VCU SOMTech
School of Medicine

THE DRIVE TO EXCELLENCE

STRATEGIC PLAN

FY21 - FY23

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EXECUTIVE SUMMARY

The VCU School of Medicine Technology Services (SOMTech) team has made rapid and substantial advancements in its operations and service model since its inception over 20 years ago. Originally set up as a decentralized and siloed team, a 2019 reorganization urged for the consolidation of fragmented units, reinforced governance and accountability, and a push to modernize practices and technologies for greater agility.

| **1999**
Decentralized
IT across SOM | **2004**
SOMTech
formed | **2009**
IT Audit
Conducted | **2019**
Organizational
Restructure | **2020**
Strategic Plan and
Service Catalog
Published |

The services and products pioneered by SOMTech are broadly and concurrently utilized by VCU Health, VP for Health Sciences, School of Dentistry, School of Pharmacy, School of Nursing, College of Health Professions, Virginia Institute for Psychiatric and Behavioral Genetics, Center for Clinical and Translational Research and MCV Physicians. SOMTech's value to the institution is extraordinary and undeniable, but its mission and service model are often understated or misunderstood.

To remedy the information gap, SOMTech initiated a strategic planning process in January 2020, with the assistance of VCU Technology Services, with two main deliverables: 1) an official **IT Service Catalog** and 2) a **Strategic Planning** document. The SOMTech IT Service Catalog provides an organized and curated collection of all business and information technology related services, which also illustrates the broad spectrum of our talents and capabilities. It will serve as a vital tool in the storytelling of our team's collective proficiencies, which many in leadership and in external groups are largely unaware of.

Subsequent interviews with SOMTech leadership and staff produced a service improvement document, which was designed to instill a customer-focused service management approach to IT and shape our eventual strategic plan. The outcomes of both efforts identified challenges in providing services, areas for service improvements and how to best direct those recommendations into tangible targets and goals, which this strategic plan encapsulates.

As these concurrent efforts proceeded and ultimately concluded, additional and more complex challenges emerged. The ongoing COVID-19 pandemic, national economic downturn, ongoing civil unrest and protests in Richmond have produced a turbulent and uncertain ripple effect for the School of Medicine and SOMTech by extension. We must demonstrate agility, adaptability and, perhaps most critically, innovation and resilience to successfully weather those challenges and demonstrate our decisive role in the success of our colleagues across the School of Medicine.

Likewise, as the speed of technology innovations, security threats and their associated risks have increased, SOMTech must be prepared to continuously transform with a risk-averse posture while maintaining operational excellence to ensure high-quality service delivery. This strategic plan aims to capture that innovative and resilient spirit, which we must embody, as we **drive to excellence.**

For 2020 and beyond, SOMTech will continue its transformation while seeking a disciplined advancement of its maturity model. As we continue to progressively grow closer to the established models of more mature academic medical center (AMC) IT counterparts, we will continuously assess our people, culture, processes, structures, tools and technology innovations to better serve the academic, clinical, research and administrative mission of the School of Medicine.

This three-year strategic plan, the first of its kind for SOMTech, faithfully adheres to both VCU and the School of Medicine's vision, values, mission and commitments to organizational excellence and distinction and will push SOMTech to a more mature and resilient service model.

In harmony with the School of Medicine's core values of innovation and technology, and VCU's Quest 2025 plan to be recognized as a preeminent national urban public research university and academic health center, SOMTech will serve as a recognized driver of information technology leadership and excellence for VCU, accelerate the evolution and adoption of innovative technology at VCU, and act as a strategic business partner that will empower the success of our colleagues across the academic, research, administrative and clinical enterprise.

THE FY21 - FY23 STRATEGIC PLAN DEFINES FIVE KEY PRIORITIES FOR SOMTECH:

1 POSITION Academic Technology Services as a campus leader in audiovisual technology and fortify standard operations.

2 DIVERSIFY Web & Application Services portfolio and formalize processes for growth and enhanced visibility.

3 MODERNIZE and strengthen the processes, tools, technologies, and collaborative opportunities of Client Services to enable shared success.

4 INVEST in the growth, expansion and support model of Research Systems to augment the academic research enterprise.

5 INFUSE a disciplined Project Management approach into SOMTech's culture to ensure SOM goals are realized.

Each of these priorities is linked to specific SMART (Specific, Measurable, Attainable, Relevant, Time-bound) goals with measurable milestones. While ambitious, these goals are achievable and necessary for SOMTech to evolve. For this roadmap plan to succeed, all teams and team members must come together across boundaries and play an important role in its realization. Each goal will be assigned to the unit supervisors; the contributing staff and partners needed to accomplish each goal will also be identified.

These leaders and the contributing units will be assessed on their performance by School of Medicine Dean's Office leadership and the School of Medicine IT Steering Committee (ITSC). The successful execution of the strategic plan will rely heavily on our implementation process, and also frequent and timely assessment combined with constant action and attention to the accomplishment of our SMART goals.

Our strategic plan, when successfully executed, will enable a dramatic advancement of SOMTech's profile and demonstrate our valued commitment to faculty, staff, students and partners. It is a plan full of ambition, optimism and confidence. Our plan will enable us to boldly own our identity as a premier technology organization for VCU.

We affirm and recognize that SOMTech must manifest disciplinary excellence and challenge ourselves to transform into a world-class organization that continues to deliver superior services to VCU. As information technology professionals who serve the healers, scientists, faculty and learners, we must foster and nurture a culture of innovation, celebrate diversity and equity while practing inclusion to bring dignity and respect to our work.

We maintain a responsibility to condemn racism and discrimination in all its forms and to uphold the School of Medicine's core values of human dignity and of mutual, unconditional respect.

If we are to both remain relevant and attract the highest caliber of information technology professionals to our team, we must ensure that our culture is one of excellence and that our values pervade in everything that we do so that every person can attain their full potential and no one is disadvantaged from achieving this potential by their social position, group identity or any other socially determined circumstance.

MISSION, VISION, AND CORE VALUES

Our mission, vision and core values augment the School of Medicine's stated mission, vision and values and demonstrate SOMTech's role in realizing our shared destiny.

MISSION	VISION	CORE VALUES
To improve health for all through exceptional and innovative discovery, training and patient care. **SOM**	We will be known for the outstanding contributions of our trainees, faculty, staff and alumni in research, education and patient care.	• Education and lifelong learning • Respect and integrity • Diversity and inclusion • Communication and collaboration • Innovation and technology • Community engagement
To deliver high quality, modern, creative and innovative IT products and services which empowers the School of Medicine in its quest for exceptional and innovative discovery, training and patient care. **SOM Tech**	We will serve as a recognized source of information technology leadership and excellence for VCU, accelerate the adoption of modern technology and act as a strategic business partner who will empower the success of our colleagues across the academic, research, administrative and clinical enterprise.	• Education and lifelong learning • Respect and integrity • Diversity and inclusion • Communication and collaboration • Innovation and technology • Community engagement through partnerships

MISSION

The missions of SOMTech and the School of Medicine are naturally linked and ultimately lead to the same destination: **exceptional and innovative discovery, training and patient care** across the educational, research and clinical domains. SOMTech's presence will be ubiquitous across all SOM departments and we will at the forefront of delivering high quality, modern, creative and innovative IT products and services to empower our faculty, staff and students. The product and services offerings detailed in our SOMTech Service Catalog represent the full arsenal of tools, teams and technology we will leverage to fulfill both mission statements. As the needs of the SOM evolve, SOMTech will recalibrate its tools, services and technologies to accommodate our users and ensure an optimal alignment with the mission.

VISION

SOMTech's presence serves the School of Medicine and VCU in multiple ways. Our accomplishments and successes rely heavily on the combined talents and strengths of our diverse workforce, making us an attractive place to work for innovative professionals who excel in their roles as technology leaders, developers, web specialists, engineers, technicians and systems analysts. With a bold vision to:
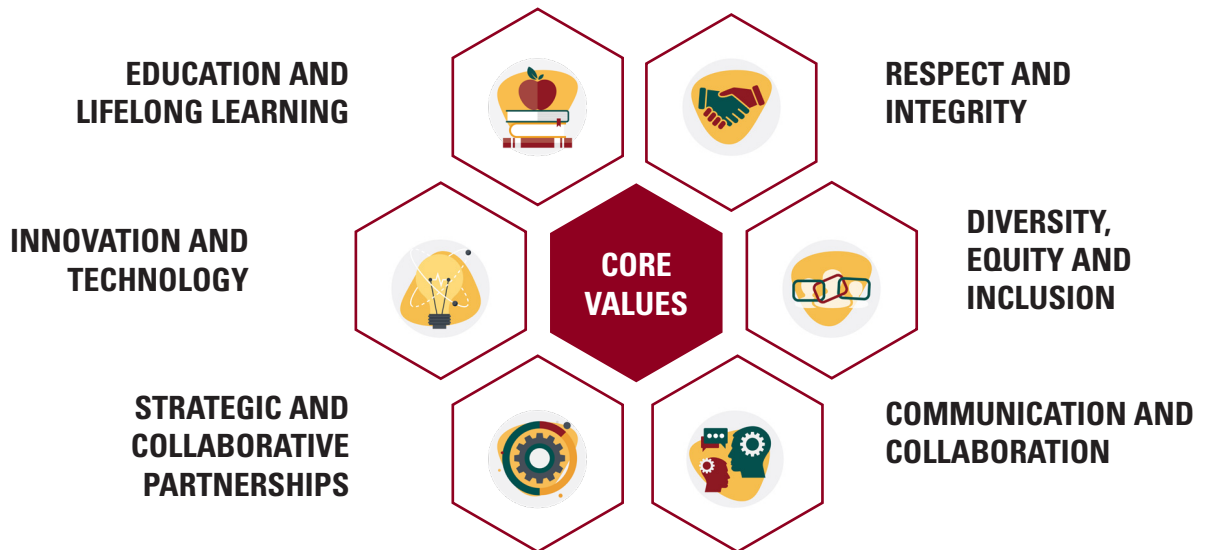
Serve as a recognized source of information technology leadership and excellence for VCU

Accelerate the adoption of modern technology and to

Act as a strategic business partner who will empower the success of our colleagues across the academic, research, administrative and clinical enterprise for a **world-class experience**

We seek to inspire, attract and lead others in innovation, creativity, product development, communication, and interdisciplinary teamwork.

EDUCATION AND LIFELONG LEARNING

RESPECT AND INTEGRITY

INNOVATION AND TECHNOLOGY

CORE VALUES

DIVERSITY, EQUITY AND INCLUSION

STRATEGIC AND COLLABORATIVE PARTNERSHIPS

COMMUNICATION AND COLLABORATION

In order to continuously improve, we must **live** our values in our culture. The culture of a university is a shared system of values, beliefs, and attitudes that shapes and influences behavior. It is disseminated through the organization from top to bottom and, in order to continuously improve, these values must guide our actions, behaviors and planning. We must ensure that our mission, vision and core values are consistently part of our lived experience and that we continue to practice everything we champion.

We live these values through our teamwork and mutual trust, professional development opportunities, positive working relationships with faculty, staff and students, collaborative and active engagements with internal and external partners and positively uplifting our colleagues when they need support or encouragement.

STRATEGIC PRIORITIES

The five key priority areas identified for the strategic focus of SOMTech will advance the academic, research and clinical domains of the SOM as they are initiated over the course of the next three years. Each priority is aligned with our mission, vision and core values and have been assigned specific SMART (Specific, Measurable, Attainable, Relevant, Time-bound) goals with measurable milestones:

PRIORITY #1: Position <u>Academic Technology Services</u> as a campus leader in audiovisual technology and fortify standard operations.

A key ingredient for faculty and student success are the high-quality, seamless, technical and audiovisual logistical support for teaching, learning and event spaces provided by SOMTech across the School of Medicine. The 2020 pandemic and resulting quarantine only magnified and heightened the criticality of having a robust and well-resourced Academic Technology Services group. Users heavily depend on the AV&C and Simulation Technology teams for expert consultation and training, reliable and steady resource management, and the efficient balancing of operational needs against those resources. By fortifying its current operational processes and addressing its longstanding historical needs, the Academic Technology group will be well-positioned to assert itself as a premier campus leader in audiovisual technology and logistical expertise.

PRIORITY #2: Diversify the <u>Web & Application Services</u> portfolio and formalize processes for growth and enhanced visibility.

The tools, original products and services developed by the Web & Application Services group are routinely and seamlessly used by nearly every member of the School of Medicine on a daily basis. With a reputation for exceptional web and application development services and innovative, informatics solutions to advance the business mission, teaching, learning, assessment and strategic decision making for the SOM, new opportunities for growth have presented themselves but have not yet been fully attained. To scale and surge ahead using its collective talents, the Web and Application Services teams can both engage in a targeted portfolio diversification and a formalization of nascent processes to ensure

steady growth. The Application Services (AS) team, specifically, will continue to elevate SOMTech's credibility and profile through AAMC presentations, publications, research and scholarship with prominent academic and technology venues. The homegrown, creative products and services developed by this group can help propel the SOM to greater national recognition.

PRIORITY #3: Modernize and strengthen the processes, tools, technologies and collaborative opportunities of <u>Client Services</u> to enable shared success.

Often praised as the 'backbone' of SOMTech's common, core services and front-line essential workforce, Client Services steadfastly provides the endpoint management, desktop and general computing support to ensure an uninterrupted continuity of service for all spheres of the academic, administrative, research and clinical missions of the SOM. The greatest potential for the SOM and Client Services resides in the modernization of the processes, tools and innovative technologies deployed by this team to make daily work and business processes less complicated and more efficient for all faculty, staff and students. By doing so, we enable an across-the-board shared success for all colleagues which helps maximize productivity and reduce or eliminate downtime with the SOM workforce. As more users telework and as more flexible, automated and secure solutions are demanded by departments for everyday issues, the success of Client Services will not only be central to the success of SOMTech but pivotal for the entire VCU-VCU Health ecosystem.

PRIORITY #4: Invest in the growth, expansion and position of <u>Research Systems</u> to augment the academic research enterprise.

The School of Medicine accounts for almost half of VCU's sponsored research awards and for 87% of the university's National Institutes of Health funding. In recent years, the school has seen a nearly 40% increase in the number of grants submitted to the National Institutes of Health and an increase in awarded NIH grant dollars during a time when many research institutions are seeing a decrease in funding. The substantial and intensive research technology and computing needs of SOM investigators, support staff and laboratories cannot be overstated. To fulfill the scientific,

clinical and translational research computing needs of SOM investigators as well as the University Strategic Research Priorities Planning (SRPP), the SOM must invest in the growth, expansion and strategic positioning of a SOMTech Research Systems team in coordination with broader enterprise research computing initiatives. This new team will concentrate its focus on the application of a nimble, highly responsive service model with specialized and diversified technical skillsets to augment the SOM academic research enterprise.

PRIORITY #5: Infuse a disciplined <u>Project Management</u> approach into SOMTech's culture to ensure SOM goals are realized.

Consistent and disciplined program and project management is the nucleus of all of the working parts because every successful initiative must be anchored to a coordinated plan of action. Contrary to the misconception of project management adding more bureaucracy and slowing productivity, its proper application has demonstrated efficacy with increasing reputational integrity, enhancing customer satisfaction, maximizing competitive advantage over undisciplined approaches and reducing risk to the organization. The organizational culture of the SOM and SOMTech shapes how our colleagues work together in pursuit of common goals. An IT culture which supports and actively works to improve project management processes, measure its own progress with robust metrics, recognize and become self-aware of needed behavioral course corrections to improve decisions and actions, will be more likely to witness the successful execution of its overall goals and mission.

SMART GOALS

PRIORITY #1: Position <u>Academic Technology Services</u> as a campus leader in audiovisual technology and fortify standard operations.

AV & CLASSROOM (AV&C)

TARGET YEAR	GOAL
FY21	**A.** Implement Cherwell to track all recurrent issues, service requests and escalation workflows; ensure all SOM departments and users are trained on usage and escalation policy. **B.** Develop SLAs with SOM departments and align tools and software to better enable work at remote locations. **C.** Develop actionable metrics, reporting and customer feedback mechanisms.
FY22	**D.** Fully integrate all SOM departmental AV equipment into the LCR program to standardize the purchasing and procurement process with recommended packages; integrate AV equipment into Lansweeper or Cherwell for asset management. **E.** Research and provide report on the potential for shared-services between VCUHS, MSS and SOMTech to support areas such as digital signage, high-use event and other common areas used by SOM/VCUHS.
FY23	**F.** Complete full ownership audit for all SOM, VCU Health, and VPHS spaces with standard reservation process. **G.** Evaluate progress on the MMEC 5-year AV Equipment refresh plan and make updated recommendations to SOM leadership.

SIMULATION TECHNOLOGY

TARGET YEAR	GOAL
FY21	**A.** Complete research and tool implementation for tracking mannequin utilization. **B.** Implement a revised, streamlined and fully integrated room scheduling process and reservation system with a public dashboard. **C.** Develop actionable metrics, reporting and customer feedback mechanisms.
FY22	**D.** Integrate technology purchases into the LCR or another standardized purchasing and procurement process.

PRIORITY #2: Diversify the <u>Web & Application Services</u> portfolio and formalize processes for growth and enhanced visibility.

APPLICATION SERVICES (AS)

TARGET YEAR	GOAL
FY21	**A.** Complete full integration and user training of Cherwell to track all recurrent issues, service requests and escalation workflows. **B.** Develop actionable metrics, reporting and customer feedback mechanisms. **C.** Enact a disciplined, internal project management process to assist with requirements gathering, accurate forecasts of projected software development time and labor and scope estimates for user consultations.
FY22	**D.** Institute a centralized and standardized Master Services Agreement (MSA) for all major AS software products which are either sold, distributed or shared; develop a standardized distribution process for Innovation Gateway engagements. **E.** Develop a robust knowledge base for new systems, training program and curriculum to train and support customers over the lifetime of an application. **F.** Establish recurring productivity meetings with VCU Health EA team, Integration & App Development Team, and/or the CCTR IT teams to reinforce relationships and data needs. **G.** Develop an internal training program for AS team members for cross training on applications portfolio; implement resource allocation and project matrix within SmartSheets to increase internal collaboration amongst team members and share workload, knowledge, and resources.
FY23	**H.** Hire an additional business analyst or junior PM to ensure consistent customer relationship management during projects and after go-live. **I.** Fully implement and leverage standardized DevOps tools and processes to transform product development and product delivery; eliminate ambiguity, adhere to a documented development process/workflow, formalized release and deployment process. **J.** Establish a well-rounded portfolio of tools and service offerings to cement the discipline of Education Informatics within the SOM; medical education data warehouse, SIM-EHR platform, VR development, instructional design and other innovative technology, research and development to advance learning outcomes and impactful scholarship. **K.** Complete full analysis, recommendation, development and launch of new, major enterprise application systems for the SOM (e.g., Learning Management System, Admissions System, FARES, SWP) while retiring and sunsetting applications of limited utility and use.

WEB SERVICES & COMMUNICATIONS

TARGET YEAR	GOAL
FY21	**A.** Establish recurring coordination meetings with VCU Health Web Marketing team to reinforce relationship and support Faculty directory needs, digital asset sharing and ownership. **B.** Develop and research end-user and client-side satisfaction surveys to measure, track and aggregate qualitative analytics for client success and user satisfaction. Implement at least 1 survey by end of FY. **C.** Formalize a more rigorous project management methodology to balance large site build projects against other operational needs to increase work efficiencies. **D.** Expand the role, engagement and interactivity of the Web Community of Practice to empower SOM departments.
FY22	**E.** Develop a governance body and policies to seamlessly integrate with the broader SOM communication strategy. **G.** Develop an intranet landing page in alignment with internal communications capabilities. Develop a robust knowledge base, training program and curriculum to train and support customers over the lifetime of a website and educate them on self-service, website management roles and responsibilities. **H.** Hire a junior analytics specialist to implement a full suite of web/UX analytics tools and testing methodologies to manage live websites for continuous improvements.
FY23	**I.** Create a robust digital asset management (DAM) system with centralized meta-tagging and ownership/sharing of assets. **J.** Develop a fully-formed web and digital strategy and three-year roadmap for website development and refreshes. **K.** Develop original scholarship on web governance and best practices for web teams in medical schools.

CLIENT SERVICES (CS)

TARGET YEAR	GOAL
FY21	**A.** Implement a full suite of SmartSheet tracking spreadsheets and other project management tools to modernize Client Services' operations for transparent decision making. **B.** Develop SLAs with SOM departments to manage expectations and align tools and software to better enable work at remote locations. **C.** Develop actionable metrics, reporting and customer feedback mechanisms.
FY22	**D.** Develop a robust knowledge base, training program and curriculum to train and support both internal team members and customers on standard operating procedures and support methods. **E.** Create additional opportunities for staff and leadership to cooperatively integrate and work together via hubs, special projects or other areas of recurring and increased responsibility for CS positions. **F.** Develop clear and documented processes and tools to simplify incident queue management, new employee onboarding, escalation paths, purchasing and granting of administrative rights. **G.** Working alongside Research Systems, establish a comprehensive ROI project and budget proposal for converting and migrating multiple SOM departments and users into a SOM VDI infrastructure; create roadmap for new staffing and additional skillsets required. **H.** Expand internal cross training, professional development and support for either research computing systems and/or other specialized systems (Linux, Active Directory, DevOps, endpoint tools, etc). **I.** Develop a cohesive and simplified plan to explain and offer an optimized mix of on-premise, hosted and cloud services for file storage and backup.
FY23	**J.** Expand the LCR program and dashboard to include SOM servers, AV equipment, and a centralized SOM software catalog and inventory.

PRIORITY #4: Invest in the growth, expansion and position of <u>Research Systems</u> to augment the academic research enterprise.

RESEARCH SYSTEMS (RS)

TARGET YEAR	GOAL
FY21	**A.** Establish recurring and organized workgroup meetings to support the enterprise implementation of the VCU Research Computing Center (RCC).
	B. Develop a high-quality, innovative and specialized research IT catalog, vendor/external partnerships and a portfolio of services to augment the broader VCU academic research enterprise.
FY23	**C.** Work with CS to develop a fully robust knowledge base, training program and curriculum to train and support users on specialized instrument support and other research computing specialties.
	D. Hire new specialist personnel to provide comprehensive support, evaluations and consultations with implementing specialized research technology needs including storage, high performance computing, cloud (AWS, Azure, Google), virtual environments and/or designing and building new services and infrastructure.

PRIORITY #5: Infuse a disciplined <u>Project Management</u> approach into SOMTech's culture to ensure SOM goals are realized.

PROJECT MANAGEMENT OFFICE (PMO)

TARGET YEAR	GOAL
FY21	**A.** Establish recurring productivity meetings with SOMTech units to reinforce PM processes and support any ongoing strategic needs which the PMO can fulfill.
	B. Create a centralized SLA catalog and portfolio of all existing SOMTech work agreements and contracts to be periodically reviewed by the SOM IT Steering Committee (ITSC).
FY22	**C.** Develop a custom, PM Essentials training program and curriculum to train, educate and support internal staff and customers on roles and responsibilities, using proper methodologies and best practices standards to ensure successful completion of projects, terminology, estimating schedules and determining project costs.
FY23	**D.** Develop an annual "State of the Team" formal report on the state of SOMTech's staffing, technical capabilities and utilization of technologies, and determine any areas of weakness or areas where the PMO may be operating in a position of strength or weakness. The annual report will advocate for the right type and amount of resources to properly and sufficiently support the goals of the SOM.
	E. Develop a fully integrated, intelligent dashboard to monitor and measure multiple quantitative and qualitative KPIs for SOMTech units which will identify areas for improvement and corrections.

IMPLEMENTATION AND ASSESSMENT PROCESS

For this roadmap plan to ultimately succeed, all teams and team members must come together across boundaries and play an important role in its realization. Each of the stated priorities is linked to SMART (Specific, Measurable, Attainable, Relevant, Time-bound) goals with measurable milestones. Each goal will be assigned to the respective SOMTech unit supervisor(s); the contributing staff and partners needed to accomplish each goal will also be identified.

These leaders and the contributing units will be assessed on their performance by the Office of the Dean leadership and the School of Medicine IT Steering Committee (ITSC). The successful execution of the strategic plan will rely heavily on not only our implementation process, but also frequent and timely assessment combined with constant action and attention to the accomplishment of our SMART goals.

Our implementation plan must also engage the relevant stakeholders to closely coordinate the execution of our strategic priorities with our budget process and decisions. The implementation will involve tactical plans and the responsible persons for each SMART goal will detail the role and actions of our SOMTech staff and stakeholders, within a given time frame, and will outline where and when further investment will be needed to achieve our strategic priorities.

The Assistant Dean of Technology Services is ultimately responsible for the articulation, strategy, execution and attainment of the vision represented in the plan. The Senior Associate Dean for Finance & Administration, as the principal authority over SOMTech, will consult with other SOM executive leadership, such as the chief of staff, to review quarterly progress on the plan. Each SMART goal will have a principal responsible leader who will review progress more frequently on her/his SMART Goal.

As assessment by the SOM ITSC will be key towards leading to strategy change and new initiatives, and will be a central part of our plan going forward. Our assessment results will be reviewed by the SOM ITSC in addition to the and Dean of School of Medicine annually. As circumstances and environmental variables may change, the Leadership teams involved in the assessment process will maintain flexibility with the strategic plan and its associated goals in order to allow SOMTech to successfully evolve and adapt.

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