement status within the IT community at Penn.

Vision Statement

The DoF IT Services team will become a valued, trusted, and reliable technology business partner throughout the University of Pennsylvania community.
Identifying Guiding Principles and Values for DoF ITS
The strategic plan’s guiding principles and values were derived entirely from customer and DoF ITS team conversations. Exact phrases were adapted to define guiding principles, while descriptors frequently used during customer conversations were selected as operating values. The underlying themes of both performance characteristics target customer service, improved technology, and DoF ITS team development.

Guiding Principles
Guiding principles are considerations the DoF ITS team undertakes when planning and executing work. These principles should be employed during customer project intake discussions, project planning, technology evaluation, acquisition, and service execution.

Values
Values represent the characteristics that describe how the DoF ITS team performs work and interacts with customers and each other.

The resulting guiding principles and values will be used to drive all DoF ITS operations as this strategic plan is executed going forward.

Guiding Principles

<table>
<thead>
<tr>
<th>GUIDING PRINCIPLES</th>
<th>VALUES</th>
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<tbody>
<tr>
<td>Customer needs drive every action we take</td>
<td>Reliable and Trustworthy</td>
</tr>
<tr>
<td>Services and products are high value, high quality, and secure</td>
<td>Collaborative and Communicative</td>
</tr>
<tr>
<td>Strive for simplicity and efficiency</td>
<td>Innovative and Objective</td>
</tr>
<tr>
<td>Consider innovation and best practices</td>
<td>Flexible and Adaptable</td>
</tr>
<tr>
<td>Everything we do is compliant and consistent with Penn’s mission</td>
<td>Transparent and Accountable</td>
</tr>
</tbody>
</table>

Franklin Field, 1922.
Setting Our Direction: Listening to Our Customers

We Listened: Here’s What We Heard
Customer conversations and survey data produced more than 100 comments and suggestions for the DoF ITS staff to consider. Customer concerns on infrastructure, such as remote access problems and Outlook issues, were already understood by DoF ITS from existing service desk help ticket history. Additional technology training and improved customer communications were the most frequently suggested areas of improvement.

When asked which technologies are most challenging or create the most problems, our customers most frequently mentioned:
- Remote access / interoperability with laptops
- Outlook / Office365
- Imaging system in SRFS
- Audio/Video Conferencing technologies
- Application support and DoF ITS staff know-how
- Client computers and virtual machines in SRFS

When asked how DoF ITS can improve, our customers most frequently mentioned:
- Improve DoF ITS customer services levels
- Improve customer communications
- Provide more training on technology
- Improve customer awareness of available technologies
- Review and improve the ticketing system and process
- Improve and enhance the customer service level agreement

Focus of Future Strategic Planning

Customer service
Communication
Easier, modern technology
Customer technology training
Finalized **Strategic Goals** and **Strategic Actions** were developed based on customer feedback and professional development opportunities for the DoF ITS staff. Each strategic action has a number of corresponding tactical action plans or individual projects that will help to achieve the corresponding strategic goals.

Similar to the themes that emerged from customer feedback and survey results, five clear priorities for strategic planning have been determined. These priorities easily translate to measurable strategic goals and actions for the DoF ITS staff. Going forward, elements of this plan will be incorporated into DoF ITS team performance objectives.

As this strategic plan is reviewed and updated by the end of FY20, the strategic goals and actions may be revised based on evolving technology, newly identified risks or compliance concerns, and customer needs. Actions that were forecasted in this FY19-22 plan, but not yet confirmed, will be reassessed for viability status, planned funding, timing, infrastructure, and staffing requirements.

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**From Our Customers and DoF ITS Team:**

**Five Clear Priorities**

1. Division of Finance customer service and communications
2. Technology modernization and harmonization
3. Team skills transferability and knowledge-sharing
4. Improve DoF ITS internal team communications and operations
5. Understand and plan for what’s ahead with a technology roadmap
The final strategic plan framework captures the DoF ITS team’s operating philosophies and performance objectives for the next four years. While the strategic goals and actions are set, respective tactical action plans will continuously evolve based on customer and DoF ITS staff needs. Ongoing reevaluation and reprioritization of tactical action plans is expected.

| MISSION | The DoF IT Services team provides technology solutions that enable the Division of Finance to engage and serve parents, students, university and external stakeholders with exceptional financial services. |
| VISION | The DoF IT Services team will become a valued, trusted, and reliable technology business partner throughout the University of Pennsylvania community. |

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<th>VALUES</th>
<th>STRATEGIC GOALS</th>
<th>STRATEGIC ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer needs drive every action we take</td>
<td>Reliable and Trustworthy</td>
<td>DoF customers are satisfied with the technology and services provided by DoF ITS</td>
<td>Enhance and elevate customer service levels</td>
</tr>
<tr>
<td>Services and products are high value, high quality, and secure</td>
<td>Collaborative and Communicative</td>
<td>The legacy DoF and SRFS computing environments are differentiated by software applications only</td>
<td>Harmonize DoF and SRFS computing environments</td>
</tr>
<tr>
<td>Strive for simplicity and efficiency</td>
<td>Innovative and Objective</td>
<td>The DoF ITS team embodies the necessary breadth and depth of soft skills and technical know-how to support DoF customers and stakeholders</td>
<td>Increase DoF ITS team knowledge sharing and soft/technical skills</td>
</tr>
<tr>
<td>Consider innovation and best practices</td>
<td>Flexible and Adaptable</td>
<td>DoF ITS business processes, DoF technology contracts, third party services and vendors are managed in a consistent, comprehensive fashion</td>
<td>Improve DoF ITS business operations</td>
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<tr>
<td>Everything we do is compliant and consistent with Penn’s mission</td>
<td>Transparent and Accountable</td>
<td>DoF technologies and services are secure, easy to use, innovative, and considerate of best practices</td>
<td>Define and execute a technology roadmap with evaluation pipeline that considers best practices</td>
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1. Enhance and elevate customer service levels
2. Harmonize DoF and SRFS computing environments
3. Increase DoF ITS team knowledge sharing and soft/technical skills
4. Improve DoF ITS business operations
5. Define and execute a technology roadmap with evaluation pipeline that considers best practices
Strategic Initiatives

SRFS and Finance Computing Environment Harmonization
The legacy, separate DoF and SRFS computing environments present the steepest technology management and support challenges for the DoF ITS team. Mixed historical practices related to SRFS server and client computing infrastructure has introduced a significant support burden and operational risk to DoF customers. Preliminary harmonization planning for the SRFS computing environment began in April, 2018. Full harmonization of the legacy environments is expected to take several years with current staffing levels and budgetary constraints. A preliminary goal of FY22 has been set to complete harmonization efforts.

Implementation of Customer Service KPIs / Review Process
In order to monitor impact of changes made to DoF ITS business processes and customer service efforts, meaningful customer service key performance indicators (KPIs) must be defined. The customer experience survey originally issued in February, 2018, will be reissued around August, 2018, as one means to measure improvement. Other actions being considered include a simplified post-ticket satisfaction survey that will help DoF ITS measure customer service on an ongoing basis. Additional KPIs are being developed, accompanied with DoF ITS management and staff review mechanisms. Finally, a post-incident critical review and “lessons learned” process is being developed for significant infrastructure events and notable adverse customer experiences.

Customer Communications Strategy Development
Customer feedback strongly indicated a need for increased and enhanced customer communications from the DoF ITS team. Reintroduction of brown bag lunch and technology instructional sessions will also be planned to support this initiative. To improve the current service desk ticketing solution and user experience, a Footprints enhancement project will be introduced to solicit improvement input from DoF customers. The Footprints enhancement project will be an interim step toward evaluating a potential replacement for the Footprints application.

3401 Data Center Move / DoF Server Strategy
Information Systems and Computing (ISC), Penn’s central IT organization, has begun work to move the existing university data center at 3401 Walnut to the university’s South Bank property in Grays Ferry. As of April, 2018, DoF ITS was working with ISC to finalize necessary space requirements for DoF server infrastructure at the new data center location.

In addition to the main data center relocation project, DoF ITS will begin planning a multi-year strategy for all server infrastructure, including assets stored in the university data center, Franklin Building, International House, FMC tower, and off-campus disaster recovery location.

Technology Roadmap Development with Technology Evaluation and Refresh Schedule / Primary-Backup Matrix
A “full stack” technology roadmap that captures all DoF ITS-supported software applications and hardware infrastructure will be a key tool used in resource and project planning. The roadmap being employed will utilize the same technology status definitions as ISC’s enterprise technology roadmap. A new project planning tool, SmartSheet®, has been deployed to DoF ITS staff to help improve project planning activities. Infrastructure project work, such as server evaluations and change-outs, will now be planned over an 18-24 month timeline.

Primary and Backup Staff Assignments for Supported Technologies
As a complementary strategy to developing the division’s technology roadmap, the majority of customer technologies supported by DoF ITS will have primary and backup owners identified. Primary and backup DoF ITS resources will be expected to have the know-how to support and maintain the assigned technologies. The primary/backup initiative is also anticipated to help facilitate more efficient assignment and management of service desk help tickets.

Launch of New Division of Finance Website
A newly designed DoF divisional website is currently being developed and planned for release in 4Q18. The new website will be hosted by Pantheon, the university’s preferred hosting provider for Drupal-based content management systems (CMS). Following launch and cutover to the new site, DoF customers will have the ability to, at their option, independently modify certain web content to meet their needs. Refresh of the web content for the SRFS, Office of Research Services (ORS), Global Support Services (GSS), and Office of Investments are subject to separate web development strategies currently underway.

SRFS Website Redesign and Refresh
A project has been initiated to identify a third party web strategy and development consultant to assist SRFS and DoF ITS in developing a new website for SRFS customers: students and parents. The future external-facing website will be designed with the parent and student experience in mind, with lower user interaction friction and a foundation in the “one stop shop” concept described by the division’s executive management team.

SalesForce CRM Deployment
SRFS and GSS have expressed interest in exploring a SalesForce CRM solution to more effectively and centrally manage data reporting, workflow management, and parent/student/stakeholder interaction information. SRFS and GSS are exploring a joint strategy, while ORS is considering a standalone solution for research-oriented workflow needs.
Infrastructure Projects

Infrastructure projects are prioritized within three major categories: technical infrastructure, web presence, and application development/integration. The infrastructure staff within the DoF ITS team meets periodically to review project status, dependencies, risks, and emerging needs. Infrastructure projects will continue to evolve based on customer demand, the information security environment, and campus best practices. Because DoF business needs require a number of on-premise applications not yet available under a cloud-based, software-as-a-service model, DoF ITS will continue to support a relatively large amount of back-end infrastructure. As of the publication of this strategic plan, over 30 infrastructure projects have been identified, with more than half currently in progress.

Technical Infrastructure
- 3401 Data Center migration
- Weblogin (CoSign) retirement
- DoF File Server upgrade
- DoF Application Server upgrade
- Office of Investments security enhancements
- Transition of custom applications to new web application server
- Transition of SRFS from Kaspersky to Symantec Endpoint Protection
- DoF Storage Area Network replacement
- BitLocker encryption solution deployment
- Upgrade to Windows 10 operating system for client PCs
- Qnomy Qflow Self-Service Web Application deployment
- Physical to Virtual Key transition within select printer environment
- FM Audit print fleet management solution deployment
- FY19 PC refresh and remaining SRFS computer upgrades
- Domain server upgrade
- Vulnerability scanner deployment
- Remote access enhancements
- Barcode scanner hardware replacement
- Imaging strategy – ORS
- Imaging strategy - SRFS
- Long-term server and data center strategy

Web Presence
- Migration to Pantheon web hosting platform
- DoF website relaunch
- ORS website refresh and relaunch
- SRFS website strategy and redevelopment
- WCAG compliance review of all DoF web properties

Application Development and Integration
- SalesForce CRM integration
- Windstar tax application data automation
- FootPrints ticketing solution enhancement project
- FootPrints long-term replacement strategy
- ORS Workflow Management application
- MarkView upgrade for BEN Financials
Individual projects that support the five strategic goals and actions within the plan are known as **tactical action plans**. Tactical action plans represent individual projects or actions undertaken by the DoF ITS team that have a measurable outcome toward meeting a particular strategic goal. Tactical plans are expected to continuously evolve as customer and DoF ITS needs dictate. Currently, the identified tactical action plans are estimated to provide nearly four years of work effort at current DoF ITS staffing levels.

As of April, 2018, more than 50 individual tactical plans have been identified, with nearly 20 plans already in-progress. All tactical plans support at least two strategic goals, while more than half of the plans support at least four strategic goals.

**Prioritizing Our Actions**
- Ensure all actions taken support the goals and priorities of the Division of Finance
- Actions that yield the fastest, most impactful results should be executed first
- Target initiatives that impact the greatest numbers of customers
- Identify business areas and customers that need additional attention or have high risk technology
- Invest the time **now on some** projects if it enables DoF ITS team knowledge transfer and supports the Primary/Backup resourcing strategy

To assist DoF ITS with project planning and execution, continued use and development of the SmartSheet® project planning application (implemented February, 2018) is anticipated. Project planning information continues to be used for resource planning, customer communications and expectations-setting.

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**Interpreting Tactical Action Plans on the following pages:**

**Strategic Action**

**Overall Goals**

**Individual Tactical Plans**

**Supported Strategic Actions**

i.e: [1,4]
# Tactical Action Plans

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### Enhance and elevate customer service levels

Customer service levels can be improved with changes to business processes, customer technology training, and reevaluation of the end-to-end processes used for service desk ticketing.

Customers also expressed a desire to hear from the DoF ITS team more often. Topics of interest included training on different technologies, understanding tips and best practices, learning about newly available technologies, and understanding what services and technologies DoF ITS has to offer.

- A. Complete current-state customer experience survey [1,2,3,4,5]
- B. Review, revise and reissue Policies and Procedures [1,2,3,4,5]
- C. Define and execute a long-term ticketing solution replacement strategy [1,2,3,4,5]
- D. Implement post-ticket satisfaction survey [1,3,4]
- E. Define and begin measuring meaningful customer service KPIs [1,3,4]
- F. Enhance and update Footprints application for customer benefit as an interim improvement step prior to future replacement strategy [1,2,3,4,5]
- G. Review, revise and reissue Service Level Agreement [1,2,5]
- H. Review, revise and reissue Technology Standards [1,2,5]
- I. Develop and deliver updated Information Security training to DoF customers [1,2,4]
- J. Complete customer service training [1,3]
- K. Establish Lynda.com customer service training curriculum [1,3]
- L. Develop a customer technology training program and schedule [1,3]
- M. Develop periodic walk-through process for all customer areas [1,3]
- N. Create customer communications and collateral, including annual report with performance metrics [1,4]
Harmonize DoF and SRFS computing environments

Planning and execution of tasks necessary to harmonize the legacy DoF and SRFS computing environments is expected to take several years. While major actions, such as server consolidation, will take significant planning and capital investment prior to execution, a range of interim actions have been identified.

In 1Q19, DoF ITS will begin accelerated deployment of new computers to the balance of SRFS staff awaiting refresh of their workstations. Completion of this computer refresh cycle will bring all SRFS computers up to modern technology standards.

A project to improve remote access capabilities is currently being planned for late FY19. Additional networking infrastructure will allow more DoF customers the ability to connect to the Finance network from remote locations.

Tactical Action Plans

1. Enhance and elevate customer service levels
2. Harmonize DoF and SRFS computing environments
3. Increase DoF ITS team knowledge sharing and soft/technical skills
4. Improve DoF ITS business operations
5. Define and execute a technology roadmap with evaluation pipeline that considers best practices

Harmonize DoF and SRFS computing environments

A. Complete planning of environment harmonization. Target harmonization complete by FY22. [1,2,3,4,5]
B. Prioritize and sequence harmonization action plan [1,2,3,4,5]
C. Define 3-5 year server strategy [1,2,3,4,5]
D. Consolidate SRFS and DoF server operations and infrastructure [1,2,3,4,5]
E. Implement FMAudit to monitor DoF print fleet [1,2,3,4,5]
F. Complete a current-state versus best-practices assessment of data/infrastructure security, security policies and procedures, and end user awareness [1,2,3,5]
G. Reevaluate and rationalize current print fleet [1,2,4,5]
H. Reevaluate overall Disaster Recovery and Backup infrastructure, costs and practices [1,2,4,5]
I. Take actions necessary to support the continuing evolution of SRFS systems [1,2,3,5]
J. Complete successful migration of DoF web properties to Pantheon platform [1,2,4,5]
K. Successfully complete migration to South Bank Data Center [1,2,5]
L. Apply change management processes to minimize change friction and set customer expectations [1,2]
Increase DoF ITS team knowledge sharing and skills

Feedback amongst the DoF ITS staff indicated a need for increased knowledge-sharing and investment in technical skills development. DoF ITS management also identified opportunities to implement project planning tools to help with the ongoing flow of infrastructure and software application projects.

Customers often indicated their desire for the DoF ITS staff to have an improved understanding of various DoF business areas and their functions. To meet this request, DoF ITS staff meetings will be adjusted to include occasional DoF guest speakers and leaders with the goal of sharing operational aspects and business objectives with DoF ITS staff.

Collaboration opportunities with IT groups across campus will continue to be evaluated. DoF ITS leadership will continue its participations in existing campus IT community working groups, including the Common Solutions Group, The Centers Working Group, and IT Roundtable.

A. Focus development efforts on: Technical, Customer Service, Relationship Management, and Project Management [1,2,3,4,5]
B. Establish primary/owner and backup resources for supported technologies [1,2,3,4,5]
C. Incorporate opportunities for DoF ITS staff to learn more about DoF business areas’ function and technology needs [1,2,3,4,5]
D. Complete back-filling of open positions; onboard and train new staff promptly [1,2,3,4,5]
E. Define a career path framework for staff seeking career advancement [3,4,5]
F. Continue support and development of the IT Academy project and TechJobs@Penn [1,3,5]
G. Build and maintain a code repository [2,3,4,5]
H. Establish soft/technical skill baseline training program [1,3]
I. Identify new opportunities for cross-campus collaboration [3,5]
**Tactical Action Plans**

1. **Enhance and elevate customer service levels**
2. **Harmonize DoF and SRFS computing environments**
3. **Increase DoF ITS team knowledge sharing and soft/technical skills**
4. **Improve DoF ITS business operations**
5. **Define and execute a technology roadmap with evaluation pipeline that considers best practices**

### Improve DoF ITS business operations

Currently, some IT vendor relationships and contracts for goods and services are held outside DoF ITS. Centralization of IT vendor management will help drive additional leverage, value and innovation from key vendor relationships. In collaboration with Purchasing Services, DoF ITS will adapt the SmartSource® contract and procurement platform to DoF requirements needed to manage DoF IT vendor contracts.

Other back-office DoF ITS business process, such as budgeting, contracting, competitive bidding, project intake, and performance measurement will be reviewed and adjusted to support the execution of the strategic plan.

- A. Develop analytics for management reporting [1,2,3,4,5]
- B. Implement and adopt a project management application [1,3,4,5]
- C. Effectuate leader and backup structure for all major projects [1,3,4,5]
- D. Create a standardized DoF ITS project intake process for use in customer engagement [1,3,4,5]
- E. Complete relocation of DoF ITS team to renovated, consolidated workspace as part of Financial Systems move strategy [1,3,4,5]
- F. Segment and prioritize IT vendor supply base [2,4,5]
- G. Establish technical and business review cycle with feedback process for key vendor relationships [2,4,5]
- H. Configure and implement SmartSource® sourcing platform to manage IT contract life cycles [2,4,5]
- I. Reevaluate service desk ticket management and assignment process [1,3,4]
- J. Lead an effort to execute group computing purchases with other EVP business areas under the Collaborative Procurement initiative [4,5]
- K. Enable and train customers on independent CMS capabilities where possible [1,4]
## Tactical Action Plans

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<tr>
<td>1</td>
<td>Enhance and elevate customer service levels</td>
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<td>5</td>
<td>Define and execute a technology roadmap with evaluation pipeline that considers best practices</td>
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### Define and execute a technology roadmap with evaluation pipeline that considers best practices

The DoF technology roadmap will be reviewed and updated at least twice per year. Significant upgrades and change-outs will now be planned with up to five years’ visibility as part of the strategic plan.

All DoF websites will undergo analysis for compliance with current *Web Content Accessibility Guidelines* (WCAG) requirements in FY19. Website development efforts will include migration of legacy content to the new DoF design standards.

- **A.** ID and prioritize technologies ready for evaluation and potential change-out [1,2,3,4,5]
- **B.** Create a full-stack DoF technology roadmap [2,3,4,5]
- **C.** Consider mobile-based/push technologies in support of SRFS service strategy [1,2,3,5]
- **D.** Complete comprehensive WCAG compliance review of all DoF-managed web properties [1,2,4,5]
- **E.** Prioritize projects for server upgrades, CRM, information security, remote access, mobile technologies, and imaging re-evaluation [1,2,5]
- **F.** Continue participation in Common Solutions and collaboration with other campus technology groups [3,5]
Measuring Success

Evaluating Our Progress
Realization of the strategic plan will occur over time, with some quick-win results expected before the end of FY18. Ten measurable critical success factors (CSFs) have been identified. Aspects of these CSFs will be incorporated into DoF ITS team and individual performance objectives while the strategic plan is executed.

Measurable Critical Success Factors

1. Overall customer satisfaction improves

2. A multi-year roadmap with a technology evaluation pipeline is defined

3. Legacy DoF and SRFS computing environments are harmonized

4. DoF ITS staff benefit from increased knowledge of supported technologies, better communications, and clear understanding of (i) customer needs and (ii) the DoF technology roadmap

5. The majority of supported technology has at least one primary and one backup subject matter expert assigned

6. DoF ITS projects are managed in a comprehensive way, clearly articulating steps and responsible DoF ITS staff or extended stakeholder tasks

7. The DoF ITS Service Level Agreement, customer service Key Performance Indicators, technology standards, policies, and procedures are reviewed, revised, and re-communicated

8. DoF technology vendors, contracts, and business operations are centrally managed by DoF ITS

9. Problematic business processes are evaluated and adjusted for improvement

10. DoF ITS is fully staffed and stabilized with headcount transition and backfill hiring actions planned by the end of 1Q19

"Without continual growth and progress, such words as improvement, achievement, and success have no meaning."  
-Benjamin Franklin
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