Yosemite
Community College District

Assessment of the
Information Technology department

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Prepared by:
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Executive Summary

Under the leadership of Interim Chancellor, Dr. Jane Harmon, Yosemite Community College District provides quality educational opportunities throughout its service area. The District seeks innovation and continuous quality improvement as evidenced by the desire to closely examine the operations, staffing, and functionality of the Information Technology (IT) department. Due to unforeseen circumstances, there was a need to fill the Vice Chancellor of Information Technology with temporary staffing. One of the tasks assigned to this position was to produce a thorough assessment of the Information Technology department, providing starting points, so the best outcomes can occur. Karen Trimble was hired as Interim Vice Chancellor of Information Technology and conducted the study.

The following report focuses on potential improvements in the operation of the IT Department at the District. While there is much that is positive and successful, the recommendations address only what can be strengthened.

The findings include the following:

First, there is a need for updated and ongoing technology planning. While there is a Technology Plan it has not been thoroughly reviewed in some time; planning is rudimentary at best and does not include all stakeholders. A new Information Technology Strategic Plan using a total cost of ownership (TOC) model can strengthen institutional decision-making regarding IT projects. New projects do not appear to be tied to strategic direction, goals, timelines, budget, or have individual accountability. IT planning should address the technology needed to further the mission of the colleges. Detailed planning at the department level will define resource needs more clearly. Detailed planning is essential in clarifying staffing needs—an issue raised a number of times by IT staff, and to increase the probability of the timely completion of a working solution.

Second, systems should be put in place to facilitate a district-wide understanding of technology needs, address concerns related to communication, enable tracking and prioritization of
projects, and develop procedures for usage and accountability. A potential solution to strengthen collaboration and provide input would be to establish a district-wide technology committee.

Third, there are a number of “vacant” positions in the IT department. In order to fill these positions with qualified individuals the job descriptions, some of which are obsolete, must to be reviewed and updated. Up-to-date job descriptions can be used for recruiting, performance management and compensation. These positions need to be filled in order to provide the level of service the colleges expect.

Finally, there is a need for training to not only ensure the success of the IT department but also for the success of those who need to use the software, hardware, and assorted technology being provided across the District.

This report provides detailed observations and suggestions. It will be the responsibility of the Board, the Chancellor, and the two college Presidents, with support from the executive team, to prioritize and implement these recommendations. It is important to note that there is a desire within the IT department to improve as well as offers of support from a variety of areas. The District’s IT department is a great asset today and it will only become stronger in the future.
Overview of Assessment Process

The following Information Technology assessment was prepared for Yosemite Community College District by Interim Vice Chancellor Information Technology, Karen Trimble. The Yosemite Community College District (YCCD) includes two comprehensive two-year colleges (Modesto Junior College and Columbia College) and a Central Services unit. The District covers a 4,500-square mile area and serves a population of over 550,000, encompassing all of two counties (Stanislaus and Tuolumne) and parts of four others (Calaveras, Merced, San Joaquin and Santa Clara). Modesto Junior College, established in 1921, is situated in the Central Valley serves an agricultural and manufacturing based economy. Columbia College, established in 1968, is located in a small mountain community in the Sierra Nevada’s, whose economy is based on tourism and natural resources.

Participants in the Assessment Process

Dr. Jane Harmon, Interim Chancellor
Teresa Scott, Executive Vice Chancellor Fiscal Services
Gina Leguira, Vice Chancellor Human Resources
Sarah Schrader, Controller
Dr. Jill Stearns, President Modesto Junior College (MJC)
James Todd, Vice President of Student Services (MJC)
Al Alt, Vice President of College Administrative Services (MJC)
Sherri Suarez, Events/Facilities & Duplicating Coordinator (MJC)
Dr. Angela Fairchilds, President Columbia College (CC)
Brian Sanders, Vice President of Instruction (CC)
Margo Guzman, IT Director (Helpdesk)
Joshua Hash, IT Director (Operations)
Patrick Pimentel Sr., IT Director (Technology)
Jeff Swank, IT Director (Media Services)
Jennifer Ahlswede, Executive Assistant IT
Also involved in the process were research staff (including college staff) and Information Technology staff from all of the following areas: network, desktop, programmers, web coordination, media services, assistant(s), user support, and student help.

**Assessment and Recommendations**

**Leadership**

The role and responsibilities of a technology leader has grown from project management to being a Chief Information/Technology Officer (CIO/CTO) who operates on vision, strategy, motivation, advocacy, and business continuity. The District has demonstrated its awareness of this by including the Vice Chancellor of Information Technology as a member of the Chancellor’s Cabinet. The next step is to develop and recognize the IT Directors as your senior IT management team. This will entail some training but primarily an institution wide recognition that these are your front line decision makers providing effective and functional systems.

**Recommendations**

1. The Vice Chancellor of IT needs to have sufficient management support staff so that he/she can expand their focus from daily operations to strategic planning. The Director of Enterprise Software over the programming staff is currently vacant and should be filled with a person able to work side-by-side with the staff possessing a substantial knowledge of Ellucian’s Colleague freeing the Vice Chancellor to do strategic planning.

2. The IT Directors need senior management/team-building training. The department currently functions as though it is five separate entities. Most of your managers have risen through the ranks and are very good at what they do but expertise in the areas of senior leadership and strategic planning requires training, mentoring, and feedback.
3. The five managers need to be recognized by staff district-wide as the IT management team. These managers also need to reflect that team approach in their dealings with other staff as well as those who report to them.

4. The IT management team should attend events with various district/college executives in order to develop relationships with coworkers as well as peers at other institutions. Building these professional relationships while at the same time providing colleagues with insight into IT trends, services and products is an important step in the mentoring/training process. These events might consist of conferences, trade shows, or training camps.

**Collaboration and Input**

There is currently no effective District Technology Committee. Such a committee should serve as an advisory and oversight committee on technology matters, and is responsible for setting the strategic technology direction for the District/College(s). It is not an IT committee, nor is it comprised solely of IT members. Faculty and staff input is necessary to provide a collaborative process for defining technology needs and prioritization of IT projects. Today’s IT departments are service providers with faculty, staff, and students as the drivers of the projects. Another important committee role is to share information. As the committee evolves, it will provide input in the creation of technology standards, guidelines, and procedures needed to implement and support information technology effectively. The faculty, staff, and student members of this committee are the users who are directly affected by these documents and their consensus is necessary for successful implementation. Gartner Group, IDC, and Forrester are all excellent sources of research materials.
Some of the items listed in the box may be developed primarily by the Information Technology department, but they should be shared with District and College Technology Committees allowing for input and feedback from all stakeholders.

**Recommendation**

Create a District Technology Committee. This committee should have membership from the executive staff, faculty, support staff, and students. Since this is in essence a new venture for the District in this format, it is recommended that the committee start with limited membership, establishing no more than 5-10 goals spanning no more than 24 months. It is recommended that IT hold a co-chair position on the committee with a representative from faculty or student services holding the other co-chair position.

Some of the tasks for the committee might be:

- Develop a Purpose statement
- Establish 5-10 Goals
- Work with IT to develop an Information Technology Strategic Plan
- Develop a Communication Plan
- Begin work on Administrative Procedures (use IT administrative regulations as a starting point)

**Examples of procedures, standards, and guidelines:**

- Acceptable Computer Use Procedures
- Web Guidelines and Standards
- www.section508.gov
- Communication Plan or Guidelines
- Building standards with regards to technology; this should include classroom needs
- Hardware Standards – including the refresh rate
- Software Standards – this is especially important for those institutions who chose to develop their own software
- Data Security and Privacy Procedures
- E-mail Guidelines/Etiquette
- BYOD - guidelines for connecting to the network
- Remote employees – address work from home

**Planning**

Strategic planning appears to be missing in both current and future projects. Comprehensive strategic planning should incorporate where you are now, where you want to be at some
defined point in the future, and the total cost of ownership (TCO). District and college executives need that information in order to make informed business decisions.

The purpose of a TCO analysis is to quantify the financial impact of deploying technology by clearly identifying all costs, including those often overlooked when making purchasing decisions. In addition to cost control, a project sponsor is essential to a successful implementation. This sponsor is the individual who has the most interest in the outcome of the project; in many cases they are the individual who requested it. They participate in project planning, approve project changes, and sign off on deliverables. In essence, they take ownership of the project.

A new 3-5 year Information Technology Strategic Plan should include a timeline for the projects listed, and provide for an annual review of project updates. The plan should emphasize continuous improvement, and be tied to the Board of Trustees’ strategic goals, each College’s strategic plan, and incorporate program reviews, the Educational Master Plan(s), and the Facilities Plan.

It is suggested that a new Information Technology Strategic Plan include the following elements:

- Collaboration
  - Who participated in planning and how the priority levels were determined

- Prioritized Projects should include:
  - Infrastructure needs, both hardware and software
  - Licenses and maintenance agreements if necessary
  - Staffing needs, including person-hours needed to complete projects
  - Training needs
  - Maintenance plan for ongoing costs, both financial and personnel
  - **Key components** of project plans
    - Project owner
    - Timeline, including regular updates on progress.
• Funding, including the amounts and sources required to complete the project and ongoing funds and sources to maintain the project. Include any possible return on investment (ROI).
• Individual(s) responsible, including the individuals from the area being served as well as IT personnel.
• Evaluation method – How do you plan to evaluate the project once it is complete and what is the method for providing continuous improvement?
  o Professional development for technical staff as well as all staff.

In addition to an Information Technology Strategic Plan, the IT department should engage in department level planning, which should be even more detailed containing milestones, walkthroughs of the projects, and frequent reviews.

Recommendations
1. The IT Strategic Plan must include goals/objectives with timelines, budget implications, project sponsor, individual(s) responsible, and assessment.
2. The IT Strategic Plan must be clearly aligned with the strategic goals of the institutions, the educational master plans, and the facilities plan.
3. The IT Strategic Plan must include the measures and process for evaluation and continuous improvement.
4. The total cost of ownership model should be applied with each technology purchase/implementation.
5. It is essential that IT leadership begin performing complete project management. This includes project planning, tracking, and communication.
Organization and Staffing

There is currently a vacant position, Director of Executive Software. This vacancy has resulted in software and research staff reporting directly to the Vice Chancellor. In order to achieve balance, provide quality guidance and supervision to software staff, and allow the Vice Chancellor to expand his focus from daily operations to strategic planning this position must be filled.

The various roles in IT are task-oriented, rather than connected to a larger vision or strategy. It is recommended to shift the focus to a department built on collaboration, vision, strategy, and business continuity. Making such a shift will involve clearly laying out what the department as a whole needs to accomplish and including all IT staff in the development of the strategies as well as making them responsible members for the implementation including information sharing.

The existing IT job descriptions have not been updated in some time. Job descriptions can have so much value if used regularly and appropriately. Up-to-date job descriptions can be used for recruiting, performance management and compensation. Job descriptions are also the foundation for expectations between the manager and their staff and they are the primary tool used by supervisors to measure job effectiveness during employee evaluations. The job description should include the function and purpose of the position, including management, to support District needs. Another important role of the job description is to clearly define a mobility track to provide an opportunity for employees to advance to their highest potential.

Recommendations

1. Fill the vacant IT Director of Enterprise Software. Currently this role is being filled by the Vice Chancellor Information Technologies (See Recommendation 1 under Leadership).

2. Promote team building for IT staff to develop a sense of structure, ownership, and responsibility.
3. IT job descriptions need to be reviewed and updated displaying a clearly defined path for upward mobility including the core competencies expected at each level.

4. The current budget includes a number of vacant positions. Without a permanent District administrator these positions remain vacant while the number of IT projects is increasing. Utilize the finalized reorganization plan to fill positions as budget allows.

Communication
The helpdesk consists of a number of employees, augmented by student help, using one system to record all calls. The current software solution is cumbersome, difficult to track, and does not provide a robust solution. The same system is used for all IT requests even though some of the requests are long-term projects while the software solution is designed for short-term projects. Although communication to the customer exists, it is automated and the customers expect a personal approach as well. Tracking of the ticket is available to the customer but for any ticket that goes beyond a short-term project (jobs completed within 2-3 days), the information is insufficient with no displays of progress, due dates, or milestones achieved.

The District is in the midst of implementing a portal solution that should provide communication and collaboration tools but until it is implemented, other solutions need to be used. Therefore, it is recommended that the IT department post project plans and updates on the IT website. The plans should include dates, responsible parties, and milestones. Updates should be posted at each milestone or anytime there is a change in the timeline. These updates would be the responsibility of the individual listed in the plan. This will facilitate timely information, consistent messages, awareness, and transparency of IT projects.

Another tool that was not visibly available is a Communication Plan defining how specific types of events would be shared. Such a plan would facilitate timely information, consistent
messages, awareness, and transparency. It should incorporate both traditional approaches as well as social media, and can address not only routine communications but also emergencies or technology difficulties.

The IT department should also begin celebrating small successes. As a project plan is defined, a milestone is reached, or a project is completed, celebrate it! These celebrations need to involve both college communities. Since IT projects are service oriented, the people benefiting from the project should be included in the celebration, which will serve to not only recognize the accomplishments but also to communicate to others. Using communication tools to share news updates, departmental notices, or project-employee-of-the-month with both staff and students provide employees an opportunity to talk about how they helped to achieve a goal.

**Recommendations**

1. Evaluate the potential of the current “help desk” software solution and make modifications to the processes in place to increase its effectiveness. Processes and procedures need to be created in order to provide a set of tracking tools that will also communicate and establish expectations including progress and due dates for long-term projects.
2. Create robust project plans and post them on the website.
3. Build a comprehensive Communication Plan, this may be a task of the District Technology Committee.

**Infrastructure and Hardware**

The Information Technology department at Yosemite Community College District is responsible for areas ranging from the backbone to desktops and teaching consoles. They also install, maintain, and support network and data security, wireless access, audio visual needs, and telecommunications. The staff does an excellent job of keeping things operational. Bond funds
provided a substantial amount of new equipment. As that equipment begins to reach its end-of-life, a comprehensive technology life-cycle management plan is needed. This plan would include a replacement schedule, standards, and a proposed budget for all equipment, not just desktops.

Desktop service by IT staff does not appear to be an issue. The use of zero and/or thin clients has recently been deployed. Some of the immediate benefits of this are fewer moving parts to fail, substantially reduce the amount of time to deploy, and have a life span of double that of a desktop system. Although this solution does not provide up-front cost savings over a physical desktop, it does immediately reduce energy consumption, thereby possibly qualifying for either energy rebates or grant funds.

**Recommendations**

1. Create a comprehensive technology life-cycle management plan used to define what equipment should be replaced, what is should be replaced with, when it should be replaced, and the funding mechanism for the replacement.
2. Celebrate your successes!

**Training**

Training is needed in four distinct areas; faculty – classroom technology, staff – job related, students – college success, and IT – technology training. There is a wide variety of media and modalities available and they should be combined to produce a complete training solution. Short video clips, less than 15 minutes, could also be produced and posted on the website. This type of media-on-demand training will increase participation and provide more flexibility in scheduling for both staff and students. While the District has a variety of training documentation available, they must ensure that it is kept up to date. Visual aids, handouts, and reference sheets are often available for free as part of a software solution. These items should also be posted on the website for quick access by staff and students. Classroom training or train the trainer also works well with staff, including IT staff. The most important thing is each project
should have a training plan, complete with costs, who should attend, timeframes, and strategies to keep the documentation current. This can then be taken to the District Technology Committee or a budget/planning committee for funding.

In addition to training technology staff in products newly purchased, they also have additional training needs. They are expected to be aware of and understand the use of tools, software, and hardware that the District does not yet support. In many cases they provide the initial stimulation to change the way business is currently done. In order to gain this knowledge, attendance at trade shows, Educause, and other similar venues is indispensable.

**Recommendations**

1. Create a training plan, fund it, and follow it.
2. Create a wide range of media options and post them for media-on-demand training.
3. Provide a mechanism for monitoring materials to keep them current.
4. Provide for technology staff to attend functions and events where new technologies are being showcased.

**Conclusions**

The Information Technology staff at Yosemite Community College District is responsible for all technology needs including telecommunications, multimedia and audio visual, desktop support (hardware and software), development, maintenance, enhancements to mission critical software solutions, and the network infrastructure.

This report focuses not on IT’s successes, but on what can be strengthened. The recommendations made throughout this document address the need for planning and providing the resources and training necessary to achieve success.
Updating the Information Technology Strategic Plan in a collaborative manner through a new District Technology Committee is critical. The plan should include timelines, budget, and responsible parties, and should provide for annual reports on progress. The plan provides for continuous improvement and each goal should correlate directly to the Board of Trustees' strategic goals and each college’s strategic plan. The development of an effective District Technology Committee is key. IT should have a seat on this committee and it is recommended that IT hold a co-chair position on the committee with a representative from faculty or student services holding the other co-chair position.

Planning also needs to take place within the IT department itself. This planning will provide the information necessary for data driven decisions, including addressing any potential staffing needs in order to successfully accomplish a task. Inclusive planning by all staff will also help promote team building and ownership in projects.

A thorough review of the IT job descriptions is needed. Filing vacant positions in order for the department to provide a high level of service and satisfaction is crucial. A software solution in conjunction with some possible reorganization of the helpdesk tasks and prioritization of cases will deliver improved communication and customer service.

In addition to creating a Communication Plan, incorporating traditional as well as social media solutions, the District should make use of the tools already available via the website to facilitate timely communications. Celebrating successes is a great way to recognize accomplishments while sharing information.
The field of technology is constantly changing and unless staff and faculty understand the technology and the processes behind it they will struggle to make the best use of it. This can only be accomplished through adequate training.

While the recommendations listed above reflect room for improvement, Yosemite Community College District should be very proud of the accomplishments it has made in the area of technology. The request for an Information Technology assessment reflects the District’s ongoing commitment to technology innovation and improvement.