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# Information Technology Committee Update to Exec Council

November 20, 2025



Advancing  
*together*

# Overview of the Information Technology Committee

**Purpose:** The committee serves as a **faculty advisory group** that **gathers technology needs** across the school, works closely with Information Technology to **organize** these needs, and **communicates** them to leadership to support institutional decision making. This ensures leadership has a clear view of pain points and areas with the greatest potential impact.

**Structure:** Faculty representation from **4 IT sub-committees:**

- Basic Science
- Clinical Research
- Academic Affairs
- ForHealth

A new cross-cutting sub-committee focused on artificial intelligence is being formed to address AI needs that span all schools and departments.

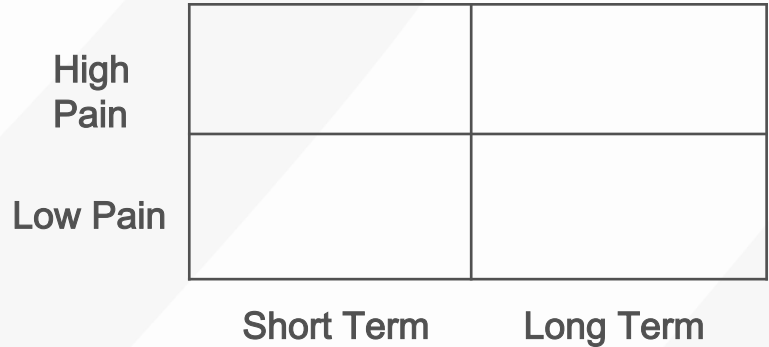
# Quadrant Framework for Organizing IT Needs

## Why we use it

- Helps turn faculty feedback into clear, actionable categories
- Organizes needs by pain level and time horizon
- Reveals which issues are urgent, which require planning, and which can be addressed opportunistically
- Gives leadership a structured view of where attention will have the greatest impact

## How it is applied

- Used consistently across all ITC subcommittees
- Creates a unified method for comparing needs in research, education, basic science, and ForHealth
- Supports transparent prioritization and informed decision making



# Level of Effort for Subcommittee recommendations

Size	Calendar Time	People	Cost ('000)
XS	< 1 week	1	< 5
S	1 week - 1 month	1 - 3	5 - 15
M	1 - 3 months	3 - 7	15 - 50
L	3 months - 1 year	7 - 15	50 - 250
XL	> 1 year	> 15	> 250

# Basic Science 4 Quadrant

High Pain

Low Pain

<p>Strategic opportunities:</p> <ul style="list-style-type: none"> <li>• GPUs for AI and ML research (L)</li> <li>• Storage for data during research (L)</li> <li>• Platforms to share research data (NIH requirement) (L)</li> </ul> <p>Tactical opportunities</p> <ul style="list-style-type: none"> <li>• Security updates interrupt instruments (M)</li> <li>• Security software slows down workstations (M)</li> <li>• Network problems in Science Buildings</li> <li>• Confirm IT costs covered by F&amp;A (?)</li> </ul>	<p>Strategic opportunities:</p> <ul style="list-style-type: none"> <li>• Research data storage strategy (XL)</li> <li>• HPC needs growing long term (M)</li> <li>• Training on use of science applications (e.g., AlphaFold) (M)</li> <li>• Subject matter expert support for science applications (L)</li> </ul> <p>Tactical opportunities:</p> <ul style="list-style-type: none"> <li>• Secure older systems running instruments (L) Software Containers for reused codes on HPC (M)</li> </ul>
<p>Strategic opportunities:</p> <ul style="list-style-type: none"> <li>• Manage paid software licenses (Schrodinger, SciFinder, Slack)</li> </ul> <p>Tactical opportunities</p> <ul style="list-style-type: none"> <li>• Curated research software for easy reuse (e.g., AlphaFold) (M)</li> <li>• Remote access to instruments(?)</li> <li>• Reduce Job failure on HPC cluster (S)</li> </ul>	<p>Tactical opportunities</p> <ul style="list-style-type: none"> <li>• Integrate Instruments with electronic lab notebooks (ELNs) (?)</li> <li>• Insure persistence of ELN data (?)</li> <li>• Improve usability of ELNs (?)</li> </ul>

Short Term

Long Term

# Clinical Research 4 Quadrant

High Pain

- **Usage & Costs:** Researchers cannot track PLUM usage or expenses, making grant planning and resource management difficult → Need a real-time dashboard.
- **Researcher Support:** RIC lacks access to help investigators inside PLUM → Give them the ability to provide direct support.
- **Data Integration:** PLUM cannot bring in outside datasets, which limits multi-site and external collaborations → Enable secure external data import.
- **Virtual Workspace Costs:** Annual cost of secure virtual workspaces (~\$50K) puts advanced analytics out of reach for many researchers → Explore subsidies or institutional support. (TBD) ~\$10k for students addressed.

- **Reporting Tools:** No PHI-approved reporting limits the ability to share findings with clinical teams or regulators → Build secure dashboards.
- **Reusable Pipelines:** Each project recreates workflows for handling large, complex data → Develop reusable pipelines to accelerate research.

Low Pain

- **AI Infrastructure:** No clear path for high-compute AI/ML research with EHR data → Standardize cloud options so investigators know what's approved.
- **Budgeting:** No catalog of approved cloud services or costs slows proposal development → Create an inventory to support faster, accurate budgeting.

- **Cloud Integration:** Limited interoperability between AWS and Azure slows multi-site studies → Simplify integration across platforms.
- **De-ID Processes:** Current de-identification of multimodal data (images, text, structured) is slow and inconsistent → Develop efficient, standardized methods to ensure compliance and enable sharing.

Short Term

Long Term

# Academic 4 Quadrant Chart

High Pain

- Build Education Data Lake (XL)
- Build a sustainable model for student access to UMMH systems\* (L)
- Develop a plan for the use of AI in Research and Academics (M)
- Establish an AI Literacy program across the 3 schools (M)
- Analyze student evaluations with the use of AI (pilot) (M)
- Drive data integrations with external entities i.e., NBME, ExamSoft, Learning Space (L)
- Consolidate the management of UMass Chan Futures (L)
- Implement Document Management System\* (M)
- Hire Slate Administrator (M)

- Power outlets in Amp 1 – with facilities (M)
- Equitable access to technology-enabled space (M)
- Replacement of secure online exam system (L)
- Acquisition of online exam proctoring system (L)

Low Pain

- Student input on academic needs\* (S)
- Enrollment and Admissions Management Technologies – Dashboard reporting, forecasting, AI for comparative study in Admissions (pilot) (L)
- Analyze and provide feedback on student clinical notes via AI (pilot) (L)
- Develop a plan for the Administrative uses of AI (S)
- Clarify and document IT vs Business costs (S)

- Procure an Academic Event Management System (L)
- Incorporate an AR/VR model into Academic Technology services (XL)
- Develop a program/database to track curricular changes (L)

Short Term

Long Term

# ForHealth 4 Quadrant

High Pain

- Federal and state program changes (TBD)
- Social Security Administration audit (TBD)
- Partner phishing incidents (TBD)
- Skill/capacity gaps, staff augmentation procurement/contracting (TBD)
- Sales and business growth requirements (TBD)
- Incident response and communication (M)
- Financial tracking and reporting (TBD)
- Application technical debt (XL)
- Process improvement and automation (TBD)
- Data and document storage (M)
- IT and data governance (L)

Prioritize  
now

- Federal and state program changes (TBD)
- Enterprise application architecture and platform strategy (M)
- Enterprise data architecture (TBD)
- Accessibility (L)
- Enterprise portal and document management capabilities (L)
- AI and automation strategy (M)
- BC/DR for high priority applications (XL)

Or  
action

Low Pain

- Application inventory (M)
- Windows 11 upgrade and hardware refresh (M)
- Office move (L)
- Acceptable use/plan for administrative AI (M)

Address opportunistically now

- Cohesive cloud strategy (M)
- International opportunities (GDPR) (XL)
- Reporting and analytic tool standards (M)
- Proactive training and skill development (M)
- Market intelligence (TBD)
- End-user telephony (L)

Or

Short Term

Long Term



# IT Priorities

## Strategic Prioritization & Planning

- Urgent, high-impact IT projects “**high pain - short-term**” targeted for FY26, not just “quick wins”
- Multiple tactical IT initiatives are already underway

## Compliance & Security

- Preparing a business case for **GDPR** compliance (costs/research needs)
- Remote access and legacy equipment security addressed with network quarantine zones

## Infrastructure & Investment

- Budgets allocated and procurement underway for GPUs and research data storage

## Data Integration & Researcher Support

- Focus on improving integration/governance of research data across platforms
- **Ongoing enhancements:** Plum dashboards, research workspaces, AlphaFold training
- **Action:** Follow-up meeting to address data integration and sharing challenges

# Next Steps

**Continue with funded FY26 priorities and priorities that can be addressed without additional funding**

## **Alignment with Budget Calendar for FY27**

- Need completion by December 2025
- Dean validation in January
- Meetings with Budget team in February
- Executive review in March