Audit Report

New FAMIS System Implementation

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Approved
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UC SANTA CRUZ

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I.   EXECUTIVE SUMMARY

Audit and Management Advisory Services has completed a review of progress being made to provide a space management system for the campus.

The Space Management Project team is pursuing CruzFix as the space management system for space data, and ArcGIS Indoors as the space management system for space visualization. However, the team does not want to limit itself to these two systems if additional needs are identified that the systems will not meet. Therefore, the team continues to review stakeholder and CPSM requirements to identify any gaps or roadblocks in using these systems.

Providing access to space data and editing was the priority. All approved space data will be entered in CruzFix production during June 2023. The Appsheet application will be open for editing space data for those trained in October 2023. PPDO estimates it will take more than year to get ArcGIS Indoors ready for use.

II. INTRODUCTION

Purpose

The purpose of this review is to assess progress in getting FAMIS 360 (CruzFix) up to speed for campus space management. Our objective was to understand when FAMIS 360 will be rolled out to the campus for space management, its requirements for using it, training, and how it addresses campus space.

Background

Space management at UCSC involves the planning, identification, allocation, assignment, and reassignment of all spaces in UCSC managed buildings. The campus maintains an inventory that documents all campus buildings, space within each building, and how space is used. The inventory is used by the campus and the UC Office of the President to provide planning and management data about the existing physical plant.

The campus utilized an online data management system called FacilitiesLink to update the facility inventory. This web-based user interface allowed easy updates and access to building, department and room information.

In 2021 the campus decided to not renew the FacilitiesLink contract. The company that owned that system, Metabim, required the campus to return or destroy all its proprietary information by July 20, 2021, and extended this demand to October 25, 2021. The campus then had to replace that system.

Scope

We contacted the management of Physical Planning, Development and Operations (PPDO) as well as the Space Management Project Team to learn what progress has been made on replacing FacilitiesLink. Specifically, we asked about
- Project team roles
- The project plan, including goals, timelines, and milestones
- Expected completion date
- User requirements
- Training plans
- Obstacles they faced

III. Results

Space Management Project Team

- Director of Business Services and Chief of Staff, PPDO
- Geographic Information Systems Programmer, PPDO
- Senior facilities analyst, Capital Planning and Space Management (CPSM)
- Educational Facilities Planning, CPSM
- Education Facilities Planning/Analyst, CPSM

In September 2022, the associate VC, PPDO, formally assigned this team the task of replacing FacilitiesLink with currently used applications. The team started to meet in October and then more aggressively in December/January 2023, after the campus space inventory update was provided to UCOP.

There were delays in getting this project underway. We identified the following causes:

- There was a lack of understanding that the campus was ending its contract for FacilitiesLink, with the consequence that a hope lingered that the contract would be renewed
- Once it became clear that we were not going back to FacilitiesLink, there was vacillation on the decision to choose a space management system that could replace FacilitiesLink as there were several possibilities.
- Staff had to focus on providing UCOP the space data update that it required for FY2022. This took time as the campus space data we received from FacilitiesLink was disorganized without the use of that system; and the data we sent to UCOP the previous year could be used, but it needed to be updated by the campus.

The Plan

The plan had to address different needs:

- Space data was required for the new FAMIS 360 workorder system, called CruzFix. When work orders are received by PPDO, a space and its occupant need to be identified in CruzFix so personnel know where to go and can request the occupant for access, as well as for billing.
- Space data is needed for the campus space inventory that is provided to UCOP and also is used by campus offices, such as Budget Analysis & Planning, CPSM and research units.
- Space data is used to assign space to space control officers (deans, vice chancellors, vice provosts, and the campus librarian) or their delegates. Updates and requests for space extends through divisions, including space managers and general campus users.
- Space visualization is needed to analysis the use of space and impacts of changes across the campus.

- A source database to store space data with application programming interface capabilities to communicate with other related databases and applications.

The plan took on three phases to address these needs:

- Space data
- Space editing/change requests
- Space planning (visual features)

Google sheets was chosen for the source database for its interface capabilities. The AppSheet application is used to query and edit the source database and provide reports to other systems, such as Infoview. CruzFix provides space data for PPDO work orders and also for other users of space data, such as space control officers. ArcGIS, a geographic information system, used by PPDO for campus infrastructure management, was enhanced with the "Indoors" module to provide space visualization.

The Timeline

September 2022

- AVC-PPDO made the decision to review and utilize our current tools (primarily Arc GIS Indoors and CruzFix) for at least 8 months to determine any gaps for space management systems. Provide approval for any additional modules needed for the current systems.

April 2023:

- Target for getting all facilities inventory space data approved in the stage environment of CruzFix

- Finalize the mapping of data for the application programming interface as it relates to basic CruzFix reporting

- Analyze the space editing tool AppSheet for campus space editors - identify strengths/challenges/opportunities/risks of the system

June 2023:

- Target for getting all facilities inventory approved space data in the production environment for CruzFix

- Announcement to stakeholders* that the CruzFix system has been updated with the 2022 facilities inventory space data and provide information on basic reporting

July/August 2023:

- Finalize strengths/challenges/opportunities/risks for space editing for leadership review (AppSheets will be used for this function this year)

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* Stakeholders can include: CPSM – admins; space control officers & their delegates; executives - annual and periodic viewers; PPDO; divisional space managers - power users (Engineering, PBSci, etc.); and general campus users

August 2023:

- Identify space editing tool for 2023; if different, identify long terms space editing tool

September 2023:

- Finalize training resources for 2023 facilities inventory reporting

October 2023:

- Provide training to space control officers and their delegates for the 2023 facilities inventory reporting

- After training, open tool for editing

During our review, PPDO reported that this timeline is being followed. PPDO told us that getting ArcGIS Indoors ready for space visualization and other functions will take more than a year. The project team believes that ArcGis Indoors is capable of performing all the space management tasks in the same ecosystem; and it can also be used alongside any of them as an enhancement rather than a replacement.

In the meantime, CruzFix will be sufficient for providing space data to users, and PDF floorplan files will be added as needed.

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