

**Division** Finance and Administration, GMP – 11/16/2022  
**Department** Information Technology (I.T.)  
**Employee completing form** Tom Battaglia

Directions: Please work through the questions below and answer to the best of your ability – bullet points are perfect. Position/ function specific – not personnel management. The short-term purpose of this information is Cost Management. Your audience is campus.

**1. What are the main objectives of your unit, and how do you measure success in achieving them?**

- *The main objective of the I.T. organization is to provide reliable and effective IT services (aka a “catalog of services”) to students, employees, visiting students and the general public.*
- *The I.T. service catalog comprises:*
  - *Internet Connectivity for all students and employees and visitors*
  - *Local network connections for all students and employees to access SOU resources*
  - *Communication services (email, telephony, video conferencing, chat, etc.)*
  - *File storage services (Box.com, Google Drive, and some local storage as needed)*
  - *Enterprise Applications and support (Banner, COGNOS, etc.)*
  - *Additional Core Applications and support (Degree Works, etc.)*
    - *Integration development*
  - *Identity Management, Authentication and Authorization services*
  - *Business Productivity Applications (Microsoft Office, Google Workplace, etc.)*
  - *Personal computing devices and support for all employees*
  - *Classroom computing and audio-visual technologies*
  - *Underlying infrastructure needed to support above services*
  - *Information security needed to protect SOU information (aka cybersecurity)*
- *There are several key-performance-indicators for success, including but not limited to:*
  - *Availability of all services*
  - *Reliability of all services*
  - *Customer Satisfaction*
  - *Cybersecurity incidents incurred*
  - *Value to cost ratio.*

**2. What are the services that your unit provides and to which customers (students, faculty, staff, donors, others)?**

- *The aforementioned service catalog is available to the entire SOU Community and much of it is also available to visitors and the general public*

3. List each position in your unit, and briefly describe the responsibilities of each. Include part-time and work-study student hours. Indicate if functionality of the position is tied to federal, state, or institutional compliance.

Position	Compliance? (Yes/No)	Description
<b>Chief Information Officer</b>	Yes and No	Sets and oversees strategic direction, budget. Responsible for accessibility, cybersecurity, contractual and vendor management. Provides public records retrievals, litigation support and forensic investigation work.
<b>Information Security Manager</b>	Yes	Operates and is responsible for InfoSec program at SOU.
<b>Information Systems Manager</b>	No	Working manager who oversees application support, integration, programming, reporting, etc.
<b>Infrastructure and Network Services Manager</b>	No	Oversees wired and wireless network operations as well as operations for all mission-critical infrastructure and core services.
<b>Client Services Manager</b>	No	Oversees: first-tier support for all employees; computing environments for all employees; asset management for end users and lab computing; computer system trainings; help desk.
<b>Classroom &amp; Media Services Manager</b>	No	Oversees: all classroom technologies; conference room technologies; event A/V support; web-development workload for inside and <a href="http://www.sou.edu">www.sou.edu</a> . Plans and procures systems for classrooms and conference rooms and teaching labs.
<b>Programmer Analyst</b>	Yes	Provides business analysis, programming, reporting and support for myriad applications used throughout campus.
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<b>Programmer Analyst</b>	Yes	Provides business analysis, programming, reporting and support for myriad applications used throughout campus.
<b>(Part-Time) Programmer Analyst</b>	Yes	Provides business analysis, programming, reporting and support for myriad applications used throughout campus.
<b>A/V &amp; Computer Systems Specialist</b>	No	Provides installation, configuration and support for classroom audio/video systems and computing environments (podiums). Also serves as a hardware technician for multiple asset groups.

<b>Desktop Systems Administrator</b>	No	Manages all desktop and lab operating system and application images. Responsible for administering of software licenses for employee and student software provided by SOU (Adobe, Microsoft, etc.)
<b>Systems Administrator</b>	No (some Yes for PCI)	Manages ~260 Windows and Linux servers, firewalls, power systems for data-center. Manages access and configurations for most cloud applications (GSuite, Box, etc.)
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<b>Network/Communications Analyst</b>	No	Manages all aspects of SOU physical and wireless network, including over 1000 wireless access points, student and family housing network, building switches and security cameras. Provides 24 x 365 support.
<b>Network/Communications Analyst</b>	No	Manages all aspects of SOU physical and wireless network, including over 1000 wireless access points, student and family housing network, building switches and security cameras. Provides 24 x 365 support.
<b>Lab/Student Computing Coordinator</b>	No	Provides technical support for all teaching lab computers and provides support assistance to all students with SOU provided software. Also serves as primary IT Coordinator for OCA- Theatre, Music, Art, EMDA (description of duties below).
<b>I.T. Coordinator</b>	No	Provides end-user support for all users within multiple departments. Includes hardware installation, replacement and configuration as well as software installation and configuration. Provides training and technical support for multiple systems.
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<b>(Temp) I.T. Coordinator</b>	No	Provides end-user support for all users within multiple departments. Includes hardware installation, replacement and configuration as well as software installation and configuration. Provides training and technical support for multiple systems.
<b>Website Manager</b>	No	Responsible for analysis, design, implementation and support for sou.edu web presence.
<b>Web Application Developer</b>	No	Provides application development, integration and support for web-applications. Provides support for multiple web-applications (i.e. Formstack, Box.com, etc.) and is the developer for inside.sou.edu. Serves as backup support for <a href="http://www.sou.edu">www.sou.edu</a> as well.

**4. Do you see needs and demands for services that your unit cannot currently meet? If so, what are they, and how do they relate to the university's mission?**

- *I.T. is currently behind in its effort to keep up with the cybersecurity landscape.*
- *I.T. struggles to keep up with the continuous need to maintain a constantly growing portfolio- vendor upgrades are constant (Banner baseline updates and changes).*
- *I.T. struggles to deploy new technologies quickly and to provide training for new technologies.*
- *I.T. struggles to keep up with custom programming and report requests.*
- *I.T. struggles to keep SOU's web presence up to date.*

**5. How could the university help your unit do its job better?**

- *Provide support for I.T. Strategic plan to stick to an enterprise architecture based on simplicity and best practice.*
- *Continue to support the centralization and standardization of most technologies.*
- *Supporting evolution of technology*
- *Continue the migration to cloud services where applicable*
- *Reinforce the need for people to accept and use technology the way it was originally meant vs. configuring or customizing away from standards.*
- *Cybersecurity awareness (and buy-in)*

**6. In what ways does your unit relate to other units of the university, academic and non-academic? For example, what services do you provide to other units? What services do other units provide to you? On what tasks do you collaborate with other offices?**

- *I.T. provides direct support to all divisions, departments, employees and students.*

- *In addition, SOU is a partner with Link-Oregon to provide internet to the surrounding area by providing data-center hosting and some configuration and technical support. Strategically, this partnership will be increasing over time.*
- *I.T. collaborates with most all departments to either provide, support or integrate department/division specific technologies with the enterprise.*
- *I.T. partners and relies heavily on accounting (payables, asset mgmt.), procurement, contract review, budget and HR for services.*
- *I.T. provides direct support for Computer Science's special needs and support for Capstone projects.*

**7. What skill sets and resources does your unit possess that can be shared with other units at slack times?**

- *All:*
  - *Creative and analytical problem solvers*
  - *Critical thinking*
  - *Training*
  - *Communication*
  - *Project management and customer orientation*
  - *Data-analysis.*

**8. Which individuals in your unit are cross-trained and in what areas?**

- *Due to the nature of the department's work, many people have vertical expertise more than horizontal cross-training. However, there are some who are cross-trained, and we are already leveraging them in this capacity. Examples are:*
  - *I.T. A/V & Computer Systems Specialist. He provides additional I.T. Consultant support and hardware troubleshooting, repair and support to that team.*
  - *I.T. A/V, Classroom Technology manager is providing management for SOU's web presence staff.*
  - *I.T. Information Security Manager is providing systems administration support to the Infrastructure Team.*

**9. What resources do you need to improve your services to a superior level?**

- *Implement Workday*
- *Implement an enterprise integration platform (ESB) that allows for much simpler "plug & play" interplay between all systems.*
- *Improved ticketing system moving to a full IT-Service Management (ITSM) system.*
- *Access to professional services where I.T.'s skillset is not fully developed.*

**10. What technologies are available to you to provide your services better? What training do you need to be more effective users of the technology?**

- *I.T. made (and is making) a concerted effort to simplify its ecosystem and to leverage as many standard and cloud provided systems for SOU as possible.*
  - *The move from Banner and the Banner Ecosystem to Workday is an example.*
  - *Additional Workday training would make I.T. supporting staff more effective.*

- I.T. will need to continue to look for opportunities to reduce the amount of hands-on support that is required to provide a given service.
- I.T. is in the process of moving its authentication, authorization, SSO and MFA platforms to a standard cloud-based solution (Okta). I.T. systems administrators need additional training and potentially some hours of consulting to ensure a smooth transition away from our current setup.
- I.T. could really use two things that would improve security while also reducing the hours of staff time needed.
  - SIEM (security information and event management) is a system or service that aggregates the log files from a wide variety of other systems and can proactively alert I.T. to security incidents, anomalies, etc. When troubleshooting or forensic analysis is required across systems, it is a very time-intensive process to “stitch together” the log files from the various systems. A SIEM solution would automate much of this.
  - EDR or XDR Solution. Endpoint Detection and Response (EDR) or Extended Detection and Response (XDR) are newer technologies that proactively protect the endpoint in SOU’s computing environment (employee computers, lab computers, classroom computers, kiosks, etc.). SOU has been trying to protect the endpoints using older approaches to save money; however, the risk level is increased, and the lower cost solution that SOU has been using is actually causing more time wasted than the protection it should.

**11. What one thing do you wish you could do differently to improve your effectiveness but have not had the opportunity, time, or resources to do?**

- *Two Things:*
  - *Establish a reasonable service-level expectation and agreement across campus for all employees and students.*
  - *Finalize the I.T. Strategic Plan to the point where it includes the actual tangible initiatives that I.T. is either already accomplishing or trying to accomplish before EOY 2025.*

**12. How do you review and evaluate your department’s yearly performance?**

- *Overall complexity of the overall I.T. environment and what steps have been accomplished to simplify it, reducing the hours needed to support it.*
- *Workload over the number of FTE I.T. has. I.T. is making a continuous effort to not increase the number of staff needed to support a continuously growing I.T. portfolio.*
  - *Can be seen as number of requests and the aging of the requests.*
- *Budget actuals versus projections (annual).*
- *Number of incident and service request tickets received*
- *Customer and employee satisfaction*
- *Number and impact of cybersecurity incidents*

**13. Explain how your unit could function with:**

- a. *A 10 percent reduction to staff*

- i. *At the current workload, service level would drop significantly. Impacts to service level would be felt by all departments, employees, students and events.*
    - ii. *CISR project would be at significant risk level for failure.*
    - iii. *Other employees would leave due to the increased workload.*
  - b. *A 20 percent reduction to staff*
    - i. *CISR project would likely fail.*
    - ii. *Service levels would drop below what is acceptable.*
    - iii. *I.T. would lose additional employees due to the increased workload.*
  - c. *A 30 percent reduction to staff*
    - i. *Many systems and services would not be supported causing them to fail.*
    - ii. *CISR project would certainly fail.*
    - iii. *Other employees would leave and morale would cause an even more significant decrease in service level.*
  - d. *A 10 percent reduction to non-personnel resources*
    - i. *I.T. has been doing this each year even while increasing the portfolio and increasing the value to campus.*
  - e. *A 20 percent reduction to non-personnel resources*
    - i. *This is beyond the area of control, as most S&S spending is on software and services used by campus, and the average annual increase is 6% for the services.*
  - f. *A 30 percent reduction to non-personnel resource*
    - i. *Not possible due to existing contracts.*
  - g. *What would be the consequences or other effects on service delivery in each case?*
    - i. *Service delivery is already a challenge for the size of the I.T. Department.*
    - ii. *Reducing staff lower would negatively impact everyone on campus.*

**14. What opportunities exist for greater collaboration and team approaches in the delivery of services?**

- *One of the greatest challenges is trying to provide the necessary support for all departments and their ever-changing needs. New software gets introduced every year across SOU, and I.T. is already struggling to keep up with the demand for security and accessibility reviews. Better communication by departments about what their annual technology needs may be would be helpful for annual planning and resource allocation. I.T. has to act reactively much of the time.*
- *There are still several I.T. titled employees across campus that serve only one department. One department has supported consolidating this position with I.T. to better provide support horizontally across the enterprise. The others have not been open to this idea, as they “like” having their own I.T. people.*

**15. How many “middle managers” do we have? Are there opportunities to reduce middle strata in the organization and expand the span of control?**

- *I.T. has four middle managers and one functional (non-supervisory) manager required for compliance with cybersecurity needs.*
- *I.T. has just recently restructured its middle management layer to take on web-presence management and information security management.*
- *I.T.’s responsibilities are increasing without hiring additional FTE.*

**16. What technological improvements could be made that would result in labor savings?**

- *As previously mentioned, ESB, SIEM, EDR/XDR are technologies that would help I.T. itself, especially ESB over the long haul.*
- *Continued emphasis on shifts to standard solutions for “commodity” technologies.*
- *Continue the shift to cloud provided services.*

**17. How can a service be more efficiently or effectively delivered?**

- *Additional automation*
- *Continuing the shift to cloud-based services*
- *A greater emphasis across campus on using standard solutions for things that don't provide tangible value towards making SOU a unique place.*

**18. What processes do we have that can be streamlined or eliminated to improve service delivery?**

- *There are several such as the creation of UserIDs, recycling these IDs, etc.*
  - *The implementation of Workday and Okta should allow for a much improved and streamlined process.*
- *Currently, web-design, development and support are co-managed across Marketing and I.T. This makes it challenging for I.T. to manage, as I.T. does not prioritize the work.*

**19. Restructuring: What efficiencies might be gained by consolidating similar entities?**

- *The Hannon Library has one I.T. professional who could be leveraged to provide more enterprise support.*
- *Both Admissions and Financial Aid also have I.T. titled positions.*
  - *The workload ratio of systems to FTE in I.T. is considerably higher than in these areas, as I.T. staff typically support a multitude of various applications, services and departments.*

**20. Personnel: Have we worked around or structured around non-effective personnel and other personnel issues, and is this the time to stop indulging and start confronting the issue(s)?**

- *Yes.*

**21. Outsourcing: Are there other opportunities to outsource non-mission-critical services to private contractors who could do it better, faster, cheaper?**

- *I.T. attempted to outsource the information security role. Costs were higher than hiring the position internally.*
- *I.T. had outsourced the management of several key systems, and I.T. is now sunsetting the systems themselves to eliminate the need for expertise or outsourcing on those systems.*
- *I.T. recently looked at outsourcing the wireless networking service for student housing. The costs exceeded what SOU is currently paying; although, the service level may have*



*been able to improve. SOU-I.T. only has two network administrators, and it is difficult for them to meet the needs of the campus community.*

**22. Customer focus: How might our services be structured or delivered to meet the needs of students, faculty, staff, donors, and others better?**

- *I.T. has been continually changing its structure to meet the needs (for example, two reorganizations and numerous internal promotion opportunities within the last three years).*
- *I.T. staffs the Help Desk with student employees and uses student supervisors as well, reducing the dependency on traditional FTE.*

**23. Benchmarking: Compare your unit with similar units at other institutions or national norms.**

- **Random Selections:**
- Abilene Christian University (1,044 total employees, 4,296 IPEDS FTE)
  - Identical management structure.
  - Basically, identical service catalog
  - Similar software portfolio
- Ball State University (3,611 total employees, 17,817 IPEDS FTE)
  - VP-CIO, Two AVPs,
  - 5 security professionals
  - 27 Media services professionals
  - 36 User support professionals
  - 30 Network & Infrastructure professionals
  - 26 Information Systems professionals
- Cal-State East Bay (1,757 employees, 13,974 IPEDS FTE)
  - CIO, 1 Deputy CIO, 4 Directors.
  - Security Office
  - 66 employees
- Cal-State Channel Islands (946 employees, 6,493 IPEDS FTE)
  - AVP-CIO, CISO, 4 directors
  - 40 employees
- Seattle University (1,543 employees, 7,300 FTE est. NWACC)
  - CIO, 4 directors
  - 43 employees
- Daytona State College (1,396 employees, 8,114 IPEDS FTE)
  - 1 VP-CIO, 1 Exec. Asst.
  - 5 systems administrators
  - 9 Application support professionals
  - 8 Project Mgmt and Help Desk
  - 5 Networking professionals
  - 17-tech support professionals
  - 1 Security Director

**24. What can we stop doing?**

- *In the current strategic plan, it is indicated that one of the greatest underlying problems that exists for I.T. at SOU (and other institutions) is the lack of adhering to a cohesive architecture that is designed to provide the highest levels of interoperability between all systems and requiring the least amount of human support.*
- *SOU can stop trying to modify technologies to support things that don't provide a value return to SOU.*

### ***Additional Comparison (NWACC Schools)***

*Employee and Student data is from IPEDS Fall 2020 report.*

*IT staffing for centralized departments is self-reported to NWACC or determined from websites.*

*IT staffing for non-centralized is difficult to determine. UPS and UW report the proportion of centralized IT staff.*

Institution	Control	Employees	Students (HC)	IT Staff	Emp per IT Staff	Students per IT Staff	Centralized
Reed College	Private	571	1,385	36	16	38	Yes
Whitman College	Private	513	1,360	25	21	54	Yes
Portland Community College	Public	2,727	39,146	115	24	340	Yes
Central Washington University	Public	1,543	11,174	60	26	186	Yes
<b>Southern Oregon University</b>	<b>Public</b>	<b>673</b>	<b>5,150</b>	<b>25</b>	<b>27</b>	<b>206</b>	<b>Yes</b>
Eastern Washington University	Public	1,367	12,349	50	27	247	Yes
Pacific Lutheran University	Private	785	2,907	28	28	104	Yes
Willamette University	Private	645	1,866	22	29	85	Yes
University of Portland	Private	1,028	3,999	32	32	125	Yes
Western Washington University	Public	2,154	15,197	64	34	237	No
Seattle University	Private	1,531	7,050	43	36	164	No
Pacific University	Private	923	3,808	25	37	152	Yes
George Fox University	Private	1,022	4,000	30	34	133	Yes
Lewis & Clark College	Private	863	3,157	22	39	144	Yes
Gonzaga University	Private	1,607	7,295	40	40	182	Yes
Clark College	Public	1,223	7,665	30	41	256	Yes
Montana State University Bozeman	Public	3,336	16,218	124	27	131	No
Portland State University	Public		25,000				

Seattle Pacific University	Private	851	3,601	29	29	124	Yes
<a href="#">The Evergreen State College</a>	Public	660	2,281				
University of Oregon	Public	4,929	21,752	273	18	80	No
University of Puget Sound**	Private	795	2,130	33	24	65	No
University of Washington** *	Public	20,689	48,149	500	41	96	No
Washington State University	Public	6,652	31,159	117	57	266	No
					<b>Non-Centralized Average</b>		
					<b>29</b>	<b>158</b>	
					<b>Centralized Average</b>		
					<b>31</b>	<b>167</b>	
**UPS is 85% centralized							
***UW estimates that 500 IT Staff are only 32% of all IT staff at the university.							

Non-Banner, General Service Request Data:

Year	Number of Request Tickets
2018	8,090
2019	9,976
2020	9,925
2021	10,343
2022*	9,264

\* as of November 29, 2022