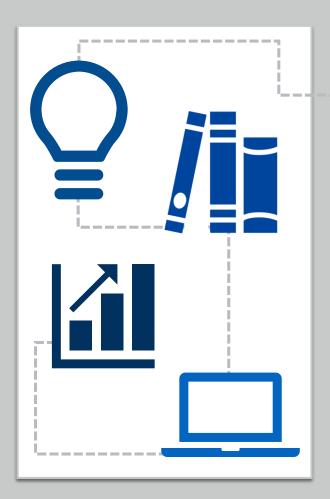


# -- STRATEGIC ROADMAPS

IT STRATEGIC PLAN





### • GOALS

Support Research & Scholarship

Facilitate Student Learning & Success

Optimize IT Resources

**Enable Administrative Excellence** 



SUPPORT RESEARCH & SCHOLARSHIP

### GOAL

The IT plan proposes to implement technologies and services to enable its strategies to increase research and scholarly activity, impact, and innovation. UD will deploy a research cyberinfrastructure that facilitates complex, data intensive research. Research networks and partnerships will enable UD researchers to move their compute intensive projects between on-premises and cloud-based resources. Expanded research computing services and data management expertise will encourage more faculty to apply research technologies to their work and maximize time available to focus on their scholarship. Improved consultative services will enable faculty in all disciplines to leverage IT capabilities, such as high performance computing or data visualization, in their scholarship.



### SUPPORT RESEARCH & SCHOLARSHIP

OBJECTIVES BENEFITS
<ol> <li>Provide high speed network connectivity from UD to research sites to national labs, supercomputing centers and regional and national institutional collaborators.</li> <li>Leverage campus cyberinfrastructure and cloud resources to provide a continuum of capabilities.</li> <li>Expand research computing support services.</li> <li>Establish funding models and governance to sustain the capabilities and responsiveness of services.</li> <li>Expanded adoption of research computing capabilities in arts, humanities and social sciences.</li> <li>More students with research experiences.</li> </ol>



### OVERALL TIMELINE - At a Glance





### PROVIDE HIGH SPEED NETWORK CONNECTIVITY

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES	
<ul> <li>Complete upgrade of network capabilities to 100GB connection speeds to UD's major research buildings.</li> <li>Identify and prioritize other campus buildings with research programs that would benefit from 100GB connection speeds.</li> </ul>	<ul> <li>Network upgrade funding to create 100GB connectivity and Science DMZ.</li> <li>Hire of Director of Networking.</li> </ul>	
<ul> <li>Complete the implementation of a science DMZ to optimize a portion of the network for high performance scientific applications.</li> </ul>	<ul> <li>On-going renewal and replacement funding to sustain the core network</li> </ul>	
<ul> <li>Improve connectivity via NYC to Internet 2 and Brookhaven labs.</li> </ul>	and expand high spend networking capabilities within buildings.	
<ul> <li>Create a partnership with other institutions or regional networks to create higher speed connections between UD and research partners in the Boston to DC corridor.</li> </ul>		
<ul> <li>Develop long-range network strategy and funding plan to facilitate continued planning and alignment of capabilities to support research.</li> </ul>		
<ul> <li>Leverage the campus master planning process to identify zones of campus requiring high spend network capabilities.</li> </ul>		



NOW	12 MONTHS	24 MONTHS	36 MONTHS
• Network upgrade and science DMZ.	<ul> <li>Improved connectivity to Internet 2 and regional research partners.</li> <li>Devise long-term network plan and funding strategy for renewal and replacement.</li> </ul>	<ul> <li>Leverage campus master plan to locate researchers requiring high-speed networking in particular buildings or zones of campus.</li> </ul>	<ul> <li>Continue to increase network connection speeds for research programs with leading edge network requirements.</li> </ul>



# PROVIDE A CONTINUUM OF HIGH PERFORMANCE COMPUTING AND DATA STORAGE CAPABILITIES

#### **MAJOR ACTION STEPS** RESOURCE DEPENDENCIES Complete faculty focus groups to identify storage requirements. Investment in on-premises storage infrastructure. Design and implement a multi-tiered approach to short and longterm data storage needs. Funding for buying compute and storage as a service for pre-Create a secured storage option for research projects. funded researchers. Complete the deployment of the new HPC cluster. Sustaining funding for long-term Develop secure pathways with pre-arranged terms and conditions data preservation to support and easy payment vehicles for researchers to configure cloud based research data management plans. resources from AWS and Azure. One-time investment to integrate Implement containers in the UD HPC environment that align with the cloud resources into campus national research resources such as XSEDE. computing environment (ordering portal, single sign-on). Develop communications and documentation to guide researchers to cloud or campus resources for compute and storage based on use cases. Create support liaisons to social science, arts and humanities departments to help faculty plan to use research technologies in their scholarship.



NOW	12 MONTHS	24 MONTHS	36 MONTHS
<ul> <li>Define storage requirements.</li> <li>Raise awareness and increase adoption of new HPC cluster.</li> </ul>	<ul> <li>Implement tiered research data storage options.</li> <li>Facilitate use of AWS and Azure cloud environments.</li> </ul>	<ul> <li>Define a data architect/advisor role in UD IT research team (also supports 1.3).</li> </ul>	<ul> <li>Continue to upgrade storage options and capacity.</li> <li>Evaluate needs for cluster upgrades or expansion.</li> </ul>
<ul> <li>Create a research IT service catalog and website in collaboration with partners.</li> <li>Develop communications and use cases to guide adoption of on-premises and cloud storage and compute.</li> </ul>	<ul> <li>Leverage containers in the HPC environment to facilitate movement of projects from UD to national research computing facilities.</li> <li>Evaluate options to form collaborative partnership to coinvest in HPC.</li> </ul>		



#### EXPAND RESEARCH COMPUTING SUPPORT SERVICES

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
<ul> <li>Hire a Director of Research Cyberinfrastructure (underway).</li> <li>Expand capabilities and capacity to work with faculty to optimize</li> </ul>	<ul> <li>Onboard Director of Research Cyberinfrastructure.</li> </ul>
applications for HPC.	• Expanded number of positions (2
<ul> <li>Create online training programs for faculty and graduate students in the use of the HPC and frequently used research software.</li> </ul>	to 3) in Research Computing to provide services to faculty (can be off-set by redeployment of
<ul> <li>Review the scope of research software applications the research IT team will support in collaboration with its UD partner organizations.</li> </ul>	positions and cost recovery).
<ul> <li>Prioritize applications and develop a network of software experts to provide consultation and training to faculty and students.</li> </ul>	
<ul> <li>Appoint a research IT liaison to each UD college to promote awareness of UD's research IT services and serve as a facilitator of research service delivery.</li> </ul>	20000
<ul> <li>Develop a rate structure and process to provide faculty with the ability to build research IT staff into their research teams.</li> </ul>	



NOW	12 MONTHS	24 MONTHS	36 MONTHS
Hire a Director of Research Cyberinfrastructure.	<ul> <li>Add developer capabilities to assist faculty to optimize applications for HPC.</li> <li>Identify a network of research application experts across UD.</li> <li>Devise a scope of services and rate structure to cost recover some UD research IT services.</li> <li>Identify research computing liaisons to colleges (also supports 1.2).</li> </ul>	<ul> <li>Create online training programs for research software and use of clusters.</li> <li>Increase participation of UD research IT support team on faculty research teams.</li> <li>Define a data architect/advisor role in UD IT research team (also supports 1.2).</li> </ul>	Add additional application development expertise in UD IT research IT team as demand warrants.



### FUNDING MODELS & GOVERNANCE

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
<ul> <li>Appoint a research computing advisory committee as part of IT governance.</li> </ul>	<ul> <li>Renewal and replacement funding to maintain network infrastructure.</li> </ul>
Benchmark and analyze alternative funding models for research computing infrastructure and services.	<ul> <li>May require seed funds to support the use of the HPC and storage</li> </ul>
<ul> <li>Establish funding strategies for data storage and compute capabilities that address pre-funded research and preserve data after a grant ends.</li> </ul>	infrastructure by faculty without grants.
<ul> <li>Create mechanisms for interested faculty to co-invest in the shared HPC environment to expand its capacity and gain priority access.</li> </ul>	
<ul> <li>Seek additional opportunities for research computing staff to participate on faculty research teams.</li> </ul>	
Continue to seek grants to fund shared infrastructure for research computing.	



	NOW	12 MONTHS	24 MONTHS	36 MONTHS
•	Benchmark funding models and analyze options.	<ul> <li>Recommend and adopt a research IT funding model.</li> </ul>	<ul> <li>Develop a multi- year forecast of research</li> </ul>	<ul> <li>Continue co- investments opportunities in</li> </ul>
•	Form a research IT governance sub- committee.	<ul> <li>Identify funding to offer baseline research computing capabilities as a core service to all faculty and graduate students.</li> <li>Continue to identify core grants or collaboration opportunities with other institutions to defray costs of research IT infrastructure.</li> </ul>	infrastructure funding requirements.	shared HPC environment with interested faculty  Continue to seek grants to fund shared infrastructure for research computing.





### GOAL

In conjunction with campus partners, the IT plan improves physical and virtual learning spaces and provides faculty with support to adopt digital learning technologies that are broader and more multi-disciplinary. It lays the technology and services foundation to support the academic strategy for online learning. Extended outreach will help more faculty and students discover digital learning capabilities. Innovation incubation programs will help early adopters evaluate emerging technologies and deploy new pedagogies. Integrated facilities and technology planning will improve baseline classroom capabilities and reflect innovations in learning space technologies in the campus master plan.



### FACILITATE LEARNING

OBJECTIVES	BENEFITS
<ol> <li>Build on the strong foundation of Faculty Commons create multi-expertise capabilities that enable sustained faculty engagement.</li> <li>Support future online learning strategy with expanded course design and development services.</li> <li>Devise a learning space master plan that promotes flexible room designs, supports varied pedagogies, and improves foundational capabilities important to the learning experience.</li> <li>Create innovative spaces to leverage digital technologies in concert with campus master plan.</li> </ol>	<ul> <li>Greater access to expertise and support to enable broader adoption of effective digital learning technologies.</li> <li>Expanded competencies and capacity to create fully online courses.</li> <li>Learning spaces meet minimum quality standards.</li> <li>An integrated room planning, funding and upgrade process</li> <li>A comprehensive room condition inventory.</li> <li>Support and spaces for faculty and student innovation</li> <li>Improved faculty and student satisfaction</li> <li>Better room utilization</li> <li>Improved student learning outcomes</li> </ul>

### OVERALL TIMELINE - At a Glance

NOW	12 MONTHS	24 MONTHS	36 MONTHS
Assess space Establish Gov	_		
	Address deficient spaces, cre integrated room planning p		
	Develop long-range learning space master plan, add collaboration spaces and active learning rooms		
			more specialized spaces an innovation seed fund



# BUILD ON FACULTY COMMONS TO EXPAND SUPPORT

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
Develop an expanded catalog of course development, design, technology and assessment services that faculty would value.	<ul><li>Funding for grant program.</li><li>Investment to create innovation</li></ul>
• Expand the expertise resident in the Faculty Commons in partnership with the Library, Institutional Research, CTAL and UD IT. Create a	space.  • Additional resident staff in the
<ul> <li>staffing plan to enable experts to be on-call in the Commons.</li> <li>Develop a brand identity and promote the new expanded Faculty</li> </ul>	Expanded Faculty Commons (could be redeployment or
Commons as a resource center.	additions).
and pilots of new learning technologies.	<ul> <li>Marketing and communication budget or expertise to promote awareness of effective learning</li> </ul>
<ul> <li>Create an innovation lab or innovation learning space to enable faculty and students to pilot new learning technologies and pedagogy.</li> </ul>	technologies and services.
<ul> <li>Develop a communications and outreach strategy to raise awareness of digital learning resources and effective practice.</li> </ul>	



NOW	12 MONTHS	24 MONTHS	36 MONTHS
Establish the mix of services in the Faculty Commons.	<ul> <li>Expand expertise in the Faculty Commons.</li> <li>Design the staffing plan to create access to crossfunctional expertise.</li> <li>Develop an identity for the expanded Commons and a communications strategy to raise awareness.</li> </ul>	<ul> <li>Develop an innovation grant program.</li> <li>Devise communications, outreach and awareness programs to highlight digital learning capabilities and share successful practices.</li> </ul>	<ul> <li>Issue innovation grants.</li> <li>Design and raise funds for an innovation lab/prototype teaching space.</li> </ul>



### 1.2

### SUPPORT FUTURE ONLINE LEARNING STRATEGY

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
Contribute to the development of the University's future online learning strategy.	<ul> <li>Hiring additional instructional designers.</li> </ul>
<ul> <li>Hire additional instructional designers to insource more course development and design work and alter the scope of partnership with external partners.</li> </ul>	• Funding for third party provider of 24x7 support services to students.
• Evaluate external partners to office 24x7 technology support and general student help desk service for online learners.	
<ul> <li>Collaborate with Office of the Provost, deans and faculty to identify criteria to prioritize the work of instructional designers and establish a focus for development of online courses.</li> </ul>	

	NOW	12 MONTHS	24 MONTHS	36 MONTHS
de Un	pport the evelopment of the niversity online tategic plan.	<ul> <li>Collaborate with academic leadership to identify priorities for new online courses and programs.</li> <li>Begin hiring additional instructional designers.</li> <li>Define requirements for 24x7 support and assess options.</li> </ul>	<ul> <li>Complete hiring of expanded instructional design team.</li> <li>Implement 24x7 support for online learners.</li> </ul>	Evaluate need for additional instructional designers or technology support based on growth of online enrollments and programs.



### 1.3

### DEVISE A LEARNING SPACE MASTER PLAN

N	IAJOR ACTION STEPS	RESOURCE DEPENDENCIES
•	Review the EDUCAUSE Learning Space Rating system and select it <i>or</i> develop an alternate rubric to assess learning spaces.	<ul> <li>Staff time to conduct room condition inventory.</li> </ul>
•	Apply the selected rubric to inventory the condition of all learning spaces (University and college controlled).	<ul> <li>Increased budget to invest in learning space</li> </ul>
•	Appoint a learning spaces governance sub-committee.	maintenance and upgrades.
•	Merge the planning processes and learning space maintenance budgets of FREAS, UD IT and the Registrar to create an integrated room maintenance and upgrade planning and prioritization process.	apgrades.
•	Develop a multi-year plan for room upgrades based on condition data.	
•	Prioritize and launch a remedial maintenance program to upgrade foundational capabilities in learning spaces – power, sound, wireless, projection, and writing spaces.	2000
•	Devise new learning space standards to apply to all general purpose classroom and guide baseline capabilities in college learning spaces.	
•	Implement standards for baseline capabilities for all spaces to promote consistency and ease of use.	



NOW	12 MONTHS	24 MONTHS	36 MONTHS
<ul> <li>Adopt a room rating rubric.</li> <li>Form a learning space governance sub committee.</li> </ul>	<ul> <li>Assess room conditions.</li> <li>Plan remediation of substandard spaces.</li> <li>Remediate substandard spaces.</li> <li>Create a room maintenance and upgrade planning and funding process led in collaboration by FREAS, UD IT, Registrar led .</li> </ul>	<ul> <li>Complete remediation of spaces.</li> <li>Plan a multi-year upgrade of other learning spaces.</li> <li>Develop new learning space standards for general and college specific rooms.</li> </ul>	Execute long-term room upgrade master plan.



### CREATE INNOVATIVE SPACES

N	IAJOR ACTION STEPS	RESOURCE DEPENDENCIES
•	Identify areas in existing buildings where common spaces can be converted to collaboration spaces with addition of outlets, furniture and display screens.	<ul> <li>Investment funds for grant program.</li> </ul>
•	Create a collaboration space design standard to inform future renovations and new spaces.	<ul> <li>Investment funds to expand collaboration spaces.</li> </ul>
•	Increase the number learning spaces that can support problem based learning in partnership with Colleges.	<ul> <li>Incorporation of funding to outfit collaboration spaces</li> </ul>
•	Create additional general purpose spaces that can be used for large enrollment classes.	and new space designs in capital budgets allocated to implement campus
•	Create more virtual software options to support students who bring their own device.	master plan.
•	Convert most general computer labs into specialized spaces for testing, access to specialized technologies or specialized teaching spaces (e.g., data science labs).	
•	Create labs or moveable capabilities that allow spaces to incorporate infrequently needed learning technologies for particular class meetings (e.g., AR/VR carts).	
•	Create a grant program to seed new types of spaces or to co-investment with Colleges in new learning space designs that pilot features that could migrate to all spaces.	<b>100000</b>



		A A -	
NOW	12 MONTHS	24 MONTHS	36 MONTHS
Rationalize plan	<ul> <li>Prioritize opportunities to expand collaboration spaces.</li> <li>Provide input to campus master plan to address needs for flexible room designs, large enrollment class spaces, and collaboration spaces.</li> </ul>	<ul> <li>Create additional collaboration spaces around campus.</li> <li>Increase the number of learning spaces that support problem based learning.</li> <li>Create digital learning capabilities on a cart capabilities to bring technologies tike AR/VR to rooms as needed.</li> <li>Design innovation space grant program.</li> </ul>	<ul> <li>Expand support for bring your own device.</li> <li>Convert additional general labs into specialized teaching and assessment spaces.</li> <li>Raise funds for and implement innovation grant program to coinvent in new space designs and emerging technologies.</li> </ul>



### ENABLE ADMINISTRATIVE EXCELLENCE

### GOAL

The IT plan sets a roadmap for the core administrative technologies that support student and administrative services and enables operational excellence. In 2027, PeopleSoft, the University's major administrative system, will be phased out by its vendor. As this date approaches, the software will become more costly to maintain and fall further behind leading capabilities and practices. This goal sets a roadmap to upgrade PeopleSoft and address acute gaps in other administrative technologies. It prepares the University to move to the next generation of student information (SIS) and enterprise administrative systems (ERP). Strategies create the technological and organizational capacity to streamline processes and enhance user experiences with digital services.

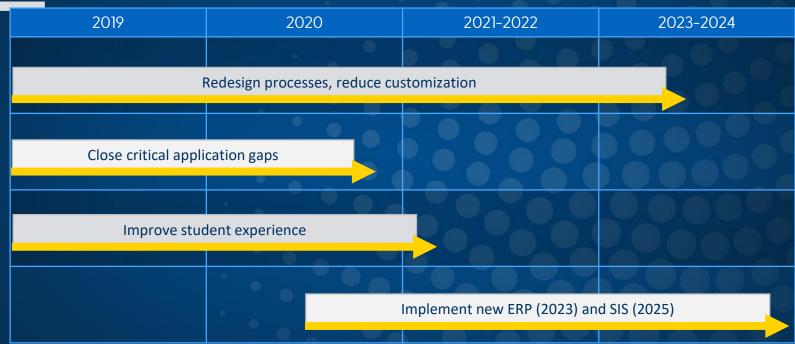


### ENABLE ADMINISTRATIVE EXCELLENCE

<ol> <li>Improve the student experience and lay the groundwork for the next generation student information systems.</li> <li>Close critical capability gaps and extend the life of the current Peoplesoft software implementation.</li> <li>Deploy business intelligence capabilities to improve transactional reporting and enable advanced analytics.</li> <li>Replace the ERP by 2023 and the student information system by 2025.</li> <li>Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> <li>More efficient processes.         <ul> <li>Increased student satisfaction.</li> <li>Expanded digital processes and services.</li> <li>Growth in research and online learning with scalable administrative services.</li> <li>More sustainable, scalable and adaptable technologies.</li> <li>Reduced effort on manual processing.</li> <li>Improved process productivity metrics.</li> <li>More cost-effective compliance.</li> </ul> </li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved organizational capacity to leverage administrative technology.</li> </ol>		
<ul> <li>groundwork for the next generation student information systems.</li> <li>Close critical capability gaps and extend the life of the current Peoplesoft software implementation.</li> <li>Deploy business intelligence capabilities to improve transactional reporting and enable advanced analytics.</li> <li>Replace the ERP by 2023 and the student information system by 2025.</li> <li>Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> <li>Increased student satisfaction.</li> <li>Expanded digital processes and services.</li> <li>Growth in research and online learning with scalable administrative services.</li> <li>More sustainable, scalable and adaptable technologies.</li> <li>Reduced effort on manual processing.</li> <li>Improved process productivity metrics.</li> <li>More cost-effective compliance.</li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved organizational capacity to leverage</li> </ul>	OBJECTIVES	BENEFITS
<ul> <li>implementation.</li> <li>3. Deploy business intelligence capabilities to improve transactional reporting and enable advanced analytics.</li> <li>4. Replace the ERP by 2023 and the student information system by 2025.</li> <li>5. Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> <li>scalable administrative services.</li> <li>More sustainable, scalable and adaptable technologies.</li> <li>Reduced effort on manual processing.</li> <li>Improved process productivity metrics.</li> <li>More cost-effective compliance.</li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved organizational capacity to leverage</li> </ul>	groundwork for the next generation student information systems.  2. Close critical capability gaps and extend the	<ul> <li>Increased student satisfaction.</li> <li>Expanded digital processes and services.</li> </ul>
<ul> <li>improve transactional reporting and enable advanced analytics.</li> <li>4. Replace the ERP by 2023 and the student information system by 2025.</li> <li>5. Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> <li>technologies.</li> <li>Reduced effort on manual processing.</li> <li>Improved process productivity metrics.</li> <li>More cost-effective compliance.</li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved organizational capacity to leverage</li> </ul>	implementation.	scalable administrative services.
<ul> <li>information system by 2025.</li> <li>5. Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> <li>More cost-effective compliance.</li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved process productivity methods.</li> <li>More cost-effective compliance.</li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved organizational capacity to leverage</li> </ul>	improve transactional reporting and enable	technologies.
<ul> <li>Support the redesign of business processes, invest in new technology systems that support improved business processes, and reduce the complexity of the current application portfolio.</li> <li>Resource shift from maintenance to enhancement projects.</li> <li>Improved organizational capacity to leverage</li> </ul>		improved process productivity memics.
	invest in new technology systems that support improved business processes, and reduce the	Resource shift from maintenance to enhancement projects.



### OVERALL TIMELINE - At a Glance





### 1.1

## REDESIGN PROCESSES AND REDUCE COMPLEXITY OF CURRENT SYSTEMS

focus on immediate process redesign, long-term systems replacement and continual improvement.  • Hire or redeploy to create additional business analysts positions in UD IT.  • Training in business	alyst positions. rovement consulting
governance to improve efficiency and reduce complex custom workflows.  • Document m	usiness process at methods. nanagement solution. opleSoft HR self service



### . |

	2019	2020	2021-2022	2023-2024
•	Process redesign – HR, Research Admin, Finance	<ul><li>Expand business analyst capacity</li><li>Reduce HR Finance customizations</li></ul>	Continued process improving implementation of new Fi	



### ADDRESS CRITICAL GAPS IN ADMINISTRATIVE PORTFOLIO

N	IAJOR ACTION STEPS		RESOURCE DEPENDENCIES
•	Complete selection of solutions for immediate priorities – budget development, business intelligence (analytics), mobile application framework, HR recruiting, HR employee relations.	•	Funding for one-time and recurring costs of all new software applications.
•	Plan and sequence implementation of immediate priorities.	•	Sequencing of implementation
•	Evaluate, select and plan implementation of an identity and access management solution.	7	efforts to fit within current project management and IT resource availability and/or additional
•	Evaluate, select and plan implementation of a solution for pre-award research administration and related research compliance processes.		consulting and contract resources.
•	Evaluate the costs and benefits of implementing an electronic commerce solution for procurement as a bridge strategy or as part of long-term ERP upgrade; implement outcome of analysis.		
•	Complete the selection of new help desk ticketing and evaluate the potential implementation of a single service desk software solution for IT, HR, finance and student service questions.		

	2019	2020	2021-2022	2023-2024
•	Page Up (HR)	eResearch Admin		
•	Mobile framework	• Identity		
•	Budget system	Management Evaluate		
•	Business Intelligence	eProcurement		
•	Document management			



#### IMPROVE THE STUDENT EXPERIENCE

N	IAJOR ACTION STEPS		RESOURCE DEPENDENCIES
•	Implement additional mobile services for students via app and responsive web sites.	•	Internal or external resources to improve mobile apps and
•	Upgrade SIS to PeopleSoft 9.2.		websites.
•	Review use of Slate in undergraduate and graduate to optimize configuration and consider moving to a single implementation.		Process improvement projects facilitated by internal or external business analysts to improve
•	Select and implement a optical character recognition (OCR) scanning solution for student related forms.		student processes that cross organizational areas (e.g. on-
•	Streamline new student onboarding experience by maximizing the sharing of information across offices.	•	boarding).  Acquisition and implementation
•	Expand the sharing of student data across UD CRM platforms that track interests and engagement.		costs of a (OCR) scanning solution.
•	Evaluate the role of the campus card as a tool to track student engagement with campus activities and services.	7	
•	Develop a vision for the future student experience as groundwork for selecting next generation SIS solution.		

	2019	2020	2021-2022	2023-2024
٠	Expand mobile services	<ul> <li>Expand mobile services</li> </ul>	<ul> <li>Envision the studer experience of the</li> </ul>	nt l
•	PeopleSoft Upgrade	Slate Optimization	future	
•	Constituent Relationship Management Strategy			



### REPLACE ERP AND SIS

N	AJOR ACTION STEPS		RESOURCE DEPENDENCIES
•	Leverage Strategy 1 to improve processes and build organizational capability to position UD to successfully implement next generation systems.	•	Consulting assistance to support chart of accounts
•	Continue to monitor maturation of cloud ERP/SIS offerings; periodically review developments with IT governance to fine tune time horizon for implementation.		design and visioning of the student experience.
•	Conduct preparatory activities such as high level redesign of chart of accounts and development of student services vision.	į	Consulting assistance for requirements development and ERP/SIS selection.
•	Partner with administrative units to develop long-range staffing plans to support implementation and prepare for managing future ERP/SIS solutions.		Multi-year investment in implementation of new SIS
•	Develop requirements and use cases to evaluate ERP/SIS options.	7	and ERP.
•	Conduct a structured review of solution options and evaluate pros and cons of single vs. multiple solutions for ERP and SIS.		
•	Refine one-time and recurring costs to move from current ERP/SIS to next generation software as a service solutions.	Ć	
•	Initiate RFP to select ERP and SIS solutions (could be multiple procurements) and implementation consultants.		
•	Develop detailed implementation plans and begin transition to new ERP (by 2023) and new SIS (by 2025).		



2019	2020	2021-2022	2023-2024
Rationalize plan	<ul><li>Initiate software options analysis</li><li>Articulate vision, and use cases</li></ul>	<ul> <li>HR &amp; finance implementation SIS strategy</li> </ul>	SIS implementation



### GOAL

To further operational excellence, the IT plan also introduces mechanisms to improve existing IT services and creates a framework to better organize responsibility for services among IT organizations. The goal strategies create efficiencies, provide a more consistent service experience for faculty and students and reduce information security risks. Most importantly, this goal creates transparent mechanisms to govern services to promote accountability and establish trust in University-wide IT services.

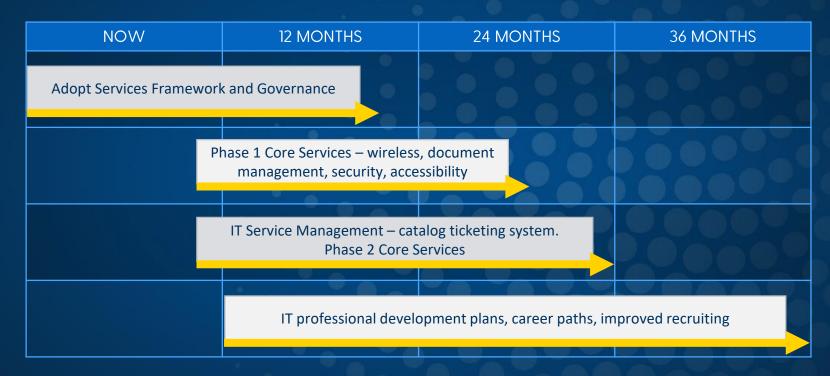


### **OPTIMIZE IT SERVICES**

OBJECTIVES	BENEFITS	
<ol> <li>Adopt structured framework to categorize services.</li> <li>Begin transition to core services for enterprise applications, major infrastructure, critical infrastructure,</li> </ol>	<ul> <li>Establish consistent service across the University.</li> <li>Elimination of duplicative solutions that unnecessarily introduce cost or risk.</li> <li>Greater transparency and accountability for services.</li> <li>Proactively managed services throughout their lifecycle.</li> <li>Continued development of the skills of the IT workforce to align with strategy.</li> <li>Positively ingrained culture that values service, agility, diversity, equity and inclusion.</li> <li>Improved employee recruitment and retention.</li> <li>Reduced IT spend on commodity services.</li> <li>Increased satisfaction with services.</li> </ul>	



### OVERALL TIMELINE - At a Glance





#### CREATE A SERVICES FRAMEWORK

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
<ul> <li>Communicate and adopt the services framework of core, consortium and specialized.</li> </ul>	Requires staff time but no new investment.
Apply the framework to confirm services that are or should be core.	
Define a process to propose, vet and approve a new core service.	
<ul> <li>Confirm the initial target list of core services – document management, enterprise applications, wireless networks, accessibility tools and training, security monitoring and training.</li> </ul>	



NOW	12 MONTHS	24 MONTHS	36 MONTHS
Communicate and adopt the services framework of core, consortium and specialized.	<ul> <li>Define and implement a process to propose, vet and approve a new core service.</li> </ul>		
Apply the framework to confirm services that are or should be core.			
Confirm the initial target list of core services.			



#### BEGIN IMPLEMENTATION OF CORE SERVICES

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
<ul> <li>Develop detailed definitions of the scope, service levels and technology solution for initial core services (see 4.1)</li> </ul>	<ul> <li>Investment in technology if new core service isn't currently at the</li> </ul>
<ul> <li>Evaluate if solutions or funding needs to be changed to meet the service levels of the core service.</li> </ul>	University (e.g., document management).
<ul> <li>Identify overlapping solutions that need to be phased out for each core service.</li> </ul>	<ul> <li>Reallocation of budgets to fund the core service and discontinue alternative solutions.</li> </ul>
<ul> <li>Develop timelines and task to transition technologies and funding practice to align with new core service.</li> </ul>	diferrative solutions.
<ul> <li>Identify second wave core services and begin developing action plans to implement (e.g., email, calendaring, collaboration tools).</li> </ul>	

NOW	12 MONTHS	24 MONTHS	36 MONTHS
Develop detailed definitions of the scope, service levels and technology solution for each core service.	<ul> <li>Implement service scope definitions and funding plans for each initial core service (defined in 4.1).</li> <li>Plan the implementation of new core services for wireless, document management, accessibility support.</li> <li>Plan phase 2 core services including email and calendaring.</li> </ul>	<ul> <li>Implement wave 2 core services.</li> <li>Transition funding and restructure budgets as needed to support wave 1 core services.</li> <li>Retire overlapping or duplicative solutions.</li> </ul>	



# IMPLEMENT SERVICE MANAGEMENT AND GOVERNANCE

MAJOR ACTION STEPS	RESOURCE DEPENDENCIES
Appoint an IT services sub-committee.	Additional training in IT service
Develop a sub-committee of the ITLC to vet initial proposals for core services to test interest and to broker potential collaborations across	management frameworks and methods.
IT groups.	• Ticketing system (already funded).
<ul> <li>Implement a service catalog to establish common naming conventions and definitions of services.</li> </ul>	
Appoint service owners (or owners of families of services).	
Complete the selection and implementation of a shared service management and ticketing system for all of UD.	



	NOW	12 MONTHS	24 MONTHS	36 MONTHS
•	Appoint an IT services sub-committee.  Complete selection of IT Service. management and help desk software.	<ul> <li>Implement a service catalog.</li> <li>Appoint service owners.</li> </ul>	<ul> <li>Continue to expand the service catalog and improve the service management life- cycle process.</li> </ul>	



#### DEVELOP THE IT WORKFORCE

N	IAJOR ACTION STEPS	RESOURCE DEPENDENCIES
•	Create structured professional development plans for IT professionals in UD IT and across the University.	<ul> <li>Additional professional development.</li> </ul>
•	Benchmark IT compensation levels.	Training and programs to
•	Collaborate with HR to develop career paths for IT professionals that include both managerial and technical expert paths.	promote diversity, equity and inclusion.
•	Develop more nimble hiring process and proactively cultivate sources of candidates.	<ul> <li>Adjusted compensation levels for hot skill positions.</li> </ul>
•	Examine position descriptions and job advertisements to better promote the opportunity to work I the IT community at UD.	posmons.
•	Create programs to encourage students to become part of the UD IT workforce upon graduation.	
•	Develop improved methods to enable IT professionals to pursue career paths that have them working in multiple IT groups and parts of the University.	2000
•	Raise awareness of the importance of diversity, equity, measure the climate, and take actions to improve the ability of the workforce to create a positive culture and climate.	



	NOW	12 MONTHS	24 MONTHS	36 MONTHS
•	Raise awareness of the importance of being an organization and IT	<ul> <li>Develop professional development plans for all IT staff.</li> </ul>	<ul> <li>Re-survey the culture and climate to measure improvement.</li> </ul>	
	community that welcomes diversity, equity and inclusion.	<ul> <li>Conduct a market analysis to benchmark compensation.</li> </ul>	<ul> <li>Develop career paths to recognize management and technical expertise.</li> </ul>	
ľ	Convene a staff advisory committee	<ul> <li>Partner with HR to streamline hiring.</li> <li>Review position descriptions and ads to better promote IT jobs at UD.</li> </ul>	<ul> <li>Create student employee career paths that lead many towards entry level positions in a UD IT organization.</li> </ul>	