CHHATRAPATI SHAHU INSTITUE OF BUSINESS EDUCATION & RESEARCH (CSIBER) (AN AUTONOMOUS INSTITUTE) UNIVERSITY ROAD, KOLHAPUR – 416004 (MS-INDIA)

INFORMATION TECHNOLOGY (IT) POLICY



CHHATRAPATI SHAHU INSTITUE OF BUSINESS EDUCATION & RESEARCH (CSIBER) (AN AUTONOMOUS INSTITUTE) UNIVERSITY ROAD, KOLHAPUR – 416004 (MS-INDIA)

Preamble

It is universally acknowledged that the world is moving rapidly into digital media and information systems. The role of Information and Communication Technologies (ICT) in education is becoming more and more important in recent times. The use of ICT in education results in student-centered learning and can streamline not only the teaching-learning process but also the way of utilizing human resources for the overall development of the educational organization. In light of this, CSIBER is committed to creating its benchmark in competency and performance and hence the need for extensive use of ICTs in the administration, finance, academics, research, student evaluation, and other sub-systems.

ICT policy is created for promoting the growth and use of Information Technology (IT) in the CSIBER. This is expected to propel the institute's functioning for transparency and accountability and make its presence in the comity of educational organizations. The institute has witnessed moderate growth in the implementation of IT due to the proactive initiatives taken by the management in terms of the creation of state-of-the-art physical infrastructure and applications. The contribution of the ICT sector had a reasonable impact on the institute's functioning expansion in its activities and perceptible improvement in student services.

Need of ICT Policy

While educational institutions are providing access to the internet to their faculty, students, and staff, they face certain constraints:

- Limited internet bandwidth.
- Limited infrastructure like computers, computer laboratories,
- Limited financial resources in which faculty, students, and staff should be provided with the network facilities and
- Limited technical manpower is needed for network management.

On one hand, resources are not easily available for expansion to accommodate the continuous rise in internet needs, on the other hand uncontrolled, uninterrupted, and free web access can give rise to activities that are neither related to Teaching/Learning processes nor governance of the university.

At the outset, we need to recognize the problems related to uncontrolled surfing by the users:

- Prolonged or intermittent surfing, affecting the quality of work
- Heavy downloads that lead to choking of available bandwidth
- Exposure to legal liability and cases of sexual harassment due to harmful and embarrassing content.
- Confidential information is being made public.

Without strong management policies, IT security measures will not be effective and not necessarily align with management objectives and desires. Hence, policies and guidelines form the foundation of the Institution's security program. Effective policies are a sign of due diligence; often necessary in the event of an IT audit or litigation. Policies also serve as blueprints that help the institution implement security measures. An effective security policy is as necessary to a good information security program as a solid foundation to the building.

Hence, CSIBER also is proposing to have its own IT Policy that works as guidelines for using the institute's computing facilities including computer hardware, software, email, information resources, intranet, and Internet access facilities, collectively called "Information and Communication Technology (ICT)". This document attempts to propose some ICT policies and guidelines that would be relevant in the context of this institute. While creating these policies, every effort has been made to have a careful balance between security and the ability to conduct the rightful functions by the users. The purpose of the ICT policy is to set direction and provide information about acceptable actions and prohibited actions or policy violations.

Location

Chhatrapati Shahu Institute of Business Education and Research (CSIBER) University Road, Kolhapur - 416004 Website: <u>www.siberindia.edu.in</u> CSIBER on Google Map: spread over 11 acres campus in Kolhapur near Shivaji University



Departments and Programs Availed

Sr. No.	Name of the Department	Program Availed
1	Management	Master of Business Administration
2	Commerce	Master of Commerce
3	Computer Studies	Master of Computer Application
		Master of Science – Computer Science
		Post Graduation Diploma in Computer Application
4	Environment Management	Master of Business Administration in Environment
		Management
		Master of Science – Environment, and Safety
5	Social Work	Masters of Social Work
6	Economics	Master of Science – Quantitative Economics
7	MPhil	Master of Philosophy

Available IT Infrastructure

Data Center Details

. .

Sr. No.	Description/Configuration	
	Dell Poweredge R540 Rack Server 84715000	
	2 X Intel Xeon Silver 4116 (2.1G, 12C/24T,	
	9.6GT/s , 16.5M Cache, Turbo, HT (85W) DDR4-2400) 96GB (6 X 16GB)	
	RDIMM, 2666MT/s, Single R Hardrive : 2 X1.2TB 10K RPM SAS 12Gbps 512n	
	2.5in Hotplug Hard Drive Optical Drive : 8x SATA DVD+/-RW Drive Chipset :	
01	Intel® C610/C236 Series Chipset Mother Board, System Management : iDRAC8	
	Enterprise Network : Broadcom® 5720-based rack network daughter card	
	Keyboard & Mouse: USB Entry Keyboard,	
	Optical Mouse, SAS 12Gbps HBA External Controller, LP Adapter (2 LAN Port)	
	RAID: PERC H740P Integrated RAID Controller, Cabinet : (2U rackable),	
	Redundant Power Supply 495W	
	VS6-ESP-KIT-C - VMware vSphere 6 Essentials Plus Kit for 3 hosts (Max 2	
02	processors per host) VS6-ESP-KIT-P-SSS-C - Production Support/Subscription	
	VMware vSphere 6 Essentials Plus Kit for 3 years	
	Dell EMC ME4024 Storage Array 8471 1	
	ME4 2U Bezel 10 X 2.4TB, HDD, 10K, 512e, SAS12, 2.5", TA15 12Gb SAS 8 Port	
03	Dual Controller Power Supply, 580W, Redundant, Flex 8 X 12Gb HD-Mini to HD-	
	Mini SAS Cable, 2M ProDeploy Dell EMC Storage ME 4XXX 2U	
	Rack Rails 2U 3Yr ProSupport & Mission Critical:(7x24) 4-hour Onsite Service	
	D-Link® Floor Mount Rack 42U -	
	NFR-42U-8010-BL-SK	
04	42U Rack Frame-800X1000-STEEL, Casters Set of 4, 19" Reduced Channel - Loop	
04	Type, Glass Door-800-42U X 1, Metal Door-800-42U-Vented X 1, Side Panels-	
	1000-42U-Vented X 2, Power Distribution Unit 12Way 15AMP, Cable	
	Management System, FHU with 4 FAN 360CFM Mounting Hardware-(Pack of 20),	
05	Cadyce KVM 8471 1 Switch 4 Port USB KVM Switch with Cables	

.

Computer Laboratory Details

. .

Sr. No	Lab Name	Equipment Details
1	Computer Lab 1	Lenovo Desktop V530 (Tower) 80 Nos
		Intel® 8th generation CoreTM i3-8100
		PROCESSOR (6M Cache, 3.10 GHz),
		4GB DDR4 Memory,1 TB Hardrive,
		No Optical Disk Drive, Intel® B250 Chipset Mother
		Board, Integrated HD Graphics, 10/100/1000 Gigabit
		Ethernet, USB Keyboard, Mouse, 19.5 Monitor
		Sophos XG210 for security purposes.
		Seqrite Endpoint security Antivirus with admin console
		200mbps internet leased line connection.
		Research software like SPSS 20.0 (30 users).
		CCTV with NVR and IP Cameras, DLP Projectors
2	Computer Lab 2	Lenovo Desktop V530 (Tower) 83 Nos
		Intel® 8th generation CoreTM i3-8100
		PROCESSOR (6M Cache, 3.10 GHz),
		4GB DDR4 Memory,1 TB Hardrive,
		No Optical Disk Drive, Intel® B250 Chipset Mother
		Board, Integrated HD Graphics, 10/100/1000 Gigabit
		Ethernet, USB Keyboard, Mouse, 19.5 Monitor
		Sophos XG210 for security purposes.
		Seqrite Endpoint security Antivirus with admin console
		200mbps internet leased line connection.
		Research software like SPSS 20.0 (30 users).
		CCTV with NVR and IP Cameras, DLP Projectors
	Computer Lab 3	Lenovo Desktop V530 (Tower) 83 Nos
		Intel® 8th generation CoreTM i3-8100
		PROCESSOR (6M Cache, 3.10 GHz),
		4GB DDR4 Memory,1 TB Hardrive,

. .

		No Optical Disk Drive, Intel® B250 Chipset Mother
		Board, Integrated HD Graphics, 10/100/1000 Gigabit
		Ethernet, USB Keyboard, Mouse, 19.5 Monitor
		Sophos XG210 for security purposes.
		Sequite Endpoint security Antivirus with admin console
		200mbps internet leased line connection.
		Research software like SPSS 20.0 (30 users).
		CCTV with NVR and IP Cameras, DLP Projectors
3	Computer Lab 4	A server with Windows 2003, 4GB RAM 500GB HDD
5	(Language Lab)	Desktops 30 with 2GB RAM 500GB HDD 17' TFT
	(Language Lab)	ClaritySet Software for Communication Activities
4	Computer Lab 5	Dell Desktops 3050 40 with 4GB RAM 250GB HDD
+	(Computer Center)	18.5'TFT Monitor, Windows 10 Professional
5		· · · · · · · · · · · · · · · · · · ·
5	Computer Lab 6	Dell Desktops with 4GB RAM 80GB HDD 17'TFT Monitor
6	Computer Lab 7	A server DualCore with 4GB RAM, 2*73, 2*146 SCSI
	(Library)	HDD
		Dell Desktops 30 with 4GB RAM 250GB HDD 17" TFT
		Monitor, Windows XP
		Libsys multiuser software
7	Exam Section	Digital Evaluation System
		IBM QuadCore server with 8GB RAM, 2*500 HDD 21"
		TFT Monitor
		20 Dell Desktops with 4GB RAM, 250GB HDD 24" TFT
		Monitor
		High-end Epson DS 70000 scanner, 24" Cutter
8	Others	Interactive Panels - ITP 19 12
		Kirloskar DG Genset DG 140KVA
		DG 30KVA 01 02
	Sound System	AHUJA AMPLIFIER SSB45 M 12
		AHUJA AMPLIFIER SSB 100 M 03
L		

Scanners	HP SCANNERJET 2400
	HP SCANNERJET 200
	EPSON DS 70000

Additional available Infrastructure

- ICT enabled classroom with LCD projectors
- WiFi for students and faculties in institute's campus
- Structured Cabling and LAN built using cat 6 UTP cable and routers
- Smart Access points with MAC binding
- Campus Surveillance with IP Cameras and NVRs
- Sophos Firewall for internet security
- Video Conferencing facility
- Biometric Attendance System
- Multimode Fiber Connectivity is maintained in Campus

Available Applications

- Moodle A Digital E-Learning and Content Delivery Platform
- ERP for Office Automation
- Libsys An integrated multi-user library management software with Acquisition, Cataloguing, Circulation, OPAC system, etc
- Digital Evaluation System All answer scripts are scanned using a high-speed scanner and stored at the server-side in the pdf format delimitated by a unique bar-code corresponding to each answer script. Authorized evaluators get access to the uploaded answer scripts for evaluation and the marks are entered on the system and calculated automatically.
- Online Resources EBSCO, Inflibnet, IEEE Xplore, DELnet
- Seqrite admin console anti-virus

In-house ICT Projects

- Web portal for an entrance examination
- Web portal for GE selection

Bandwidth

• Two Leased lines with the bandwidth of 200 Mbps and 10 Mbps

Central repository

- Google Drive is used as a repository for facility
- A dedicated data center on the campus

Maintenance of IT infrastructure

• In-house maintenance

IT services provided for students

- Every department has Internet connectivity to carry out teaching and learning activities.
- Currently, the students are equipped with a free Wi-Fi facility for learning
- Library management system for searching the library database
- Moodle, Learning Management System
- Google Classroom, virtual collaborative tool for teachers and students
- Internet facility in hostels

IT services provided for staffs

- On-campus internet service to carry out teaching and research activities
- Online Content Delivery & Management through Moodle, Google Classroom
- Official mail ID for interaction and communication
- Use video conferencing for audio-video interaction with eminent experts remotely
- Staff Biometric Attendance System
- Online Resources EBSCO, Inflibnet, IEEE Xplore, DELnet
- Implementation of online teaching through Google Meet platform

The auxiliary services

- Emergency backup services UPS with 1-hour battery backup
- Two Genset for power backup 140KVA and 30 KVA

Proposed ICT Policy

All members, staff, students, and visitors using the CSIBER's ICT service, including the connection of any device to a departmental network connected to the CSIBER backbone network, must follow these regulations. Users must also be aware that the departments may impose additional rules for use of facilities under their control. All units (departments, staff, and students) of the CSIBER must set in place procedures to ensure that they conform to the appropriate ICT policies of the institute.

This policy provides a framework for the management of information and other security throughout the CSIBER. It applies to:

- All those with access to CSIBER computer network, including staff, students, visitors, and contractors
- Any systems attached to the CSIBER computer networks
- All external parties that provide services to the CSIBER in respect of information processing facilities and business activities and
- Principal information assets include the physical locations from which the CSIBER operates.

ICT Policy Regulations - Objectives

- To facilitate effective communication for learning enrichment and student engagement.
- To ensure that all of the CSIBER computing facilities and services, programs, and data are adequately protected against loss, misuse or abuse;
- To create an institute's awareness that appropriate information and physical security measures are implemented as part of the effective operation and support of ICT facilities and services;
- To ensure that all users fully comply with Information Security policy, standards, guidelines, and procedures.
- To ensure all users are aware of their responsibilities for the security and protection of facilities, services, programs, and data over which they have control

- The ICT committee oversees the overall strategic direction, management, and operation of the CSIBER's ICT infrastructure and services, consistent with the strategic and operational objectives of the CSIBER.
- System Administrator(s) must assist in maintaining the security and integrity of the CSIBER's ICT infrastructure, facilities, and services.

ICT Acceptable Use Policy

- The CSIBER provides computer facilities and access to its computer networks only for purposes directly connected with the work of the institute and departments with the normal academic activities of their members.
- Individuals have no right to use CSIBER facilities for any other purpose.
- CSIBER reserves the right to exercise control over all activities employing its computer facilities.
- Users are not permitted to use CSIBER IT facilities for any unlawful activity like the creation, transmission, storage, downloading, or display of any offensive, obscene, indecent, or menacing images, data, except in the case of the use of the facilities for properly supervised research purposes when that use is lawful and when the user has obtained prior written authority for the particular activity from the head of his or her department or the chairman of his or her faculty board

ICT System Management

The institute endeavors to reach a less paper stage, where all communications are done using ICTs. Currently, all office circulars are sent through e-mails. Information storage and processing is done through ICT. Institute has two leased lines of 200 Mbps and 10 Mbps bandwidth. This bandwidth shall be utilized in a phased manner to provide Campus-wide wireless access for all activities using ICTs. The institute leverages this bandwidth to improve its use of ICTs in teaching-learning and research by creating appropriate systems and platforms. The ICT services on the campus are:

• **Common Data Services** - Data Communication forms an essential component of the ICT policy. Common Network Services, mainly comprising physical network infrastructure

(wiring, switches, routers, servers, etc) and communication protocols (TCP/IP), are prerequisites for Internet access.

- Electronic Mail Services Email systems are designed to enhance communication.
- Access-to-Internet Services This is one of the most valuable communication services for higher learning. It provides access to a wealth of information sources, located on computer systems around the world. While the institute provides restricted access to the Internet and Web to prevent misuse of the facilities and block sites that are inappropriate.
- Intranet Services The institute maintains intranet services for staff and students for use of its resources.
- Learning Management System The institute has installed and managing a Learning Management System (LMS) and other facilities to promote the effective use of ICTs in teaching and learning.
- Office Computing Services It is the institute's policy to promote office computing in the office. In this context the term office computing is used for the application of ICT, mostly desk-top computers, to support general office tasks. Major office computing applications are office ERP, word processing, electronic mail, spreadsheet processing, document storage and retrieval, and access to the Internet.

Hardware Installation Policy

Institute network user community needs to observe certain precautions while getting their computers or peripherals installed so that he/she may face minimum inconvenience due to interruption of services due to hardware failures. Hardware installation policy includes:

- Warranty & Annual Maintenance Contract
- All the computers and peripherals should be connected to the electrical point strictly through UPS.
- While connecting the computer to the network, the connecting network cable should be away from any electrical/electronic equipment, as they interfere with the network communication.
- File and print sharing facilities on the computer over the network should be installed only when it is required.

Software Installation and Licensing Policy

Respecting the anti-piracy laws of the country, institute IT policy does not allow any pirated/unauthorized software installation on the institute-owned computers and the computers connected to the CSIBER campus network. In case of any such instances, the institute will hold the department/individual personally responsible for any pirated software installed on the computers located in their department/individuals' rooms.

Operating System and its Updating

- Individual users should make sure that respective computer systems have their OS updated in respective of their service packs/patches, through the Internet. This is particularly important for all MS Windows-based computers (both PCs and Servers). Updating OS by the users help their computers in fixing bugs and vulnerabilities in the OS that were periodically detected by Microsoft for which it provides patches/service packs to fix them.
- Institute as a policy encourages user community to go for open-source software such as Linux, Open office to be used on their systems wherever possible.

Network Use Policy

CSIBER network use policy includes:

- Any computer that is connected to the institute's network, should have an IP address assigned by the network administrator
- Internet bandwidth acquired by any department of the institute under any program should ideally be pooled with the institute's Internet bandwidth, and be treated as the institute's common resource.

Computer Laboratories and ICT Usage Policy

While students and staff are encouraged to use the institute's ICT facilities optimally and in a shared and cordial manner, some basic norms must be followed:

• All ICTs, including Local Area Network, Wireless Local Area Network, Internet, and email are to be used only for the purpose laid down in this policy.

- Playing software games or downloading inappropriate content is strictly prohibited, and any such event will be treated with disciplinary proceedings.
- All users must adhere to the laws concerning piracy, copyright, and other intellectual property rights.
- It is illegal to retrieve, view, post, store, or distribute pornographic, obscene, violent, or offensive material through the University's email, network, or hardware.
- Bags are kept on the racks in the computer labs, food and/or drinks are not to be brought into computer labs.
- Computer equipment can only be handled by authorized staff members, students should not attempt to repair any parts and function of the systems.
- All equipment faults and/or damage must be reported to the system administrator

Computer Naming Policy

The hostname starts with lab name followed by computer number. Here computer number is the last octant of IP Address.

Eg: MCA38

ICT Anti-Virus Policy

The institute ensures that approved and maintained licensed anti-virus software Quick Heal (Seqrite) from known and trusted sources is deployed, where appropriate anti-virus is available, on ICT facilities owned or leased by the CSIBER and ICT services provided by the CSIBER. Computer systems used in the institute should have anti-virus software installed, and it should be active at all times. The primary user of a computer system is responsible for keeping the computer system compliant with this virus protection policy. Individual users should make sure that respective computer systems have current virus protection software installed and maintained.

The virus management includes:

- Employ virus management measures at appropriate points of the CSIBER network.
- Implement virus control software and procedures to ensure that all networked computer servers and ICT-managed nodes are protected against virus infection.
- The detected infection has been remedied.

• Manage mass virus infections/threats through the ICT emergency management process.

Email Account Policy

As the institute invested in the cloud, staff are provided with a CSIBER email account. This account is used for day-to-day official communication. Communication to different groups is through group emails. All users use the institute's email account for communication within the institute and educational purposes.

Website hosting Policy

Institute's official website <u>www.siberindia.edu.in</u> is registered with Education and Research Network (www.ernet.in/), an autonomous scientific society of the Ministry of Communications and Information Technology (Govt. of India). The website is hosted at GoDaddy (in.godday.com), a publicly-traded Internet domain registrar and web hosting company. The website maintenance is performed by the website committee. Institute's website hosting policy includes:

- The website maintenance team is responsible for updating the contents of the site
- Academic details, faculty information, program structure, and activities related to the departments are available on the official website
- The website includes pages related to statutory bodies, infrastructure, library, Internal Quality Assurance Cell, placement cell, students, alumni, etc
- Timely notifications of admission intimations, upcoming events, and news on activities held in the institute are available online
- Official Web pages must conform to the institute website creation guidelines for website hosting

Student Data and Teaching- Learning

ICT-enabled teaching-learning encompasses a variety of techniques, tools, content, and resources aimed at improving the quality and efficiency of the teaching-learning process. ICTs are used by teachers to catalyze the transformation of information into student learning. The institute

undertakes a range of activities to support teaching and learning through the use of ICTs, but not limited to the following:

- Teachers are facilitated to engage in the selection and evaluation of digital content and resources to improve their students' learning. They are also encouraged to develop their digital resources and share them with colleagues through the digital repository.
- Training programs are organized on the effective use of ICTs for teaching and learning for teachers. Such training may be organized within the institute or faculty members are deputed to attend external workshops.
- Encouraged teachers and students to create learning groups for free flow of discussion beyond the classroom.
- Facilitate teachers to collaborate and undertake projects to develop high-quality digital learning materials for the students.
- Create appropriate online learning spaces for use of the teachers and learners.
- Encourage teachers to use, create and contextualize Open Educational Resources available in their discipline for the students.

Student Engagement

CSIBER encourages students to be familiar with the use of Information and Communication Technology and services to support and strengthen their learning experiences at the institute. Each student is facilitated with:

• Moodle login to access e-Learning resources

When student accounts have been activated, students are responsible for everything that occurs on their accounts. Therefore, every user, including students are:

- Advised to keep login passwords confidential and not share with anyone;
- Advised not to attempt unauthorized access to secured network resources or accounts of other users;
- Required to report any security concerns to the system administrator on the campus

Google Classroom for Virtual Learning

Google Classroom, an easy-to-use learning management system is used to interact virtually with students. Google classroom support for teachers:

- Create and manage classes in a paperless way
- Invite co-teachers and students to class
- Add materials such as word documents, PowerPoint presentations, Files, YouTube video links, and other items from Google Drive
- Add assignments, quiz and give direct, real-time feedback
- Create topics and arrange materials topic wise
- Post announcements

For students:

- Join the class
- Access the learning resources shared in the class
- View and reply posts

Google Meet for Live Classes

Google Meet, a video meeting app by Google is used for conducting live lectures and video meetings. The lectures are scheduled as per the timetable and conducted accordingly.

Conclusion

As a finishing up note, it is unequivocally accentuated that however, the approaches concentrate on issues identified with the technology and information usage, it might be comprehended that they determine more extensive importance and essentialness from key rights as well as fundamental standards and obligations that apply to all parts of the CSIBER community. If something is not indicated unequivocally in the policy or guidelines as illegal or unauthorized, it is fundamental and imperative to utilize one's knowledge and basic speculation in assessing new circumstances.