

# MULTI-YEAR TECHNOLOGY PLANNING PROCESS GUIDELINES

July 2023

## Information for FY24 Planning

### Technology Planning Overview

Technology continues to be an essential component of—and source of change to—how members of the Harvard community experience teaching, learning, living, and working at Harvard University. The pandemic and new technologies, such as generative artificial intelligence (AI), have accelerated this change and showed the need for greater coordination of technology investments to create a more cohesive ecosystem for faculty, students, staff, and researchers. Harvard has a unique opportunity to make careful and effective IT investments across its distributed system to position the University for a sustainable future. The Multi-Year Technology Planning (MYTP) process aids Harvard in providing our faculty, students, staff, and researchers with the best possible digital campus. It helps each school / unit identify the key investment decisions they need to make to advance their respective priority areas of growth, change, and reinvigoration, and it will aim to harmonize them with University investments and priorities. Examples of such investments that have shared impact are infrastructure investments, security, and privacy enhancements.

As was the case last year, the FY24 MYTP process will engage school and University leadership in making strategic investments to ensure that significant IT projects across schools, units, and Central Administration are shepherded in a coordinated and purposeful way and that the University is well positioned for the digital future. Through the MYTP and increased coordination, Harvard will gain visibility into what significant investments are being made and leverage central investments in a way that is financially beneficial and avoids duplication or wasted investments. The MYTP process will also help enhance the Harvard community's digital experience by supporting a more integrated technology ecosystem for faculty, students, staff, and researchers.

Through the MYTP process, school, unit, and central IT leadership will be better positioned to:

- Enhance the effectiveness of IT investment procurement, utilization, and management
- Improve renewal and replacement planning and ensure an appropriate pace of investment in IT to support Harvard's mission
- Support the evergreening of IT and keeping investments up to date
- Uncover potential risks, including in areas other than IT security, such as those associated with IT outsourcing or vendor relationships, to ensure Harvard's operations and reputation are protected
- Pinpoint areas in need of additional support from the Central Administration
- Share information and lessons learned across IT investments and schools/units

FY23 was the first year and a pilot year for the MYTP, building on prior submissions that schools and the Central Administration completed in the past as part of the Integrated Planning for IT (IPIT) process. Our focus was on minimizing the impact on schools, providing transparency, and having robust conversations about plans and improvements to the process. We gained important insights about shared needs and themes of technology interest that resonated across traditional school and unit boundaries. Last year's planning question, focused on customer relationship management (CRM) needs and plans, provided new information that formed the foundation of project funding conversations that followed.

The FY24 MYTP process will be similar to last year's, though we have made a number of changes in response to community feedback and our own observations.

Contact information for MYTP and resources:

Heather Lantz

Senior Director, Office of Technology Strategy and Planning (OTSP)

[OTSP@harvard.edu](mailto:OTSP@harvard.edu)

[heather\\_lantz@harvard.edu](mailto:heather_lantz@harvard.edu)

<https://huit.harvard.edu/mytp>

## **Development of School / Unit Technology Plans**

### **A. Timeline**

#### **Summer / Fall MYTP:**

Schools / units will submit their Multi-Year Technology Plan by emailing to [OTSP@harvard.edu](mailto:OTSP@harvard.edu) the two MYTP components: 1) a spreadsheet of planned and needed technology investments, using the provided template and 2) the narrative element of the MYTP. Complete MYTPs are due on September 29, 2023, consistent with the due date for Multi-Year Financial Plans (MYFP).

To meet the submission date, it is recommended that schools / units meet with their leadership and stakeholders during the summer to review the information they plan to include in their MYTPs. The OTSP is available for questions and support throughout the MYTP preparation period.

The OTSP will informally engage with schools / units to clarify information after the submission of materials in the October timeframe. Meetings with school / unit and University leadership may also be scheduled, as relevant.

#### **Winter / Spring MYTP:**

For next fiscal year plans, the OTSP may reach out to schools / units for additional detail (in the form of a 1-year Technology Plan, or TP). Initial MYTP and specific 1-year TP (if needed) may undergo a Technology Risk Assessment coordinated by OTSP to assess the security risks and potential integration requirements with University IT infrastructure. Results will be shared with the school / unit and University leadership, who will have final approval authority.

The MYTP process will go by the following high-level timeline:

<b>Date</b>	<b>Activity</b>
Summer 2023	The Office of Technology Strategy and Planning (OTSP) distributes Technology Planning Guidelines to schools and units alongside the Multi-Year Financial Planning (MYFP) process.
September 29, 2023	Concurrent with MYFP, schools and units submit Multi-Year Technology Plans (MYTP) to OTSP by September 29, 2023, using a template spreadsheet and the school's/unit's prior-year plan. A complete MYTP includes both the spreadsheet of planned and needed investments and the narrative component.
October / November 2023	OTSP reviews the MYTP submissions, holding follow-up meetings as necessary.

<p>Winter 2023-24</p>	<p>OTSP and senior leadership reviews are ongoing after submission. OTSP shares information with the Deans, Administrative Deans, Financial Deans, CIOs, the EVP, and the Provost.</p> <p>OTSP provides Technology Risk Assessments as needed, which will be due in March/April.</p> <p>If needed, school / unit Technology Plans (TP) are submitted by February 28, 2024; final adjustments to the TP submissions are made by March 15, 2024.</p> <p>A draft MYTP summary is shared with schools / units.</p> <p>A final MYTP summary is shared with Deans, the EVP, and the Provost.</p>
<p>Spring 2024</p>	<p>The University MYTP is presented to the Corporation.</p> <p>OTSP meets with schools, units, and stakeholder groups to assess the past year's MYTP process and obtain suggestions for consideration for future planning efforts.</p>

## B. FY25-27 MYTP and FY25 TP Development Guidance

The specific IT investments to be included in the Multi-Year Technology Plan (MYTP) should be those that the school / unit has already made or committed to, as well as new IT investments the school / unit hopes to advance during FY25-27, which are most critical for ensuring effective IT operations. This is inclusive of projects that are already underway and that will have activity during the FY25-27 time period.

The following questions may help schools / units think about which technology projects and investments to include in multi-year technology plans:

- What technology investments planned (or desired) for the next three years are strategically significant for the school or department?
- What technology plans or needs will impact central IT groups or other areas **or** be of potential interest to others for collaboration and/or co-investment?
- Are there any technology investments that may require institutional risk mitigation?

## C. Submissions

A complete submission includes the following elements:

MYTP overall narrative	
<ul style="list-style-type: none"><li>• School/unit strategic plan, if available, and how the MYTP enables that</li><li>• How the school/unit MYTP priorities align with that plan/planning</li><li>• Qualitative and supporting information about the plans and needs included in the MYTP spreadsheet submission</li><li>• Response to this year's planning question (regarding generative AI needs/investments)</li></ul>	
Specific technology investment information (one entry per investment)	
Overview information: <ul style="list-style-type: none"><li>• Description, including business challenges to be solved or opportunities to be realized</li><li>• Impact to students/faculty/staff/researchers/systems</li><li>• Plans to ensure cyber security and data privacy</li></ul>	Check-boxes and short-form fields: <ul style="list-style-type: none"><li>• Investment overview (category, purpose, funding status, etc.)</li><li>• Vendor information (if applicable)</li><li>• Estimated total cost; likely funding source</li><li>• Estimated useful life</li><li>• Whether aspirational; whether included in the MYFP</li><li>• Anticipated schedule</li></ul>

### Narrative:

The MYTP should include a narrative that provides information about the school / unit's strategic plan, if one is available, and how the investments that comprise the school / unit's MYTP align with and support that strategic plan. Even if there is not a specific school / unit strategic plan, schools / units should provide information about technology planning in their area and how technology will support the vision

and goals of their area's leadership in the coming years. The narrative component of the MYTP is enormously valuable to understanding the school's / unit's technology vision and needs.

Similar to how the MYFP process includes an annual scenario planning exercise, each year the MYTP may highlight a particular aspect of technology planning for deeper reflection. This could be used to build out information about areas of emerging need across the University or to facilitate connections to ITCRB or other projects. For this year's MYTP process, schools / units are asked to share information about emerging artificial intelligence use and investment:

What projects are you planning or conceiving that leverage or may leverage AI? Are there areas where you are looking for help? What sort of current or planned spending on AI are you seeing in your school/unit?

### **Information about Specific Investments:**

#### Overview Information (MYTP):

A description of the investment, including business challenges it will address, opportunities to be realized, key collaborators, and framing or background information that will add context should be included.

The fiscal year(s) of anticipated activity, the investment type (new, enhancement, operations/maintenance), and the name of the associated vendor(s) (as relevant) should also be included.

#### Plans to Ensure Cyber Security, Data Privacy, and Accessibility (MYTP):

Include information about plans to ensure cyber security, data privacy, and accessibility in specific investments that are part of the MYTP. (As always, all technology investments are required to comply with [Harvard's Information Security Policy](#), which may be a resource for answering this question.) Questions that will need to be addressed before the investment is made may be included.

#### Estimated Total Cost (MYTP):

Schools / units should try to estimate the total cost of IT projects with a focus on external costs (hardware, software, new hires, and consulting). Estimates of internal (operational) costs are not expected. Approximate costs and ranges can be included.

To estimate total costs, schools / units are encouraged to include:

- One-time investment costs (e.g., hardware, software, implementation costs)
- 3-year recurring operating costs (e.g., subscription services, ongoing labor costs)

Schools / units are also asked to estimate spending by fiscal year. As with the total cost, approximate amounts and ranges can be included. **Schools / units are expected to include a specific cost estimate or anticipated range for FY25 projects or needs.**

The OTSP is available to assist in estimating total costs and encourages schools / units to begin this step early in the planning process.

Funding Status (MYTP):

The funding status of the investment should be indicated: if funding has not yet been requested; if there is a proposal for funding in development; or if funding has been allocated for the activity, and if it has been approved for ITCRB funding.

Funding Source (MYTP):

Describe the likely source of funding for the investment, or funding sources to be explored.

Optional FY25 Forecast (TP Only):

If needed, as part of 1-Year Technology Plan (TP) submissions in February only, schools / units can provide more detailed cost estimates for expenses expected to occur in FY25, such as:

- Specific information needed for Technology Risk Assessment (TRA)
- Costs:
  - Initial cost of hardware / software / service
  - Cost of staffing support / maintenance (e.g., additional staff, training, etc.)
  - Other expenses

The OTSP is available to assist in detailed cost estimates.

Estimated Useful Life (MYTP):

Schools / units should provide the estimated useful life of the technology or IT service (less than 1 year, 1-5 years, greater than 5 years). Estimated useful life should be considered prior to investing and is an important consideration within the context of school / unit and institutional strategic priorities, given the rapidly changing operating environment. In general, the useful life of hardware purchases is up to 5 years. Full services commonly have useful lives of 5+ years and their ongoing maintenance and renewal have ongoing operating impact, including staffing needs.

Aspirational (MYTP):

Schools / units are asked to differentiate between individual *planned* and *aspirational* technology / IT service investments. Aspirational investments can provide a helpful context for long-term goals. Aspirational investments provide schools / units with the opportunity to raise awareness of identified needs and to start the process of building a case for change to share with other schools / units, Central Administration, and University leadership. An aspirational entry could be an emerging need, an IT

investment that a school / unit hopes to be able to advance but that doesn't have a clear sponsor or funding source, an investment that a school / unit hopes will be undertaken at a cross-University level, and so on.

Placeholder (MYTP):

Schools / units should include "Placeholder" technology, IT investments, or budget allocations in the MYTP when specific details are not yet available or when the projects are smaller in scope and impact. This is a similar concept to MYFP and MYCP.

Investment Purpose (MYTP):

Characterization of investment purpose is requested for each technology or IT service investment in MYTP and TP submissions. Schools / units should select the most appropriate characterization based on the following:

1. "Required for Safe and Effective Operations (Including Compliance Mandates)" – those technology or IT services that are critical to the fundamental security and effectiveness of school / unit operations, such as:
  - IT or data security risks
  - Complying with federal, state, or local laws or other regulations
  - Complying with University policy requirements
2. "Essential for Fulfilling Existing Core Activities" – those technology or IT services that support functionality and systems sustainability, such as:
  - Student learning – systems required to support learning modalities
  - Faculty teaching – systems required to support teaching in evolving modalities
  - Research – systems required to support or advance research, including systems to meet compliance and reporting obligations
  - Renewal
3. "Central to Achieving School / Unit Vision" – those technology or IT services that enable the school / unit in achieving its mission
4. "Necessary for Cost Savings / Efficiency" – those technologies or IT services deemed valuable and useful that are largely driven by financial or efficiency considerations. The primary purpose of these technologies or IT services is to reduce current or future operating expenses, such as:
  - Replacement of inefficient or insufficient administrative tools (e.g., local budget planning and administration system / tools, local data management system / tools)
  - Outsourcing an administrative service to a third-party provider
  - Other
5. "Important to Do" – those technologies or IT services deemed valuable and useful to the school / unit, but not rising to the level of categories 1-3 (above); these investments could be delayed without significant impact to the school / unit's operations or missions



6. “Maintenance” – required for maintenance of existing technology
7. “Enabling school/unit to take advantage of University resources” – those technologies or IT services that facilitate integration or allow schools / units to take advantage of University resources (e.g., a project that enables a school system to join an enterprise system)
8. “Other” – those technologies and investments that do not fit into the categories above; please describe the category so we can refresh the options for next year

Anticipated Impacts (MYTP):

Schools / units should also consider potential impacts due to the new technology or IT service. Examples of impact are:

- Students / faculty / staff / researchers / other
- Current processes / workflows
- Costs to be shared with another school / unit / central (identify other)
- Systems infrastructure managed by HUIT
- Central IT support service expectations or requirements
- Other

Impacts may be positive or negative and may serve as part of the justification or characterization of the investment. The OTSP is available to help answer questions and consider potential impacts.

Anticipated Schedule (MYTP):

Schools / units are asked to provide the anticipated schedule for investments in MYTP. We recognize that it is impossible to predict exact days and/or months; schools / units should focus on estimating dates and time periods that generally represent expected activity in any given fiscal year. Dates used in the MYTP submission are non-binding; they can be updated as planning progresses and more specific timelines are formed.

**Means of Submission**

Last year, a significant majority of schools and units chose to submit their MYTPs using the spreadsheet template that mimicked a CPATH submission. In response to feedback received, this year, we will ask all schools / units to submit this portion of the MYTP using the format of a single spreadsheet template. As was the case last year, narrative elements should be submitted via a separate Word document.