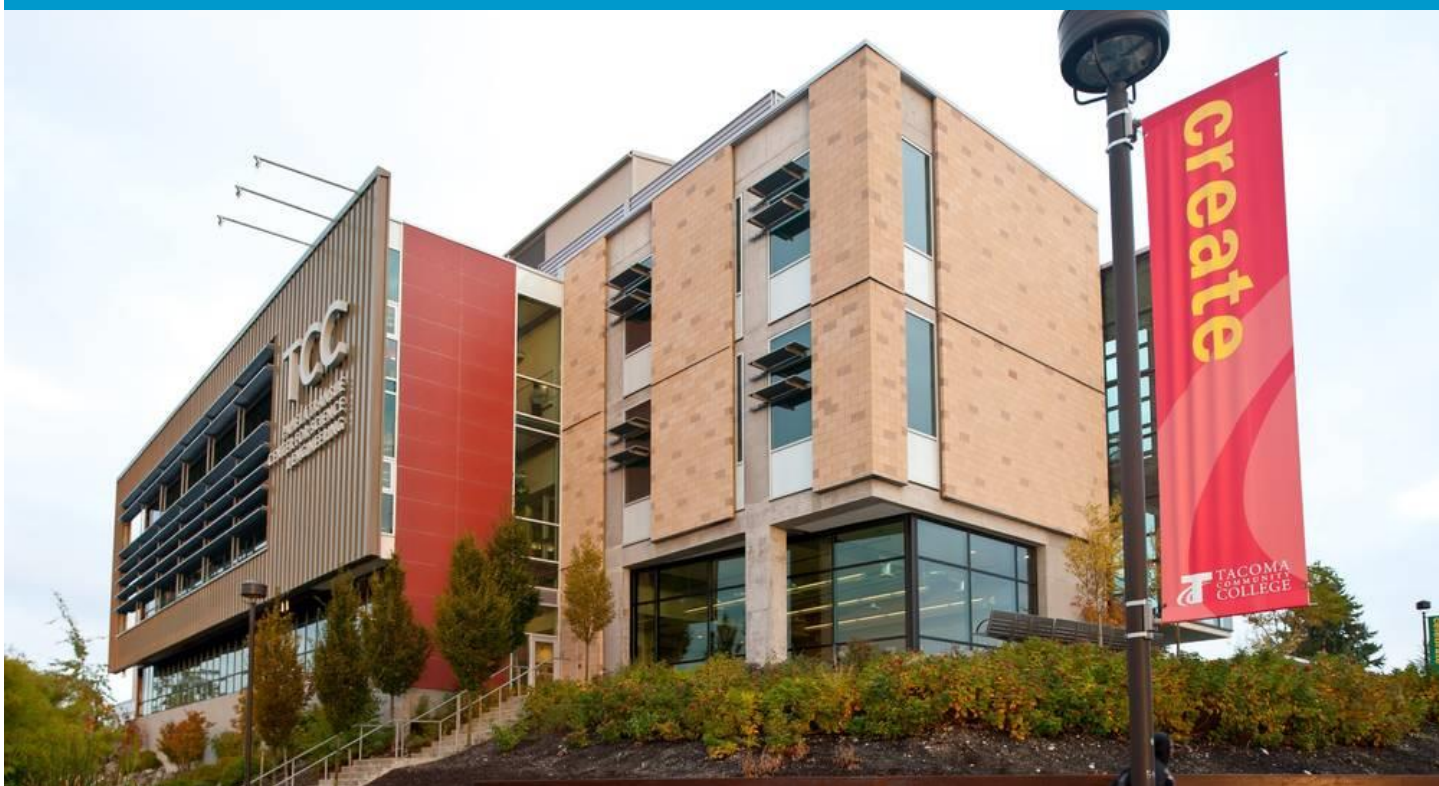# TACOMA COMMUNITY COLLEGE

INFORMATION TECHNOLOGY STRATEGIC PLAN

JANUARY 2022

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Contents

EXECUTIVE SUMMARY – STRATEGIC PLAN AT A GLANCE

Information Technology Department

TCC Mission

As the community's college, we create meaningful learning, advance equity, and strengthen student and community success.

TCC IT Mission

The TCC IT Department supports campus efforts to create meaningful learning, advance equity, and strengthen student and community success by leading and enabling the use of Information Technology at Tacoma Community College.

TCC IT Vision

Instructional and Administrative Information Technology which seamlessly aligns to and actively drives organizational goals and outcomes at Tacoma Community College.

OUR FOCUS

Digital Learning

Empower Digital Learning and Instructional tools for greater success.

Access

Bridge digital divides to deliver inclusive IT services in more ways to more people.

Data and Information

Ensure that Data, Information, and Analytics are relevant, convenient, and useful to the campus.

Innovation

Embrace Innovation and leverage new Technology opportunities.

Cybersecurity

Minimize institutional exposure to information security threats.

IT STRATEGIC PLAN | at a glance   2022

Welcome & Introduction

Welcome to the Tacoma Community College IT Department Strategic Plan! This plan aims to guide the important work the IT Department is doing in alignment with campus efforts. We embarked on this planning process after the completion of the TCC Strategic Plan in 2021, with a goal of producing a finished IT strategic plan early 2022.

Tacoma Community College developed and is implementing a comprehensive, multi-year Strategic Plan launched in 2020. This IT Strategic Plan is fully aligned with the greater Tacoma Community College Strategic Plan.

TCC Mission

As the community's college, we create meaningful learning, advance equity, and strengthen student and community success.

About TCC

Tacoma Community College (TCC) is a public, two-year institution of higher education authorized by the State of Washington under the Community College Act of 1967.

The college is part of a system of 34 community and technical colleges, the State Board of Community & Technical Colleges (SBCTC). Under the purview of a local Board of Trustees, with oversight by SBCTC, the college offers comprehensive educational and service programs to meet the needs of the students and communities served.

The main campus, located on 150 acres in Tacoma, Washington, provides educational opportunities and resources for the estimated 891,299 residents of Pierce County. The college also provides programs at a second campus in nearby Gig Harbor, another at the Washington Corrections Center for Women in Purdy, Washington, as well as the Mission Creek Corrections Center for Women in Belfair, Washington.

TCC offers over 60 associate degrees, 24 professional certificates, and four Bachelor of Applied Science degrees. Basic reading/writing and math skills, Fresh Start, GED testing, I-BEST (Integrated Basic Education and Skills Training), and EAP (English for Academic Purposes) are offered primarily as pre-college programs. Also, the Continuing Education Division offers personal enrichment activities for the community.

2019-2020 Enrollment Counts	
• 11,566 annual enrollment headcount	• 37.3% of students of color (including multi-racial)
• 6,054 full-time	• 42.1% of white students
• 7,985 part-time	• 22.4% race/ethnicity unknown
• 1,042 Running Start (dual-enrollment for 11th- and 12th-grade students)	• 51% pursuing transfer degrees
	• 25% pursuing workforce certificates and degrees

- 64.6% female
- 21.5% male
- 14.3% gender unknown
- 43.3% under age of 30
- 58.9% age 30 or older
- 10% pursuing basic skills
- 16.5% pursuing other education
- 844 veterans
- 358 international students

About TCC Information Technology

IT Department Mission

The IT Department supports campus efforts to enhance and foster learning, equity, community, and discovery by leading and facilitating the use of Information Technology at Tacoma Community College.

IT Department Vision

Instructional and Administrative Information Technology which seamlessly aligns to and actively drives organizational goals and outcomes at Tacoma Community College.

TCC IT Services

Email, Office365, & Home Use Software
Key office productivity software tools that are offered at TCC.

- Campus Email
- Home Use Software (Office365 & Antivirus)
- Office 365 (Teams, O365 Email, OneDrive, Groups, Online Microsoft Apps)

Instructional Technology Support
Services to support technology in the classrooms and computer labs.

- Campus Computer Lab Pay-for-Print
- Classroom/Lab Computer Support
- Multimedia Classroom Support

Network, Telephones, Communications, and IT Infrastructure
The IT infrastructure provides the backbone on which our computers, phones, and information systems operate.

- On-Campus File Storage and Backup
- Campus Computer Network
- Campus Wi-Fi
- Virtual Private Network (off-campus connections)

- Campus Phone System

End-user and Device Support

We support our campus customers and end-users, and their computing devices.

- IT Help Desk & Help Line
- Multifunction Shared Copiers/Printers
- Networked and Desktop Printers
- Staff/Faculty Computer/Devices & Support

TCC Campus Applications and Support

We support and build a multitude of computer applications on campus, some big, some small.

- ctcLink Security Roles, Access, and Permission Requests
- ctcLink Systems Analysis Services
- OnBase Enterprise Content Management
- TCC Custom Applications and Programming

IT by the Numbers

2021

- 2 Campuses
- 831 Telephones
- 950 Faculty/Staff
- 130 Multimedia Classrooms
- 11,500 Students
- 18 Help Line Tickets per Day
- 390 Tablets
- 11 Help Line Calls per Day
- 2221 Computers
- 28 Buildings
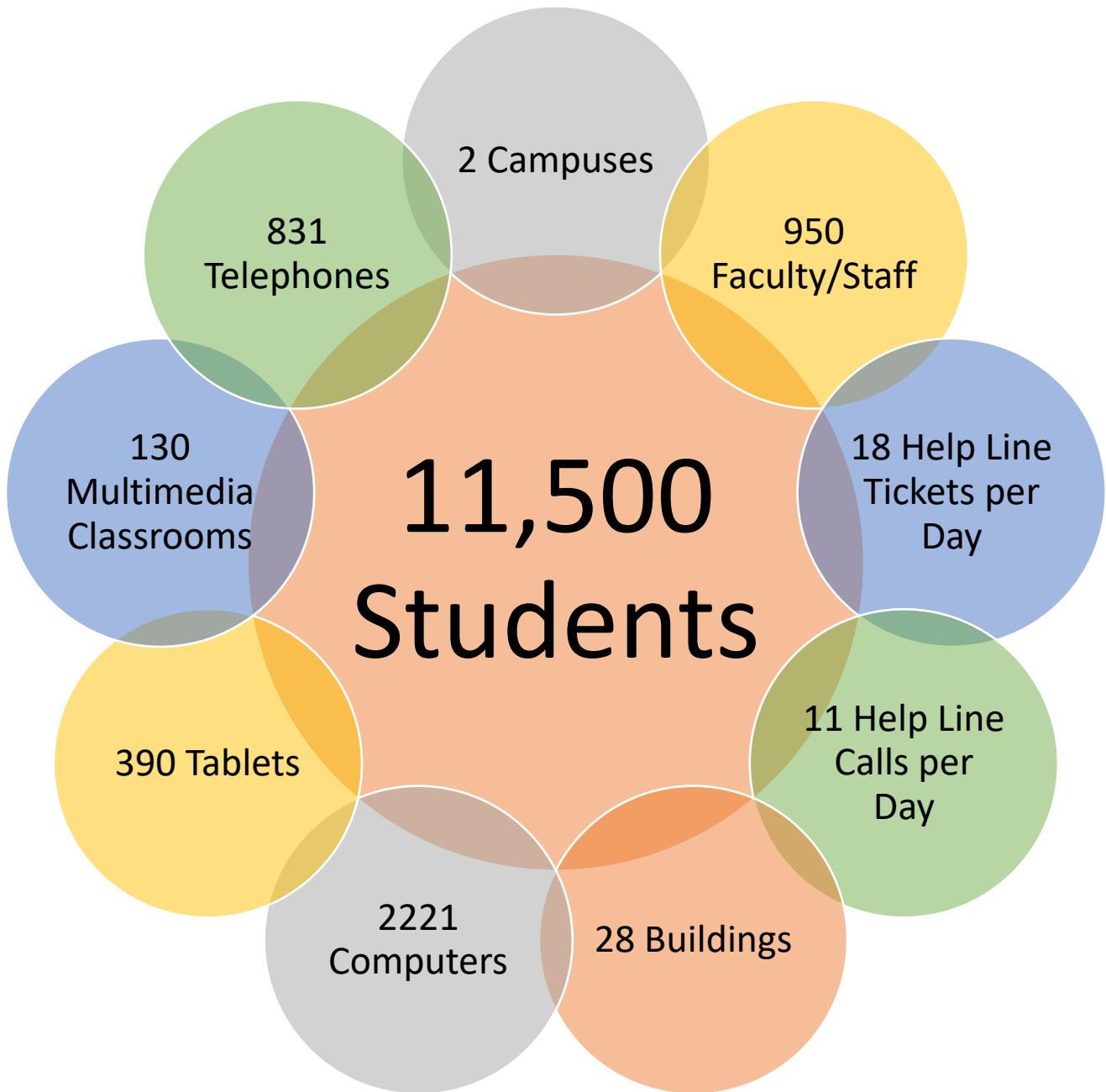
Strategic Planning Process
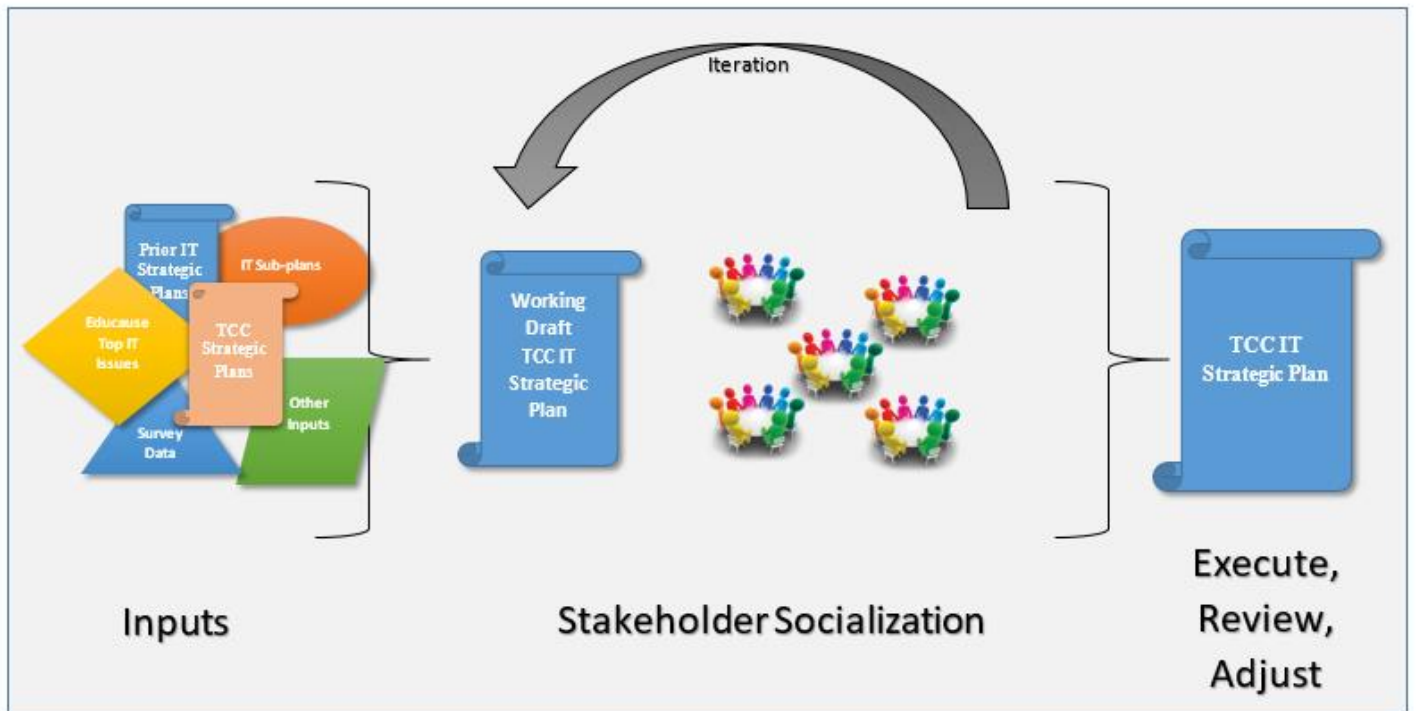

Inputs

This strategic plan starts with existing data points and inputs to form a working draft of the document. Primarily, the work that IT does must be aligned with the rest of the college. Therefore, a key input to the strategic planning process is TCC college strategic plans that describes key campus initiatives and goals. Information about the college strategic plan can be found at *tacomacc.edu/about/strategicplan/strategicplan*. We also take into consideration feedback from the campus in any form – be it through survey data or other means. Similarly, any other available and relevant input, such as previous IT strategic plans or data from research entities such as Gartner or Educause, will be leveraged in formation of this strategic plan.
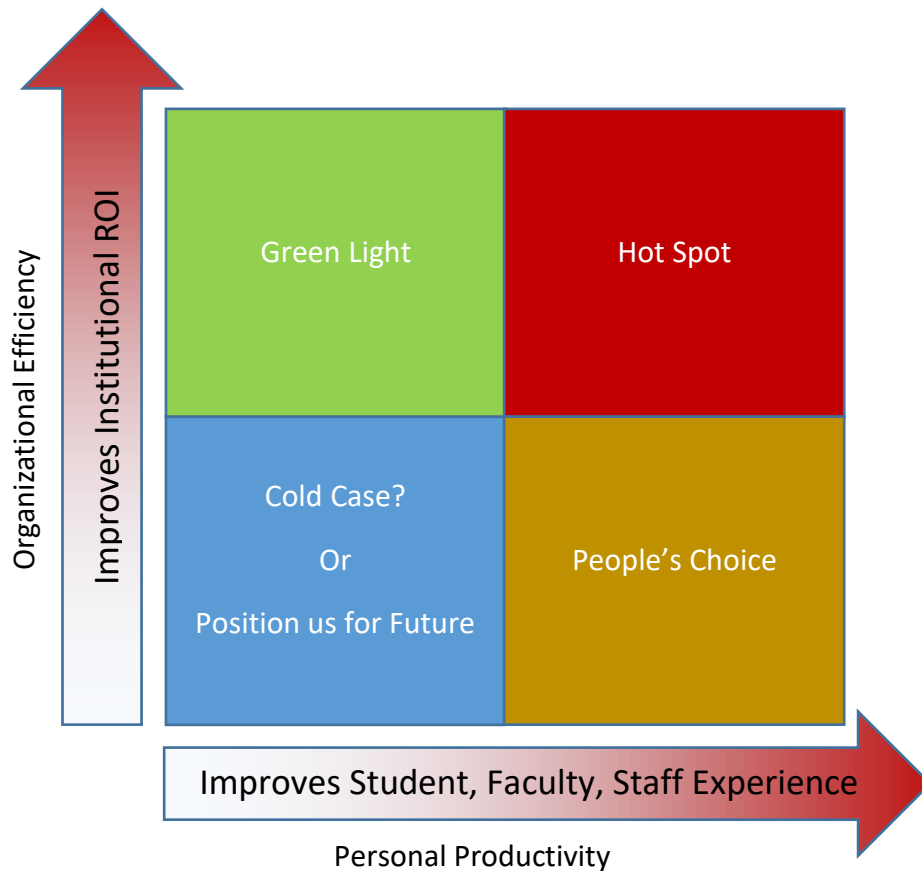
Stakeholder Socialization

It is important to get further feedback from our customers and stakeholders to ensure alignment with their needs. The contents of this plan will be socialized as appropriate to various constituent groups on campus for the validation and further iteration ensuring the strategic plan contains the necessary elements for the campus.

Execute, Review, Adjust

When complete, the document will be finalized, published, and work will continue. The work and plans contained within this strategic plan document will remain fluid and adjust accordingly to the institutional context. The strategic plan will continually be re-evaluated in concert with the changing context of the campus, stakeholder needs/feedback, and evolution of Tacoma Community College strategic plans.

Project & Initiative Value

Every IT initiative is different and exists in a unique institutional context and should be evaluated as such. A two-dimensional model can be employed to value and prioritize IT projects and initiatives. On one dimension is the impact that it has across the campus as a whole in terms of organizational efficiency and positioning the campus for the future. This could be considered the level of institutional return on investment (ROI) or strategic value. The other dimension is personal productivity, or how much an initiative improves the digital experience for students, faculty, and/or staff. The higher a project can be evaluated on these two dimensions conjointly, the higher the overall value of the project in relation to portfolio of IT projects. Again, special emphasis and importance should be placed on projects that are aligned with organizational strategy, such as increasing enrollment, completion rates, or guided pathways. In addition, a proverbial asterisk can be placed on IT infrastucture or related projects that are considered requisite maintenance, or position IT to better serve the campus in the future as these garner emphasis when developing strategic IT plans.

Organizational Efficiency — Improves Institutional ROI (vertical axis)

Green Light	Hot Spot
Cold Case? Or Position us for Future	People's Choice

Improves Student, Faculty, Staff Experience
Personal Productivity (horizontal axis)

**Adapted from Gartner Research's presentation: "Your University of the Future: Visual Strategic Planning Tools for Collaboration and Communication" by Dr. Jan-Martin Lowendahl.

Information Technology Strategic Focus Areas

Digital Learning   **Access**   **Data and Information**   **Innovation**   **Cybersecurity**

Focus 1: Digital Learning
Empower Digital Learning and Instructional tools for greater success.

TACOMA COMMUNITY COLLEGE VISION 20/25	**Core Theme 2: Cultivating Exceptional Learning**

Tacoma Community College is student-centered. Student success in learning and college completion is at the beginning, end, and everywhere in between of all we do. In the 21st century, technology has a transformative effect to enhance pedagogy and the student classroom experience in line with our institutional mission. Trends such as personalized learning wherein computer-based systems are form-fitted to characteristics of individual students to assist in personalizing learning and student engagement throughout their educational careers at TCC. Digital Learning is an important focus to not only IT practitioners, but academics, administrators, and students. Indeed, all stakeholders must be engaged in the endeavor. This Focus Area seeks to take advantage of opportunities and to better position Tacoma Community College for future Digital Learning opportunities.

Focus 2: Access
Bridge digital divides to deliver inclusive IT services in more ways to more people.

TACOMA COMMUNITY COLLEGE VISION 20/25	**Core Theme 1: Advancing Equity, Diversity and Inclusion** **Core Theme 2: Cultivating Exceptional Learning**

> Goal 4: Students have equitable access to onboarding, career cluster and specialization, technology, course materials, and advising information.

The global pandemic has laid bare and exasperated digital divides - inequity and systemic disadvantages inhibiting access to the internet, hardware, and software needed to use technology resources. Students, faculty, and staff of lower economic means, of certain racial and ethnic groups, with disabilities, and who live in rural areas are impacted to a greater degree by these disadvantages. This focus area aims to make IT services more accessible in order to bridge those digital divides and breakdown inequitable and systemic barriers. This focus area speaks to the heart of TCC's mission of creating meaningful learning and advancing equity to provide for better student and community success outcomes.

Focus 3: Data and Information

Ensure that Data, Information, and Analytics are relevant, convenient, and useful for the campus.

Core Theme 1: Advancing Equity, Diversity and Inclusion
Core Theme 2: Cultivating Exceptional Learning
> Goal 1: We provide coherent pathways from college entry to completion, transfer, and employment.

Core Theme 3: Strengthening Community Partnerships
Core Theme 4: Enhancing Institutional Vitality

In the 21st century, information is power. It enables an organization to makes wiser decisions day-to-day, or over the long-term. The data can originate in many areas, but ctcLink is our primary system of record. Not only does ctcLink help with processing payroll and HR-related functions; general ledger, finance, and accounting functions; help TCC disperse student financial aid; and act as our primary Student Information System (SIS), ctcLink also contains data that is used for reporting and integrating with other systems. ctcLink data is integral for the proper function of the vast majority of our homegrown applications or third party systems, from running our daily infrastructure and allowing students and staff access, to feeding Civitas for predictive student analytics. With a modern, heterogeneous computing environment, it is vital that a core competency of IT is securely and effectively integrating disparate information systems in such a way where data is accessible and relevant for effectiveness of college operations.

Focus 4: Innovation

Embrace Innovation and leverage new Technology opportunities.

Core Theme 2: Core Theme 2: Cultivating Exceptional Learning
  Goal 2: Our faculty and staff strive for teaching and learning excellence.
Core Theme 4: Enhancing Institutional Vitality
  Goal 1: We sustain and support current and new initiatives.

Technology and change are so interlinked that the two are sometimes synonymous. Certainly the technology that powers a campus and enterprise is constant changing. While managing change is another core competency in enterprise technology management, change also offers opportunities that can be seized in order to improve outcomes at the college. Whether the technological innovation is mature or cutting-edge, judicious forward movement is key.   It is important to push the boundaries of technologies without wasting resources by being caught up in hype. It is also important to manage the end of the technology lifecycle, replacing old technologies by ushering in new technologies that are relevant and compatible with current technological ecosystems. In addition to technological innovation, we extend the mantra of innovation into other realms such as supporting the innovation of other departments and programs, and advancing our own processes or approaches that do not necessarily utilize technology but present opportunities to run an effective Information Technology service organization in line with our department values and college goals.

Focus 5: Cybersecurity

Minimize institutional exposure to information security threats.

Core Theme 4: Enhancing Institutional Vitality
  Goal 2: We promote sustainable practices.

The threats to Cybersecurity are numerous and constantly evolving, therefore a pro-active approach to protecting the IT systems, applications, and data must be taken. We weave Cybersecurity into all necessary aspects of IT work, from daily conversation to tactical and strategic planning, so that we can get out in front of any threats. Cybersecurity must be a continued focus in order to minimize the risk exposure for TCC and ensure the secure utility and warranty of our systems. Our approach is to make sure that we comply with government regulations for information access and privacy, that we follow best business practices for implementing, monitoring and securing IT systems, and to hire and train qualified staff, to include end-user security awareness training.

Featured Projects and Initiatives

This following is a list of high-priority and high-value IT projects and initiatives, primarily grouped by the teams doing the work. This list was produced as a "point in time" list of notable projects. The ongoing project and initiative tracking and status are kept with the IT Department.

Campus-wide Initiatives

- **Student Communications**
  Communications with students has proved challenging over the years. As part of the TCC Strategic Plan, TCC will seek to create a communication system that allows students to receive the support they need when and how they need it. Technology will be an important part of this effort to improve communications with students.

- **Nudge Tech**
  Nudge tech is a collection of technologies that work together to achieve timely, personalized interaction with students, staff and faculty, such as a just-in-time student advising reminders from Civitas. This effort involves tapping into TCC student data sources to personalize student interactions to improve student outcomes such as completion or retention.

- **Guided Pathways & Civitas**
  Guided pathways is a "way of doing business". It is a reforming student-centered framework designed to increase and diversify the students and communities accessing and earning high value community college credentials. The approach focuses on the construction of a structured educational experience that engages each student from point of entry to attainment of high-quality postsecondary credentials and careers. Many efforts are underway at TCC to transform our institution to this paradigm, with Civitas being a key technology component.

- **Student CRM**
  Student Affairs is exploring Student CRM toolsets that will assist in managing and sharing information about student engagement and interaction across the institution. Focusing on a single view of a prospect or student, moving through the student life cycle improving enrollment, retention and completion rates.

- **IT Accessibility**
  IT is working with eLearning and Access Services staff to improve IT Accessibility at TCC. These stakeholder groups, along with faculty outreach, will be developing a plan and proposal for improving IT Accessibility. By supporting IT Accessibility, the college helps ensure that as broad a population as possible is able to access, benefit from, and contribute to its electronic programs and services.

- **Zoom Planning**
  During the pandemic, TCC leveraged Zoom to facilitate remote teaching, learning, and teleconferencing. In September of 2020, CARES/recovery funds were leveraged for two years of Zoom licenses. This effort will focus on long range planning for campus use of Zoom and identification of funding models.

- Open Educational Resources (OER)
  Open Educational Resources (OER) are teaching materials available at little or no cost that can be used for teaching, learning or research. TCC seeks to increase access to course materials by making supporting OER for courses and increasing enrollment for low-cost and zero-cost text sections.
- Facilities Master Planning and Capital Projects
  Last updated in 2015, TCC will be revisiting Facilities Master planning efforts to create a Long Range Facilities Master Plan to align with the College's Strategic Plan. IT will assist in the planning efforts as a key technology stakeholder. Large capital building projects on the horizon are the Center for Innovative Learning and Engagement and the new Student Support Center.

IT Governance & Policy

- Data Governance Committee
  The Data Governance Committee seeks to improve data management at Tacoma Community College by identifying resources, developing and supporting the people who manage them, and communicating regularly for continuous improvement. IT and other stakeholders are working to develop best practices, reduce risk, enhance security, maximize access, and appropriately use data to position the college for mission fulfillment.
- TRPPEL Policy Revisions
  Along with the rest of the college, IT will be revising its policies on an ongoing basis. An important component in these policy revisions is to use TRPPEL (Tool to Review Policies & Procedures through an Equity Lens), aligned with TCC's Core Theme 1: Advancing Equity, Diversity and Inclusion and commitment to highlighting, disrupting, and ending systems of oppression.
- IT Department Service Catalog
  TCC IT leverages ITIL (Information Technology Infrastructure Library) as a set of best practices for organizing IT as service provider. This effort will build out the customer-facing TCC IT Service Catalog to communicate services and service parameters to help our customers better understand what services are available.

IT Infrastructure

- 10g to the Classroom & Infrastructure Fiber Upgrades
  A large portion of the campus is running on 1 gigabit/sec connections within buildings and between buildings. This effort will standardize on-campus bandwidth to 10 gigabit/sec to ensure the campus network has capacity for computing and data processing needs within the classroom and faculty/staff administrative offices.
- 2g Internet Connection
  The College is running on a 1 gigabit/sec internet connection provided by K20 networks. A new

connection will double the size of that pipe to "future proof" the service in anticipation for internet connection needs years in the future.

- Network Segmentation
  Dividing the campus network into multiple segments or subnets, with each acting as its own small network, will allow for better flow of traffic between the network segments based on policies. Ultimately, this will improve network management, monitoring, performance, troubleshooting, and security.
- Wi-Fi Access Points Refresh
  We have made many improvements to our campus Wi-Fi over the years to enhance access and usability to the campus. This effort will focus on upgrading the individual Wi-Fi access points hanging from the ceiling to more modern versions of software and hardware.

Applications

- OnBase Forms
  This effort is aimed at making the college more efficient at producing OnBase forms. We will do that by optimizing the forms request intake process and augmenting the resources it takes to make forms.
- Process Automation
  There are many behind the scenes process that assist the college information systems in running smoothly. These processes may do anything from manage data from SBCTC/ctcLink or automate student and staff computer account lifecycle. This initiative will continue work along those lines and further automate processes where feasible and appropriate.
- Centralized Community Partnership Development System
  This initiative will support Core Theme 3: Goal 4: Objective 1, "Create a centralized community partnership development system." Through process development or creation of data and community partnership elements, this effort will seek to enhance local and global partnerships.
- Portal and Apps Migration
  Marketing has embarked on a project to move the portal off its current platform, uPortal, to Microsoft SharePoint. This will also involve presentation of portal applications and a hybrid approach for doing so across platforms.
- Website Cloud Migration
  The Marketing department is looking to move the www.tacomacc.edu website and functionality to be primarily cloud hosted. This will be accomplished using Microsoft Azure technologies.
- Budgeting Tool
  This project will deliver a transformed Budget Tool based on Whatcom Community College's tool that will work with ctcLink data formats and budget chart strings.
- Strategic Planning, Assessment, & Accreditation Software
  The college is embarking on efforts to manage strategic planning, assessment, and accreditation. That work is headed by the Office of EDI and, from a technology standpoint, will focus on the

Technology and Classroom Support

- Hyflex Classroom Technology
  Hybrid-Flexible (HyFlex) instructional models allow for the synchronous instruction of on-campus, in-person students and remote online students. We working to implement scalable technology upgrades to classroom and meeting spaces to increase capacity for HyFlex instruction and synchronous online and in-person meetings.
- Qatar Distance Education
  TCC International Student Services is in the midst of partnering with a third party to offer a TCC education to students overseas. This is a similar model to what International already does, but the students will physically remain overseas and the instructor will be at TCC. The program will leverage a technology setup to accomplish an instructor being in Tacoma and students in a classroom in Qatar.
- Remote Endpoint Management
  With the rapid shift to remote instruction and work-from-home during COVID response, our strategy involved supporting a much larger fleet of mobile computing end points. Our capabilities around managing those endpoints improved, but more work needs to be done exploring methods to do so more effectively and efficiently.
- Campus Print Management
  This campus-wide effort standardized faculty and staff on Shared Copier/Printers to provide fit-for-purpose, cost-effective printing options. The effort will also improve Shared Copier/Printer support for Faculty and Staff needs and provide transparency and clarity to Faculty and Staff printing chargebacks and usage.

ctcLink

- Champion TCC ctcLink at State Level
  ctcLink is an essential system for TCC. It is important to work with the SBCTC and other external entities to ensure TCC's voice is heard and needs are understood. We are interested in championing such issues as Service Level Agreements with ctcLink Support, and enhancing Business Systems Analysts capabilities through usage of PeopleSoft toolsets.
- Explore Unused & Valuable ctcLink Functionality
  ctcLink & PeopleSoft has plenty of potential that is unused. We will explore ways to tap this unused potential by exploring functionality available to us and offer it to users, or identify training & change management gaps across campus.
- ctcLink Reporting

TCC will explore options for better reporting using ctcLink data. This may include native PeopleSoft toolsets, or employing local SQL Server Reporting Services reports.

- Deployment Group 6 Go-lives
  The ctcLink project is a $145 million, decade-long project to move from Legacy to a modern platform on a shared system for the 34 SBCTC schools. In February through May of 2022, the last nine schools will be joining the ctcLink family. As part of the home stretch, TCC will need to manage communication and any TCC campus impacts as a result of the last nine schools coming online.
- Roles and Permissions Security Redesign
  TCC is in the process of switching over to a new ctcLink roles and permissions security model. SBCTC moved to a new permission base in ctcLink and this effort will complete TCC's move of all faculty, staff, and students to the new model.

Cybersecurity

- IT Security Audit
  In 2018 and 2021, TCC went through successful audits of our IT Security Program in accordance with WA State Office of the Chief Information Officer Policy 141 Cybersecurity Standards. TCC will continue to complete its triennial audit in accordance with the standards continued within Policy 141.
- PCI Compliance
  Working with the Finance Office, revisit PCI (Payment Card Industry) compliance to ensure continued achievement of regulations surrounding credit card machines at TCC.
- ctcLink Multifactor Authentication
  Working the SBCTC, connect TCC's SBCTC-provided Okta tenant to allow for Multifactor Authentication applied to Staff and Faculty accounts starting with accounts accessing core HR and Finance functionality and data.
- Student Multifactor Authentication
  Similar to ctcLink Multifactor Authentication, explore options for applying O365 Multifactor Authentication to Office 365 student access. This will help protect student accounts from phishing and unauthorized access.

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