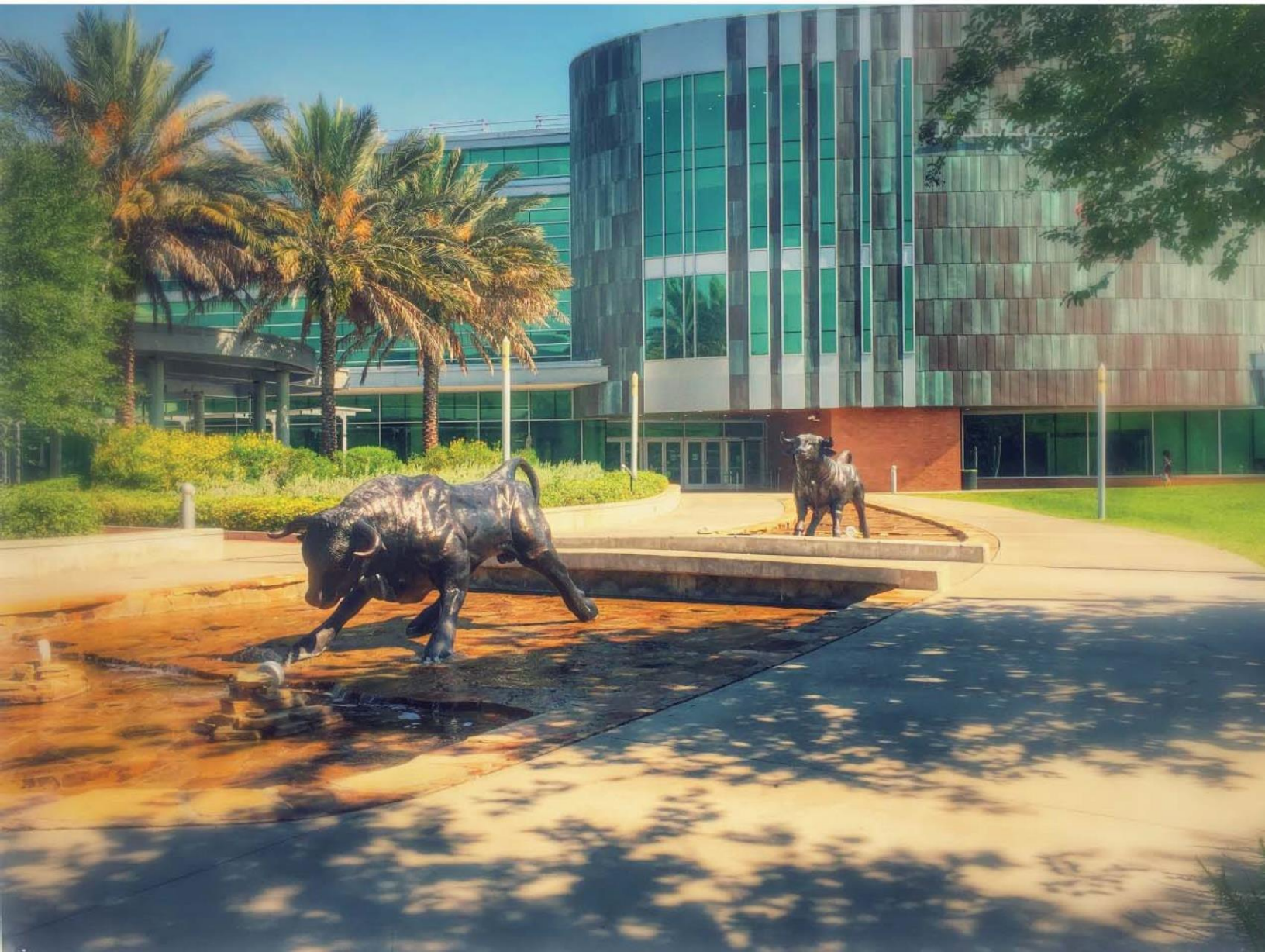# INFORMATION TECHNOLOGY
STRATEGIC PLAN
2018 - 2022

Information Technology Strategic Plan
2018 - 2022

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Introduction

USF Information Technology (USF IT) provides technology services and support for the USF System including the USF institutions in Tampa (including USF Health), St. Petersburg and Sarasota-Manatee. The IT team, led by Sidney Fernandes, System Vice President and CIO, provides the following services.

Administrative Systems: IT enables efficient administrative functions by providing systems that support the achievement of institutional goals. Services include access and management of student, clinical, business, and public safety systems as well as facilitating integration between these systems.

Client Support: IT provides clients with a digital workplace that enables effective performance. Services include desktop and software management, printers, storage solutions, research computing, and much more.

Communication Services: IT promotes information sharing through communication and collaboration, enabling the USF community to work together effectively. Services include online collaboration, video conferencing, messaging, email, event services, and digital signage.

Teaching and Learning: IT supports achievement of student success by fostering a 21st century teaching and learning environment. Services include academic support resources such as Canvas, technology in classrooms and smart computing labs, lecture capture, and more.

Analytics and Reporting: IT enables decision makers by providing a full range of reporting and business intelligence tools. Services include data analysis and mining, predictive analytics, creation of interactive dashboards, data visualization, and ad hoc reports.

Mobile and Web Services: IT empowers the USF community to engage their clients using dynamic, secure and recognizable web and mobile solutions. Services include custom application development, business process automation solutions, website hosting and management, web content management, user experience analysis, MyUSF enhancements, and mobile app development.

Consulting Services: IT assists clients in optimizing use of technology to solve challenging institutional needs. Services include research consulting, visualization, 3D modeling, project management, process improvement, new technology solution evaluations, and more.

Cybersecurity Services: IT reduces risk of cybersecurity threats by protecting USF's technology assets. Services include secure computing such as data protection and encryption, and vulnerability scans.

Judy Genshaft
President

Sidney Fernandes
System Vice President/CIO

Developing the plan

The USF System Board of Trustees requested a 5 year technology strategy in support of the USF System institutions' strategic plans. The IT leadership team, together with input and feedback from the Information Technology Management Council, developed the technology strategy for 2018 – 2022. In addition to reviewing missions and goals of all institutions within the USF System, input was gathered from students, faculty and staff to determine the technology needs of the institutions over the next 5 years. Research was performed to understand the trends in technology in Higher Education through expert organizations such as Gartner and Educause. Analysis was also conducted to evaluate the strengths, weaknesses, opportunities and threats facing USF IT today and into the future.

Next Steps

Following the review of the Technology Strategy Plan by the USF System Board of Trustees, operational plans will be developed each year within the IT organization to align resources and funds with strategic goals and initiatives. The USF IT governance process will require relevant governance work groups to review and approve or reject new initiatives as appropriate. USF IT will monitor metrics by establishing benchmarks and targets to demonstrate the progress and achievement of the strategic plan; review and update the strategy on an annual basis to ensure that it aligns with the mission and strategic goals of the USF System and its member institutions.

SWOT Analysis

Strengths

- Energetic, passionate employees who are experts in USF's institutional practices and committed to the System's success
- Developing a culture of openness and respect, inspiring a focus on client communication and transparency
- Transformation to agile processes enabling improved client engagement and responsiveness to their needs
- Improved governance processes enabling effective decision making on technology investments
- New technology infrastructure suites, including an integration platform and an intelligent business process management platform, modernizing the client experience through innovative solutions

Weaknesses

- Recruitment, talent management, and retention is hindered by outdated classification and compensation practices
- Limitations of financial resources impacts the ability to replace aging infrastructure and to invest in new systems
- Limited IT marketing and communication channels across a large, complex, client base, contribute to slow client adoption of new technology
- Limited resource capacity and multiple competing demands impede our ability to deliver timely solutions
- Multiple login credentials and authentication pathways increase the complexity for users and decrease the visibility of the systems for security purposes
- Inconsistent alignment of technology solution purchases leading to multiple solutions for the same business problem
- Data Center limitations and deficiencies jeopardize availability and reliability of core computing infrastructure

Opportunities

- Leadership focus and support to fix disjointed and siloed systems and processes needing disruptive technologies to achieve efficiencies
- Institutional costs may be reduced by emerging commodity technology services
- A digitally native student body expecting an academic experience utilizing modern technology
- Consumerization of healthcare creates opportunities to improve patient experience and outcomes
- Innovative technology tools and platforms will contribute to the success of the USF System in surpassing performance goals
- Integrating IT initiatives into the training and development of USF students, enabling them to build skills required to successfully find employment upon graduation
- Engaging with local and national industry and community partners to promote USF's brand and identify solutions for the USF community

Threats

- Constant cyber threats put University and client data, as well as the reputation of the institution, at risk
- Competition for technology talent within the SUS and market
- Evolving state funding models increases internal competition for limited resources
- State and USF procurement policies limits agility in acquisition of products and services
- Resistance to change limits the effectiveness of new technology solutions
- New regulatory mandates create additional risks and require complex controls necessary for compliance

Vision

USF IT will lead the use of disruptive technology to achieve USF System goals.

Mission

Through a culture of excellence, we partner with our clients to implement innovative and impactful technology across the USF System.

Guiding Principles

Focus on the success of our clients.

Manage institutional risk.

Advance the institutional vision utilizing disruptive technologies strategically.

Ensure complete funding of initiatives and services.

Our Values*

Focus
Because we focus on only a few things at a time, we work well together and produce excellent work. We deliver valuable items sooner.

Courage
Because we work as a team, we feel supported and have more resources at our disposal. This gives us the courage to undertake greater challenges.

Openness
As we work together, we express how we're doing, what's in our way, and our concerns so they can be addressed.

Commitment
Since we are empowered, we are more committed to success.

Respect
As we work together, sharing successes and failures, we come to respect each other and to help each other become worthy of respect.

IT Strategic Goals

The following are the strategic goals that IT will focus on to support the USF System and its member institutions in achieving their missions and strategic goals.

Student Success

Create a globally accessible, digital ecosystem that transforms the student experience and supports student retention, timely graduation and cost-effectiveness of education. This will be accomplished through:

- Modernization of our student information system

- Creation of internships and certificate programs

- Use of predictive analytics and other strategic technologies to enhance student outcomes

Research and Innovation

Provide the research community with technology solutions for world-class research in support of preeminence. Accomplish this through:

- Implementation of efficient grant management solutions

- Expansion of innovative infrastructure

- Research and education facilitator programs

- Focus on pioneering emerging technologies

Strategic Partnerships

Pursue local, national and global entrepreneurial partnerships with technology leaders to:

- Promote USF's brand

- Create academic and research technology job opportunities for students

- Establish new collaboration opportunities for the USF community

IT Strategic Goals (continued)

Provider/Patient Engagement

Create a superior patient and provider experience by:

- Leveraging cutting-edge technologies, including virtualized treatment, self-service and self-help to improve satisfaction and quality outcomes

Digital Foundation Transformation

Transform the underlying technology architecture to accommodate a digital ecosystem required by a world-class institution.

- Continue to improve the cybersecurity posture of the institution by using analytics, threat intelligence, and other innovative approaches

- Prepare for a world of expanded digitization including electronic devices of all forms (Internet of Things) using new ways of IT operations to increase productivity

- Adopt innovative talent management approaches to recruit and retain top-notch talent

- Leverage IT employees' passion and expertise in process improvement frameworks as well as the platform of technology tools that enable efficiencies, such as intelligent business process management

- Increase use and awareness of technology tools to improve the digital experience, increase self-service and reduce work effort where possible

- Seek opportunities to use digital assistance, robotic process automation, and machine learning, to scale services for a growing client base

- Embrace a "cloud first" and "mobile first" strategy

- Continually analyze existing technologies and retire those that are no longer viable

Strategic Metrics

The following metrics will be used to measure achievement of the IT strategic plan. Benchmarks will be established in year 1 and targets will be established annually.

Security Posture Index
>   Industry recognized security index, measured quarterly against peer universities

Client Satisfaction
>   Percent of clients satisfied with technology services

Calls resolved on first contact
>   Percent of support incidents resolved on the first contact with the service desk

Unplanned Effort
>   Percent of technology resource time spent on unplanned work in each quarter

ROI on Digital Foundation Ecosystem
>   Number of technology projects that yield a positive return on investment

Strategic Alignment Index
>   Measurement of the contribution of technology projects to the achievement of USF System institutions goals, determined in collaboration with the client

Planning Committee

The IT strategic plan was created by the IT leadership team in partnership with the Information Technology Management Council (ITMC) which has representation from USF Tampa, USF St Petersburg, USF Sarasota Manatee and all Senior Vice President areas.

IT Leadership Team included:

Sidney Fernandes (USF System VP and CIO)

Jenny Paulsen (Associate VP and Deputy CIO)

Patrick Gall (Associate VP and CTO)

Swapna Chackravarthy (Assistant VP – BI and Analytics)

Dan Majchrzak (Assistant VP – Research Technologies)

Alex Campoe (Assistant VP and CISO)

Jay Evans (Director - Financial Strategy)

Carrie Garcia (Director – Application Services)

Jason Hair (Senior Director – Infrastructure and Operations)

Alice Wei (Director – Digital Innovations)

Chase Holland (Associate Director – Service Management)

Brian Ippolito (Director – Infrastructure Services)

Jay Unnikrishnan (Director – BI and Analytics)

Adam Tobias (Director – BI and Analytics)

Beth Reid (Director – Business Operations)

Mary Chang (Director – Business Analysis)

Andy Wineinger (Director – Clinical Systems)

Information Technology Management Council included the following members:

Academic Affairs - Theresa Chisolm; Paul Dosal

Athletics - Yulander Wells

Business and Finance - Nick Trivunovich

Communications and Marketing - Steve Dapcic

USF System Faculty Council - Timothy Boaz; Gregory Teague

Research and Innovation - Rebecca Puig

University Advancement - Noreen Segrest; Susan Vandermast

Student Government - Alec Waid; Shaquille Kent

Information Technology - Sidney Fernandes

Library - Todd Chavez

USF Health - Rich Sobieray; Joann Stobbe

USF Sarasota-Manatee - Ben Ellinor

USF St Petersburg - Joe Trubacz

Administrative Services - Calvin Williams

*Our Values – adopted from The Scrum Guide, Ken Schwaber and Jeff Sutherland, 2017@