Operational Plan for the California Technology Fellowship Program

The proposed California Technology Fellowship Program would accelerate delivery of critical projects by placing talented state employees in year-long fellowships at the California Department of Technology (CDT). Implementing this fellowship will require clear structure, high-level executive support, and sufficient funding. Fellows should also be offered avenues for professional development, cross-department collaboration, and shared learning. This document details the purpose of the California Technology Fellowship Program and how the CDT can operationalize the fellowship.

BACKGROUND AND CONCEPT

The CDT is the State of California's division dedicated to driving digital transformation. But limiting digital innovation to this department impedes the state's ability to tap employees in other divisions to contribute to transformation efforts. For example, a California Department of Food and Agriculture employee, when equipped with training in digital service delivery, could be especially effective at leading an agricultural tech innovation project given their deep knowledge of that domain.

We propose that the state establish a California Technology Fellowship Program to leverage talent across its departments to achieve key digital service delivery goals. The Technology Fellowship Program should run annually, bringing employees across state agencies into 12-month rotations at the CDT. Following training on modern digital service delivery techniques, fellows should lead critical tech innovation initiatives through the Project Approval Lifecycle (PAL) and execution.

Such a fellowship program will broaden the pool of employees involved in digital transformation projects to accelerate service delivery, improve project outcomes, and lower total project costs. At the same time, the fellowship would also provide fellows with an invaluable career development opportunity. Moreover, by facilitating cross-department collaboration, the fellowship will also advance one of the primary principles of the CDT's Vision 2023 strategic plan: working together across disciplines.

OPERATIONAL PLAN

The CDT should develop the fellowship by proceeding in 8 steps:

▶ Establish the Fellowship;

▶ Select Fellows;

▶ Identify Projects;

▶ Train Fellows;

▶ Implement & Deliver Projects;

▶ Enable Professional Development;

▶ Encourage Information Sharing; and

▶ Sustain the Fellowship in Perpetuity.

We review each in turn.

STEP 1: ESTABLISH THE FELLOWSHIP

(a) Define the Fellowship Structure & Agency Responsibilities

First, the CDT should formalize the structure of the fellowship. The fellowship should embed 20 technologists from California departments within the CDT full-time for 12 months. During the fellowship, fellows will work together to drive critical projects through the Project Approval Lifecycle (PAL) and service delivery.

The fellowship execution timeline should be divided into 4 stages over 15 months total:

1. Assembling the Fellowship Cohort;

2. Training Fellows;

3. Developing Projects; and

4. Delivering Services.

Fellowship Lifecycle

Project Selection

Applications Open

Project Development

Post-program Evaluation

Technical Training

Cohort Selection

Project(s) Delivery

| Start | 3 months | 2 months | 2 months | 8 months | End |

To run a fellowship cohort from start to finish, the CDT will be responsible for:

1. Coordinating program logistics, communications, and scheduling;
2. Developing and delivering domain and technical training curricula;
3. Reporting on program goals and ongoing success metrics; and
4. Facilitating delivery of services and outputs.

Meanwhile, the participating departments will be responsible for:

1. Advertising the fellowship within their departments (example recruitment material here);
2. Selecting and submitting candidates for the fellowship;
3. Proposing critical projects for program consideration; and
4. Helping temporary employees cover vacancies left by accepted candidates.

(b) Identify Executive-Level Sponsors

Once the fellowship structure is finalized, the planning committee should pitch state officials with the power to authorize the fellowship. Officials the committee should reach out to include:

▸ The Governor of California (Gavin Newsom at the time of this writing);

▸ The Director of the CDT (Amy Tong at the time of this writing); and

▸ Heads of other California departments. For example:

  ▸ The Secretary of the Department of Food and Agriculture (Karen Ross at the time of this writing); and

  ▸ The Director of the Department of Transportation (Toks Omishakin at the time of this writing).

With support from key officials, the committee will have a mandate for piloting the fellowship.

(c) Secure Funding for Departments to Backfill Fellows

To fill the vacancies fellows leave in their home departments during their fellowships, the state should hire temporary employees. The state has several potential funding sources for making these hires:

1. The California Department of Technology's existing budget;
2. The fellow's home departments;
3. A public-private partnership;
4. New California legislature-appropriated funds; and
5. New federal funding.

This project team recommends a public-private partnership as the best way forward to acquire funding. The CDT could convene a coalition of supportive private sector companies to donate funding for the fellowship. This approach would allow the CDT to side-step the complex state and federal budget processes, secure funding quickly, and avoid reallocating funding from other initiatives.

STEP 2: SELECT FELLOWS

The committee should strive to build cohorts that represent a wide array of California departments and that are diverse in thought, being, and action. For the pilot cohort, the CDT should aim to select fellows from at least 10 departments to represent a wide array of backgrounds. Any department employee in good standing with 5 years of experience working on technology projects in product, UX, development, or program management roles should be eligible to apply during an open application period. From the

applicant pool, the committee should ultimately select 20 fellows, gauging for their technical skill, domain knowledge, and leadership potential.

STEP 3: IDENTIFY PROJECTS

After soliciting proposals from the CDT and other California departments, the committee should select fellowship projects that are suitable in scope and impact for fellows to tackle.

When considering the scope of a project, the committee should ask:

▸ Are there complexities or dependencies that would make this project difficult to accomplish in one year?

▸ How many departments would be required to collaborate to enact this project?

▸ What is the estimated development cycle?

When considering the impact of a project, the committee should ask:

▸ How urgent is this project?

▸ How many Californians would be positively impacted by this project? Would any Californians be negatively impacted by this project such that it should not be pursued?

▸ Will this project lay groundwork for future projects?

Ultimately, the final set of projects should be executable during the one-year fellowship period and promise sufficient positive impact for the state.

STEP 4: TRAIN FELLOWS

Once fellows are selected and matched with projects, but before they begin work, the CDT should provide fellows the technical and domain skills necessary to carry out their assignments. Fellows should receive training on modern agile, service-oriented, and human-centered delivery practices. Equally importantly, fellows should be encouraged to break from the mold when appropriate to challenge prevailing assumptions and drive improvements in the PAL process.

A sample curriculum might include training on:

1. Tech procurement and the current PAL process;
2. Departments' scope and responsibilities;
3. The mission and goals of the CDT;
4. California's critical government service needs;
5. The basics of agile software development; and
6. The basics of user-centered design thinking.

STEP 5: IMPLEMENT & DELIVER PROJECTS

With their training complete, fellows should begin work on their projects and progress through 6 stages with clearly-defined milestones:

1. Defining the project problem and scope;
2. Designing a solution;
3. Devising a plan for developing the solution;
4. Developing the solution;
5. Releasing the solution; and
6. Preparing systems for maintaining the solution.

During this period, the committee should help the cohort leverage the CDT's resources and make sure projects are accelerating without compromising oversight.

DEFINE

DESIGN

MAINTAIN

RELEASE

PLAN
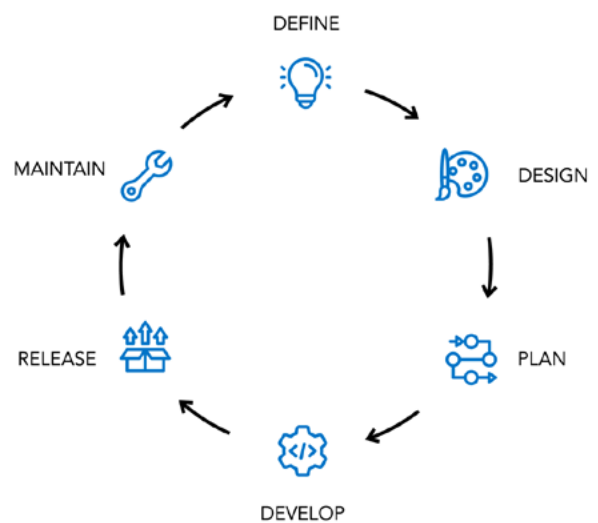
DEVELOP

Icons made by Freepik

STEP 6: ENABLE PROFESSIONAL DEVELOPMENT

Throughout the fellowship, the committee should provide fellows with supplemental technology and leadership development opportunities. These programs would help demonstrate that the fellowship is not only for the state's gain, but is also an investment in employees' personal and professional growth.

Example activities might include "lunch and learn" events with CDT officials, book clubs on digital transformation, leadership seminars, and public speaking training.

STEP 7: ENCOURAGE INFORMATION SHARING

The committee should also encourage fellows to share the knowledge and skills they gain with their home departments. The committee can help facilitate this by hosting a demonstration day event at the end of the fellowship for all California employees to attend. At the event, fellows could present the completed projects and reflect on the development process and key lessons.

STEP 8: SUSTAIN THE FELLOWSHIP IN PERPETUITY

After the pilot (and every successive cohort), the committee should reserve time for a program evaluation to prepare for future iterations.

To evaluate each fellow and project's success, the committee should consider the following questions:

- ▸ Did the project delivered meet the identified need?
- ▸ Did the participants gain useful tools to take back to their home departments?
- ▸ Were their cross-departmental dependencies or pitfalls identified during the project development process?

To evaluate the fellowship program's success, the committee should consider the following questions based on its goals of accelerating service delivery, improving project outcomes, and lowering total project costs:

- ▸ Have project approval times decreased?
- ▸ Has the state's service delivery quality improved?
- ▸ Are project stakeholders more satisfied?
- ▸ Are Californians better served?
- ▸ Has overall cost been reduced?

Contingent on positive responses to the above questions, the committee should repeat the program annually, delivering new projects each cycle and evaluating progress towards the state's goals.