



Social Issues and Professional Practices

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MODULE 8

HOW COMPUTING IS CHANGING WHO WE ARE



Introduction

Computers and its uses grew rapidly and widely throughout the world. They are used to deal with many tasks due to their various potential. It helps to resolve problems human life encounters in daily life. Therefore, they have more influence on our life. The impact of computer usage on our life obviously identified as Savings of Money, Time and Effort.

Within the last 3 decades, computer has been recognized as the most life changing and successful invention solving problems in human life. Today, where business caters, there you find applying computer usage. Look at educational sector, health, transportation, or communication sector, we can see the influence and application of computer. It's difficult to survive a business without adopting computer usage either directly or indirectly in this modern world (Lopol.Org - Computers and Our Life: How Have Computers Changed Our Life, n.d)



Learning Outcomes

At the end of this module, students should be able to:

1. Identify the multiple online personas.
2. Analyze the different Virtual and Online Addiction
3. Explain how the internet changes our lives.

Lesson 1: Computer and Human Life Correlated with Communication

Computer can bring people closer together and facilitate contacts between them using Email, Chatting, Videoconferencing, Mobile Phones and Social Medias. It saves time, efforts and money compared with letters used, before making influence of computers in

human life. These days, we seldom use hand written letters, put in the envelopes and transport over long distances because most of us have computer and education to make use of it.

Print media, Television and Radio play important role in our life. They too have influence of computers from production, control, storage and broadcasting. Using computers, we are able to create a document, display it on screen, modify and print it on a printer or publish in front of the world through world wide web. Computer connected with internet has ability to publish ideas, thoughts, criticism etc, instantly across the world. Social networking sites like, Facebook, Twitter, blogger, Youtube, Whatsapp etc. opens another sophisticated yet easy to use viral communication, reveals the importance of computer and human life. If it is not exaggerated, our younger generation has become addicted to use these modern tools. A majority of college students cannot have a day without login to at least one social networking site (Lopol.Org - Computers and Our Life: How Have Computers Changed Our Life, n.d.).

Influence of Computer in Education

Computer has made massive makeover in education field. Three decades ago, if anyone has a doubt to be clarified in a learning process, finding right expert itself was a cumbersome task and there may not be available further opinion about the subject. Although the different and easiest clarification or solution are available on the other side of the world, we were unable to know its whereabouts because lack of communication. In this modern world, our "Guru" as all we know is "Google search" being evolved as Human Assist adopting Artificial Intelligence (the latest trends in Computer application).

A New Era in Education - MOOC

Most of the universities offer distant education and exams using online channels to their students in which many famous universities have made tie-ups with MOOC providers. MOOCs become a paradigm in the heart of real knowledge seekers who gets new horizon to the world of learning with learner's convenience.

What is MOOC?

MOOC is the acronym for Massive Open Online Course. The title itself declare that learner has to be online for MOOC's course, ie., connected through internet. It taught by various universities all around the world with the help of MOOC technology. MOOCs are

available (both free and paid) for anyone with an internet connection, time and thirst for knowledge. Some of the popular MOOC providers include Coursera, edX, Udacity, and Future Learn partnered with universities, companies, and professors to provide MOOCs. A learner has to sign up with MOOC technology provider's website or mobile application prior joining a course.

Education Through MOOC

Some popular universities partnered with online education providers, for example, Coursera, Khan Academy are famous among them. More and more universities added day by day to Massive Open Online Course (MOOC) concept in education. It brings learning process to the learner's convenience as well as unlimited participants.

Influence of Computer in Utility Facilities

Computer also facilitate comfort to our life and provides convenience. For transportation, it facilitates the way people travel. Airways, Roadways and waterways uses computers to control their operation. It saves time and relieve severity of traveling difficulties.

Computer Brings Tremendous Progress in Health Care Sector

Computers provide potential for improving the effectiveness of medical care. It uses storing data of hospital such as patient data and medical information. Doctors and nurses can access to this data easier which resulted in decreasing the process of time. In addition, many operations are no longer manually perform, rather computers are used to manage these tasks.

Latest Trends and Near Future Expectations by Computers

While discussing changes computer has made in human life, it's worth mentioning the changes computer bring in the near future. Some of the predicted changes are of Artificial Intelligence (AI), Machine Learning (ML), Interest Based Education, 3D Printing, Driver-less Vehicles and Space Traveling (Lopol.Org - Computers and Our Life: How Have Computers Changed Our Life, 2013).

Artificial Intelligence (AI)

Artificial intelligence takes over work places of repetitive jobs, reduce human intervention up to the end of job cycle. Minimum or nil supervision and management for production units. Factories will be transformed into one single machine that accept raw material at one point and the other point receives output of finished products. In between there won't be any kind of human work force, supervision or management employees.

Machine Learning (ML)

Machines are being capable to learn new things to accomplish what humans want to get it done. It will be task-based learning that machines become smarter devices human wanted to make use of.

Interest based education

New dimensions and methods will be adopted for teaching and learning. In our traditional system, most learners taught the subject they never liked or interested. A few of them are lucky mastering subjects they loved or interested. In the near future, computer can predict which is the flair subject a person can learn and interact actively. This way education will be smarter than ever.

3D Printing

3D printing sweepstakes in the small-scale manufacturing industry. Once 3D printing become affordable and common, it will badly affect traditional small-scale manufacturers (Lopol.Org - Computers and Our Life: How Have Computers Changed Our Life, 2013).

Lesson 2: Multiple Online Personas (Washburn.Edu - Career Services, 2020)

The development of Internet communication and social media has expanded the traditional notion of identity. Now, people have online identities in addition to real life identities. It can be hard to manage the relationship between online and real-life identities because a) materials that are posted online may exist forever; b) they can shape people's interpersonal perception towards you in the real world; and c) employers tend to use online platforms to verify and validate the identity of individuals. Hence, it is important to be aware of effective

ways to manage your online identities. Managing online identities is important because (Washburn.Edu - Career Services, 2020):

- It provides platforms for people to express their feelings and show different sides of their personalities.
- It helps people to understand you more holistically.
- It helps to shape people's interpersonal perception.
- People often associate your virtual identities with real life identities.
- Employers will use online platforms to verify and validate the identity of individuals.
- More importantly, the materials posted online may exist forever and may always be searchable.

Managing your Online Persona

If you have a social media presence, such as a profile on Facebook or Twitter, you need to be especially careful of the information placed on your profile as these sites are widely used and open for public consumption. As you prepare to start your professional life, be sure to review your online persona from a prospective employer's point of view.

Remember, Nothing on The Web Is Private

- Think of your profile as your public relations tool. Use it to present your accomplishments and creativity, not to settle scores and attack others.
- Google yourself occasionally. Even better, consider signing up for a Google Alert - it will tell you when your name is mentioned online.
- Make sure that your social networking profiles (Facebook, MySpace, Twitter, etc.) are all set to the highest privacy setting. Hint – Facebook has a tendency to change these without warning and they reset them to public settings.
- Be careful whom you decide to “friend” on your account.
- Edit what your friends write on your “Wall.” You can and will be held accountable for their actions when it comes to your job.
- Before posting a comment online, consider these suggestions:
 - What would my Grandparents think about what I'm about to say?
 - Don't write anything on someone else's profile that can come back to haunt you.

- Avoid trashing your current or former employers online. If you have a lousy boss or an obnoxious co-worker, vent to your family and friends in person.
- Lastly, always use a professional looking email address - i.e., use your washburn.edu account. You do not want to be associated with email addresses like imstoned311 or beerguzzler19 as part of your ever important first impression.
- Know what potential employers can find out about you.

Lesson 3: Virtual and Online Addiction

Defining Addiction

Addiction is a compulsive physiological and psychological need for a substance or practice. Addiction is connected to the release of dopamine hormone neurotransmitter that helps control the brain's reward and pleasure centers. There are addictions to substances such as nicotine or drugs, and there are addictions to activities such as computer games. In both cases, the brain's reward mechanism is strengthened, causing repeated use of the substance or repeated activity with progressively increasing intensity (Hoeg, 2019).

How to Recognize Addiction

An Internet addict usually tries to hide an addiction, but there are behavioral and mental indicators of addiction, such as progressively increasing surfing time, an inability to disengage, nervousness, stress (when someone stops the addict's surfing activity), surfing online at unusual hours, a decrease in eating and sleeping, and more. The following list composed by experts contains some of the indicators when an addiction is suspected:

- Increased need for Internet/multimedia surfing time
- Loss of interest in socialization
- Physical neglect
- Reduction in eating, or overeating
- Neglect of personal hygiene
- Reduction in physical activity
- Difficulty concentrating
- Lack of sleep, and red eyes

- Lost sense of time
- Irritability or violence

Damage Caused by Addiction

- Most addicts struggle with their addiction to the point of a total loss of control. An addiction disrupts the course of everyday life at school, work, and one's relationships and social life. The sense of complete lack of control is heavy to the addict, particularly if the addiction leads to depression or suicidal thoughts, or to the harming of others or sexual abuse when the addiction is to sexual or pornographic content (Hoeg, 2019).

Preventing Addiction

- The best means to prevent addiction is to be actively involved with a child's screen activity. Set a reasonable amount of time for Internet and multimedia use, and balance it with other non-screen activities. See our recommended screen times for each age group here.
- The virtual world presents new technology and content all the time, so be alert as to which devices may be more addictive than others. For example, a fast video game with rhythmic background music creating strong brain stimuli is more likely to be addictive than a quiet thinking game.
- Some individuals are more inclined to develop an addiction, such as those characterized by obsessive compulsive behavior, or those possessing emotional difficulties. These types may require additional attention and care when determining an appropriate schedule for their Internet and multimedia use (Hoeg, 2019).

What Is an Internet Addiction?

Today, internet and computer use are ingrained in contemporary society and have changed the way we live our lives more than any other technological medium yet. Despite this, we still know relatively little about the effects of internet addiction on our psychological functioning, mental health, and general well-being. Just last year, data from the Pew Research Center showed that 77% of Americans connect to the internet on a daily basis. While many believe that surfing the web or binging cat videos on YouTube is a relatively harmless act, there are some people who spend so much of their time using a computer or on the internet that it has begun to interfere with their daily lives. When an action or desire becomes a

hindrance, taking precedence over the most important aspects of one's life – relationships, work, school – it can become classified as an addiction (Hoeg, 2019).

5 Types of Internet Addiction (Hoeg, 2019)

Internet addiction is a broad term that covers a range of behaviors and impulse-control problems involving internet, personal computer, and mobile technology. While there is yet no officially accepted criteria to diagnose an internet addiction, researchers have identified 5 subcategories of specific types of computer and internet addictions.

Cybersex Addiction

A Cybersex addiction is one of the more self-explanatory internet addictions. It involves online pornography, adult websites, sexual fantasy/adult chat rooms, and XXX web-cam services among others. An obsession with any of these services can be harmful to one's ability to form real-world sexual, romantic, or intimate relationships. Treatment options are available for those with cybersex addictions, typically in the form of intervention followed by ongoing inpatient or outpatient therapy.

Net Compulsions

Net compulsions concern interactive activities online that can be extremely harmful, such as online gambling, trading stocks, online auctions (such as E-bay), and compulsive online shopping. These habits can have a detrimental impact on one's financial stability and disrupt job-related duties. Spending or losing excessive amounts of money can also cause stress in one's relationships. With instant and easy access to online casinos and stores, it is easy for those who are already susceptible to a gambling or spending addiction to get hooked online.

Cyber (Online) Relationship Addiction

Cyber or online relationship addicts are deeply involved with finding and maintaining relationships online, often forgetting and neglecting real-life family and friends. Typically, online relationships are formed in chat rooms or different social networking sites but can occur anywhere you can interact with people online. Often, people who pursue online relationships

do so while concealing their real identity and appearance – this modern phenomenon led to the creation of the term “catfish.”

After being consumed by an online social life and persona, a person may be left with limited social skills and unrealistic expectations concerning in-person interactions. Many times, this leads to an inability to make real-world connections, in turn, making them more dependent on their cyber relationships. Counseling or therapy is typically required to treat this addiction and ensure lasting behavioral changes.

Compulsive Information Seeking

The internet provides users with a wealth of data and knowledge. For some, the opportunity to find information so easily has turned into an uncontrollable urge to gather and organize data. In some cases, information seeking is a manifestation of pre-existing, obsessive-compulsive tendencies. Commonly, compulsive information-seeking can also reduce work productivity and potentially lead to job termination. Depending on the severity of the addiction, treatment options can range from different therapy modalities – which target changing compulsive behavior and developing coping strategies – to medication.

Computer or Gaming Addiction

Computer addiction, sometimes referred to as computer gaming addiction, involves on- and offline activities that can be done with a computer. As computers became more widely available, games such as Solitaire, Tetris, and Minesweeper were programmed into their software. Researchers quickly found that obsessive computer game playing was become a problem in certain settings. Office employees would spend excessive amounts of time playing these games causing a notable decrease in productivity. Today, not only are these classic games still available, but so are thousands of new ones. Computer addiction is the oldest type of internet/computer addiction, and it is still prevalent and harmful today (Hoeg, 2019).



Assessment Tasks

Part 1. True or False. Write True if the statement is true otherwise false.

- _____ 1. Compulsive information-seeking can also reduce work productivity and potentially lead to job termination.
- _____ 2. Depending on the severity of the addiction, treatment options can range from different therapy modalities – which target changing compulsive behavior and developing coping strategies – to medication.
- _____ 3. An obsession with any of these services and addiction can be harmful to one's ability to form real-world non-sexual, romantic, or intimate relationships.
- _____ 4. Some individuals are more inclined to develop an addiction, such as those characterized by obsessive compulsive attitude, or those possessing emotional difficulties.
- _____ 5. The best means to prevent addiction is to be actively involved with a child's screen activity.
- _____ 6. An addiction disrupts the course of everyday life at school, work, and one's relationships and social life.
- _____ 7. Addiction is connected to the release of dopamine hormone neurotransmitter that helps control the brain's reward and context centers.
- _____ 8. Computer addiction is the oldest type of internet/computer addiction, and it is still prevalent and harmful nowadays.
- _____ 9. Researchers quickly found that obsessive computer game playing was become a problem in certain settings.
- _____ 10. Counseling or therapy is typically required to treat this addiction and ensure lasting behavioral changes.

Part 2. Multiple choice.

1. It is sometimes referred to as computer gaming addiction, involves on- and offline activities that can be done with a computer.
 - a. Computer or Gaming Addiction
 - b. Compulsive Information Seeking
 - c. Net Compulsions
 - d. Cyber (Online) Relationship Addiction
2. It can also reduce work productivity and potentially lead to job termination.

Depending on the severity of the addiction, treatment options can range from different therapy modalities.

 - a. Computer or Gaming Addiction
 - b. Compulsive Information Seeking
 - c. Net Compulsions
 - d. Cyber (Online) Relationship Addiction
3. Many times, this leads to an inability to make real-world connections, in turn, making them more dependent.
 - a. Computer or Gaming Addiction
 - b. Compulsive Information Seeking
 - c. Net Compulsions
 - d. Cyber (Online) Relationship Addiction
4. These habits can have a detrimental impact on one's financial stability and disrupt job-related duties.
 - a. Computer or Gaming Addiction
 - b. Compulsive Information Seeking
 - c. Net Compulsions
 - d. Cyber (Online) Relationship Addiction
5. An obsession with any of these services can be harmful to one's ability to form real-world sexual, romantic, or intimate relationships.

- a. Cybersex addiction
 - b. Compulsive Information Seeking
 - c. Net Compulsions
 - d. Cyber (Online) Relationship Addiction
6. What is MOOC?
- a. Massive Open Online Course
 - b. Massive Open-line Online Course
 - c. Massive Online Open Course
 - d. Massive Object-Oriented Course
7. It is a compulsive physiological and psychological need for a substance or practice.
- a. Obsession
 - b. Addiction
 - c. Internet Addiction
 - d. Online Addiction
8. Are being capable to learn new things to accomplish what humans want to get it done. It will be task-based learning that machines become smarter devices human wanted to make use of.
- a. Learning machine
 - b. Machine learning
 - c. Learning style
 - d. Style of learning
9. The best means to prevent addiction is to be actively involved with a child's screen activity. Set a reasonable amount of time for Internet and multimedia use, and balance it with other non-screen activities.
- a. Prevention
 - b. Avoiding prevention
 - c. Predicting prevention
 - d. Preventing prediction

10. New dimensions and methods will be adopted for teaching and learning. In our traditional system, most learners taught the subject they never liked or interested.

- a. Internet based education
- b. Online based education
- c. Modular based education
- d. Module online based education



Summary

- MOOC is the acronym for Massive Open Online Course. The title itself declare that learner has to be online for MOOC's course.
- Managing online identities is important because:
 - It provides platforms for people to express their feelings and show different sides of their personalities.
 - It helps people to understand you more holistically.
 - It helps to shape people's interpersonal perception.
 - People often associate your virtual identities with real life identities.
 - Employers will use online platforms to verify and validate the identity of individuals.
 - More importantly, the materials posted online may exist forever and may always be searchable.
- Addiction is a compulsive physiological and psychological need for a substance or practice.
- **5 Types of Internet Addiction**
 - Cybersex Addiction
 - Net Compulsion
 - Cyber (Online) Relationship Addiction
 - Compulsive Information Seeking
 - Computer or Gaming Addiction



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MODULE 9

EMPLOYEE AND EMPLOYER ISSUES



Introduction

While some conflict in the workplace is inevitable, unchecked conflict can get out of control and do irreversible damage to your business. Conflict can have several causes, including personality differences, cultural expectations, malicious harassment and the failure of some employers to understand employee limitations and needs. Conflict is often the result of personality clashes. If a supervisor and employee have significantly different personalities, friction can arise. These conflicts are often not motivated by malice but are the result of two very different people misunderstanding each other.

For example, Jessie is a very quiet, serious employee who doesn't often smile or laugh. She tends to be private about her personal life. Although Jessie got along well with her previous supervisor, Julie, who had a similar personality, Julie now has left the company, and Roberta has taken her role. Roberta is very gregarious, loud, and laughs often, and also tends to be inquisitive about her employees' lives.

Jessie has become increasingly uncomfortable around Roberta, as she doesn't like being asked about her personal life and feels that too much noise and laughter in the workplace is unprofessional. For her part, Roberta is put off by Jessie's quiet, private nature and regards Jessie as unfriendly. Recently, Roberta reprimanded Jessie for not smiling enough or not making small talk with a recent client who visited the office. Jessie feels bullied and is contemplating making a formal complaint to HR (Petersen, 2019).

*Respectful communication is essential to a happy and productive
employer-employee relationship*

Paul Foster



Learning Outcomes

At the end of this module, students should be able to:

1. Identify the importance of employer and employee relationship;
2. Analyze the use of non-traditional workers; and
3. Explain the importance of Offshore Outsourcing.

Lesson 1: The Need for Nontraditional Workers

According to the Computing Research Association, the number of undergraduate degrees awarded in computer science, computer engineering, and information technology at doctoral-granting computer science departments in the United States and Canada decreased dramatically from a peak of around 21,000 per year in 2004 to less than 10,000 in 2009.

By 2011, however, the number of undergraduate degrees had rebounded to nearly 15,000 (see Figure 9.1). This recovery was due in part to the federal government's forecast of an increased need for workers in computer science-related fields. The Bureau of Labor Statistics estimates that as of 2010, there were 3.4 million people employed in IT-related positions in the United States; the agency expects this sector to add close to 750,000 new jobs between 2010 and 2020.

Figure 9.2 shows the total number of people needed for selected IT positions as well as the median 2010 salaries associated with these positions. As a result of the decline in undergraduate degrees being awarded in computer science and engineering fields, IT firms and organizations that use IT products and services are concerned about a shortfall in the number of U.S. workers to fill not only the 750,000 expected new positions but also to replace the many people who will retire from existing positions.

Facing a likely long-term shortage of trained and experienced workers, employers are increasingly turning to nontraditional sources to find IT workers with skills that meet their needs; these sources include contingent workers, H-1B workers, and outsourced offshore workers. As employers consider these options, they must confront ethical decisions about

whether to recruit new and more skilled workers from these sources or to develop their own staff to meet the needs of their business.

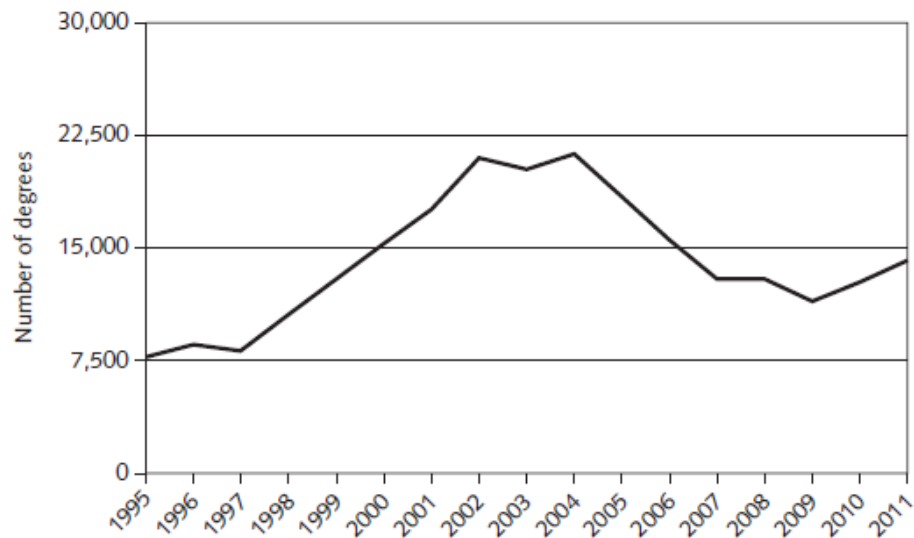


Figure 9.1 Number of Undergraduate Degrees Awarded in Computer Science, Computer Engineering and Information Systems

Source: CRA Taulbee Survey; Computing Degree and Enrollment Trends 2010-2011.

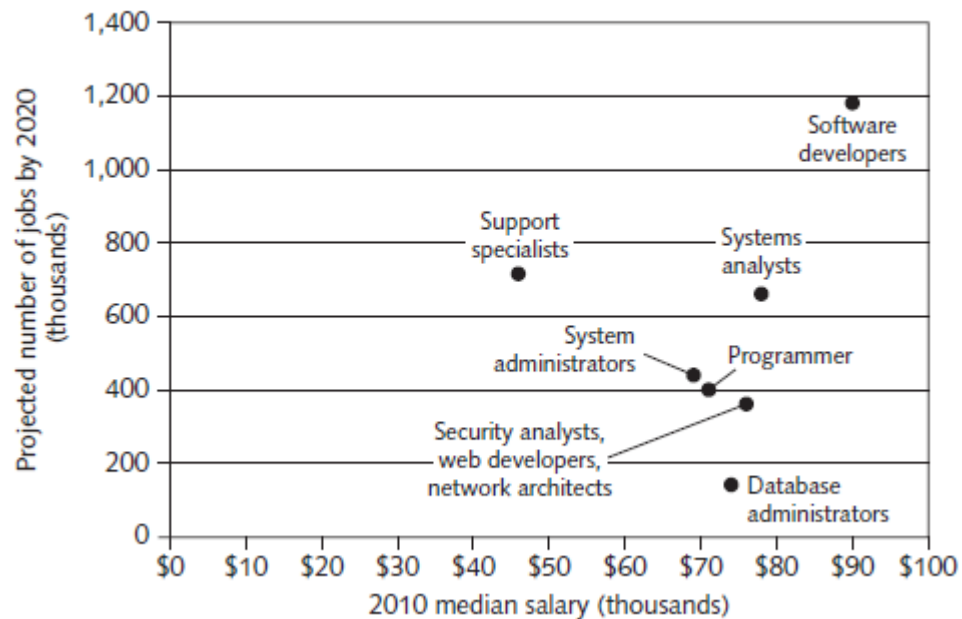


Figure 9.2 Occupational Outlook, IT positions

Source: Occupational Outlook Handbook, www.bls.gov/ooh/computer-and-information-technology/software-developers.htm

Lesson 2: Contingent Workers

Contingent Workers

A job situation in which an individual does not have an explicit or implicit contract for long-term employment. The contingent workforce includes independent contractors, temporary workers hired through employment agencies, on-call or day laborers, and on-site workers whose services are provided through contract firms (Reynolds,n.d.).

Typically, these workers join a team of full-time employees and other contingent workers for the life of the project and then move on to their next assignment. Whether they work, when they work, and how much they work depends on the company's need for them. They have neither an explicit nor an implicit contract for continuing employment.

Organizations can obtain contingent workers through temporary staffing firms or employee leasing organizations. Temporary staffing firms recruit, train, and test job seekers in a wide range of job categories and skill levels, and then assign them to clients as needed. Temporary employees are often used to fill in during staff vacations and illnesses, handle seasonal workloads, and help staff special projects. However, they are not considered official employees of the company, so they are not eligible for company benefits such as vacation, sick pay, and medical insurance. Because temporary workers do not receive additional compensation through company benefits, they are often paid a higher hourly wage than full-time employees doing equivalent work.

Employee Leasing

A business (called the subscribing firm) transfers all or part of its workforce to another firm (called the leasing firm), which handles all human resource-related activities and costs, such as payroll, training, and the administration of employee benefits. The subscribing firm leases these workers, but they remain employees of the leasing firm. Employee leasing firms operate with minimal administrative, sales, and marketing staff to keep down overall costs, and they pass the savings on to their clients.

Organizations can also obtain temporary IT employees by hiring a consulting firm. Consulting organizations maintain a staff of employees with a wide range of skills and experience, up to and including world-renowned industry experts; thus, these firms can often

provide the exact skills and expertise that an organization requires for a particular project. Consulting firms work with their clients on engagements for which there are typically well-defined expected results or deliverables that must be produced (e.g., creation of an IT strategic plan, implementation of an enterprise resource planning [ERP] system, or selection of a hardware vendor) (Reynolds, n.d.).

Advantages of Using Contingent Workers

When a firm employs a contingent worker, it does not usually have to provide benefits such as insurance, paid time off, and contributions to a retirement plan. A company can easily adjust the number of contingent workers it uses to meet its business needs, and can release contingent workers when they are no longer needed. An organization cannot usually do the same with full-time employees without creating a great deal of ill will and negatively impacting employee morale. Moreover, because many contingent workers are already specialists in a particular task, a firm does not customarily incur training costs for contingent workers. Therefore, the use of contingent workers can enable a firm to meet its staffing needs more efficiently, lower its labor costs, and respond more quickly to changing market conditions.

Disadvantages of Using Contingent Workers

One downside to using contingent workers is that they may not feel a strong connection to the company for which they are working. This can result in a low commitment to the company and its projects, along with a high turnover rate. Although contingent workers may already have the necessary technical training for a temporary job, many contingent workers gain additional skills and knowledge while working for a particular company; those assets are lost to the company when a contingent worker departs at a project's completion (Reynolds,n.d.).

Deciding When to Use Contingent Workers

When an organization decides to use contingent workers for a project, it should recognize the trade-off it is making between completing a single project quickly and cheaply versus developing people within its own organization. If the project requires unique skills that

are probably not necessary for future projects, there may be little reason to invest the additional time and costs required to develop those skills in full-time employees.

The key lesson of this case is that even if workers sign an agreement indicating that they are contractors and not employees, the deciding factor is not the agreement but the degree of control the company exercises over the employees. The following questions can help determine whether a worker is an employee:

- Does the worker have the right to control the manner and means of accomplishing the desired result?
- How much work experience does the person have?
- Does the worker provide his own tools and equipment?
- Is the worker engaged in a distinct occupation or an independently established business?
- Is the method of payment by the hour or by the job?
- What degree of skill is required to complete the job?
- Does the worker hire employees to help? (Reynolds,n.d.)

Table 9.1 Manager's checklist for the use of contingent employees

Question	Yes	No
Have you reviewed the definition of an employee in your company's policies and pension plan documents to ensure it is not so broad that it encompasses contingent workers, thus entitling them to benefits?		
Are you careful not to use contingent workers on an extended basis? Do you make sure the assignments are finite, with break periods in between?		
Do you use contracts that specifically designate workers as contingent workers?		
Are you aware that the actual circumstances of the working relationship determine whether a worker is considered an employee in various contexts, and that a company's definition of a contingent worker may not be accepted as accurate by a government agency or court?		
Do you avoid telling contingent workers where, when, and how to do their jobs and instead work through the contingent worker's manager to communicate job requirements?		
Do you request that contingent workers use their own equipment and resources, such as computers and email accounts?		
Do you avoid training your contingent workers?		
When leasing employees from an agency, do you let the agency do its job? Do you avoid asking to see résumés and getting involved with compensation, performance feedback, counseling, or day-to-day supervision?		
If you lease employees, do you use a leasing firm that offers its own benefits plan, deducts payroll taxes, and provides required insurance?		

Source Line: Course Technology/Cengage Learning.

Lesson 3: H-1B Workers

An **H-1B visa** is a temporary work visa granted by the U.S. Citizenship and Immigration Services (USCIS) for people who work in specialty occupations—jobs that require at least a four-year bachelor's degree in a specific field, or equivalent experience (Reynolds, n.d.).

Table 9.2 Top H-1B Visa Employers In 2012

Company	Total H-1B visas granted (2012)
Cognizant	9,281
Tata	7,469
Infosys	5,600
Wipro	4,304
Accenture	4,037
HCL America	2,070
Tech Mahindra SATYAM	1,963
IBM & IBM India	1,846
Larsen & Toubro	1,632
Deloitte Touche Tohmatsu	1,668

Source Line: Ron Hira, "Top 10 Users of H-1B Guest Workers Program Are All Offshore Outsourcing Firms," Economic Policy Institute (blog), February 14, 2013, www.epi.org/blog/top-10-h1b-guestworker-off-shore-outsourcing.

H-1B Application Process

Most companies make ethical hiring decisions based on how well an applicant fulfills the job qualifications. Such companies consider the need to obtain an H-1B visa after deciding to hire the best available candidate. To receive an H-1B visa, the person must have a job offer from an employer who is also willing to offer sponsorship. Once a decision has been made to hire a worker who will require an H-1B visa, an employer must begin the application process. There are two application stages: The Labor Condition Application (LCA) and the H-1B visa application. The company files an LCA with the Department of Labor (DOL), stating the job title, the geographic area in which the worker is needed, as well as the salary to be paid (Reynolds, n.d.).

Using H-1B Workers Instead of U.S. Workers

In order to compete in the global economy, U.S. firms must be able to attract the best and brightest workers from all over the world. Most H-1B workers are brought to the United States to fill a legitimate gap that cannot be filled from the existing pool of workers (Reynolds, n.d.).

Potential Exploitation of H-1B Workers

Even though companies applying for H-1B visas must offer a wage that is at least 95 percent of the average salary for the occupation, some companies use H-1B visas as a way to lower salaries. Because wages in the IT field vary greatly, unethical companies can get around the average salary requirement. Determining an appropriate wage is an imprecise science at best.

Companies using H-1B workers, as well as the workers themselves, must also consider what will happen at the end of the six-year H-1B visa term. The stopgap nature of the visa program can be challenging for both sponsoring companies and applicants. If a worker is not granted a green card, the firm can lose a worker without having developed a permanent employee. Many of these foreign workers, finding that they are suddenly unemployed, are forced to uproot their families and return home.

Lesson 4: Offshore Outsourcing

Outsourcing

It is a long-term business arrangement in which a company contracts for services with an outside organization that has expertise in providing a specific function. A company may contract with an organization to provide services such as operating a data center, supporting a telecommunications network, or staffing a computer help desk (Reynolds, n.d.).

Offshore outsourcing

It is a form of outsourcing in which the services are provided by an organization whose employees are in a foreign country. Organizations must consider many factors when deciding where to locate outsourcing activities. For example, political unrest in Egypt has reduced the

attractiveness of that country as a source of IT outsourcing, particularly after the government there temporarily blocked all Internet and cell phone service in early 2011.

Table 9.3 Most Attractive Offshoring Destinations (Based on A.T. Kearney Rating Methodology)

Country
1. India
2. China
3. Malaysia
4. Egypt
5. Indonesia
6. Mexico
7. Thailand
8. Vietnam
9. Philippines
10. Chile

Source Line: A.T. Kearney, Inc., "A.T. Kearney's Global Services Location Index™," © 2011, www.atkearney.com/index.php/Publications/at-kearneys-global-services-location-index-volume-xiii-number-2-2010.html.

In 2011, Nokia, the Finnish mobile device manufacturer, and Accenture, the global consulting company headquartered in Ireland, announced a major outsourcing deal in which Accenture agreed to provide Nokia with software development and support services for the once popular Symbian mobile operating system and computing platform. Some 2,300 Nokia employees in China, Denmark, Finland, India, the United Kingdom, and the United States were transferred to Accenture as part of the deal. Symbian has fallen out of favor with phone handset manufacturers, and Nokia has decided to transition to a Windows Phone platform for its line of smartphones. As part of the outsourcing agreement, Accenture became the preferred supplier to Nokia to aid its transition from Symbian to the Windows Phone platform.

Table 9.4 Top-Rated IT Outsourcing Firms According to The International Association of Outsourcing Professionals.

Firm	Headquarters location
Accenture	Dublin, Ireland
Wipro Technologies	Bangalore, India
Infosys Technologies	Bangalore, India
HCL Technologies	New Delhi, India
CSC	Falls Church, Virginia
Capgemini	Paris, France
Amdocs	Chesterfield, Missouri
CGI Group	Montreal, Quebec, Canada

Source Line: International Association of Outsourcing Professionals, "The 2013 Global Outsourcing 100," © 2013, www.iaop.org/Content/19/165/3612.

Strategies for Successful Offshore Outsourcing

Successful projects require day-to-day interaction between software development and business teams, so it is essential for the hiring company to take a hands-on approach to project management. Companies cannot afford to outsource responsibility and accountability (Reynolds, 2015).

To improve the chances that an offshore outsourcing project will succeed, a company must carefully evaluate whether an outsourcing firm can provide the following:

- Employees with the required expertise in the technologies involved in the project.
- A project manager who speaks the employer company's native language.
- A pool of staff large enough to meet the needs of the project.
- A state-of-the-art telecommunications setup.
- High-quality on-site managers and supervisors.

The following list provides several tips for companies that are considering offshore outsourcing:

- Set clear, firm business specifications for the work to be done.
- Assess the probability of political upheavals or factors that might interfere with information flow, and ensure the risks are acceptable.

- Assess the basic stability and economic soundness of the outsourcing vendor and what might occur if the vendor encounters a severe financial downturn.
- Establish reliable satellite or broadband communications between your site and the outsourcer's location.
- Implement a formal version-control process, coordinated through a quality assurance person.
- Develop and use a dictionary of terms to encourage a common understanding of technical jargon.
- Require vendors to have project managers at the client site to overcome cultural barriers and facilitate communication with offshore programmers.
- Require a network manager at the vendor site to coordinate the logistics of using several communications providers around the world.
- Agree in advance on the structure and content of documentation to ensure that manuals explain how the system was built, as well as how to maintain it.
- Carefully review a current copy of the outsourcing firm's SAS No. 70 audit report to ascertain its level of control over information technology and related processes.



Assessment Tasks

Part I.

Direction: Write **TRUE** if the statement conveys correct thought, otherwise write **FALSE** if the statement is not true.

_____ 1. The contingent workforce includes independent contractors, temporary workers hired through employment agencies, on-call or day laborers, and on-site workers whose services are provided through contract firms.

_____ 2. Employee cannot lease firms operate with minimal administrative, sales, and marketing staff to keep down overall costs, and they pass the savings on to their clients.

_____ 3. Successful projects require day-to-day interaction between software development and business teams, so it is essential for the hiring company to take a hands-on approach to project management.

_____4. Organizations must not consider many factors when deciding where to locate outsourcing activities.

_____5. A company may contract with an organization to provide services such as operating a data center, supporting a telecommunications network, or staffing a computer help desk.

_____6. If a worker is granted a green card, the firm can lose a worker without having developed a permanent employee.

_____7. Most H-1B workers are brought to the United States to fill a legitimate gap that cannot be filled from the existing pool of workers.

_____8. An organization cannot usually do the same with part-time employees without creating a great deal of ill will and negatively impacting employee morale.

_____9. The use of contingent workers can enable a firm to meet its staffing needs more efficiently, lower its labor costs, and respond more quickly to changing market conditions.

_____10. The stopgap nature of the program can be challenging for both sponsoring companies and applicants.

Part 2. Essay

1. What factors must a company consider in deciding whether to employ offshore outsourcing on a project?
2. Your firm has just added six H-1B workers to your 50-person department. You have been asked to help get one of the workers “on board.” Your manager wants you to introduce him to other team members, provide him with some basic company background and information, and explain to him how work gets done within your organization. Your manager has also asked you to help your new coworker become familiar with the community, including residential areas, shopping centers, restaurants, and recreational activities. Your goal would be to help the new worker be productive and comfortable with his new surroundings as soon as possible. How would you feel about taking on this responsibility? What would you do?



Summary

- IT firms and organizations that use IT products and services are concerned about a shortfall in the number of U.S. workers to fill these positions. As a result, they are turning to nontraditional sources to find IT workers with skills that meet their needs.
- Contingent work is a job situation in which an individual does not have an explicit or implicit contract for long-term employment. The contingent workforce includes independent contractors, temporary workers hired through employment agencies, on-call or day laborers, and on-site workers whose services are provided through contract firms.
- An H-1B is a temporary work visa granted by the U.S. Citizenship and Immigration Services (USCIS) for people who work in specialty occupations—jobs that require at least a four-year bachelor's degree in a specific field, or equivalent experience.
- Employers hire H-1B workers to meet critical business needs or to obtain essential technical skills or knowledge that cannot be readily found in the United States. H-1B workers may also be used when there are temporary shortages of needed skills.
- Some people contend that employers exploit contingent workers, especially H-1B foreign workers, to obtain skilled labor at less-than-competitive salaries. Others believe that the use of H-1B workers is required to keep the United States competitive.
- Employers must make ethical decisions about whether to recruit new and more skilled workers from these sources or to spend the time and money to develop their current staff to meet the needs of their business.
- Outsourcing is a long-term business arrangement in which a company contracts for services with an outside organization that has expertise in providing a specific function. Offshore outsourcing is a form of outsourcing in which the services are provided by an organization whose employees are in a foreign country.
- Outsourcing and offshore outsourcing are used to meet staffing needs while potentially reducing costs and speeding up project schedules.



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MODULE 10

ETHICS OF IT ORGANIZATIONS



Introduction

Although Information Technology (IT) plays a critical role in organizations and is essential for nowadays business survival, but organizations have several ethical challenges in embarking this technology. Nonetheless, because of its role and importance in organizations, it is necessary to identify factors affecting on IT ethics. The relationship between organizational citizenship behavior (OCB) and IT ethics remained relatively underdeveloped and a review of these studies indicates that validity and reliability issues have yet to be fully addressed (Sohrabi & Amir, n.d.).

To give real service you must add something which cannot be bought or measured with money, and that is sincerity and integrity.

—Douglas Adams, English humorist and science fiction author



Learning Outcomes

At the end of the lesson, the student is expected to:

1. Understand what is green computing and what are organizations doing to support this initiative.
2. Distinguish what measures does the members of the electronics manufacturing industry are taking to ensure the ethical behavior of the many participants in their long and complex supply chains.
3. Identify the ICT Industry code of conduct.

Lesson 1: Green Computing

Many computer manufacturers today are talking about building a “green PC,” by which they usually mean one that uses less electricity to run than the standard computer; thus, its carbon footprint on the planet is smaller. However, to manufacture a truly green PC, a hardware company must also reduce the number of hazardous materials and dramatically increase the amount of reusable or recyclable materials used in its manufacturing and packaging processes (Reynolds, n.d.).

Green computing is a term applied to a variety of efforts directed toward the efficient design, manufacture, operation, and disposal of IT-related products, including personal computers, laptops, servers, printers, and printer supplies. Computer manufacturers and end users are faced with many questions about when and how to transition to green computing, and at what cost.

Electronic devices such as personal computers and cell phones contain hundreds or even thousands of components. The components, in turn, are composed of many different materials, including some that are known to be potentially harmful to humans and the environment, such as beryllium, cadmium, lead, mercury, brominated flame retardants (BFRs), selenium, and polyvinyl chloride.

Some electronics manufacturers have developed programs to assist their customers in disposing of old equipment. For example, Dell offers a free worldwide recycling program for consumers. It also provides no-charge recycling of any brand of used computer or printer with the purchase of a new Dell computer or printer. This equipment is recycled in an environmentally responsible manner, using Dell’s stringent global recycling guidelines. HP and other manufacturers offer similar programs.

Electronic Product Environmental Assessment Tool (EPEAT) is a system that enables purchasers to evaluate, compare, and select electronic products based on a total of 51 environmental criteria. Products are ranked in EPEAT according to three tiers of environmental performance: Bronze (meets all 23 required criteria), Silver (meets all 23 of the required criteria plus at least 50 percent of the optional criteria), and Gold (meets all 23 required criteria plus at least 75 percent of the optional criteria) (Reynolds,n.d.).

Some electronics manufacturers have developed programs to assist their customers in disposing of old equipment. For example, Dell offers a free worldwide recycling program for consumers. It also provides no-charge recycling of any brand of used computer or printer with the purchase of a new Dell computer or printer. This equipment is recycled in an environmentally responsible manner, using Dell's stringent global recycling guidelines. HP and other manufacturers offer similar programs.

The environmental activist organization Greenpeace issues ratings of the top manufacturers of personal computers, mobile phones, TVs, and game consoles based on the manufacturers' policies on toxic chemicals, recycling, and climate change. Table 10.1 shows the companies with the top ten Greenpeace ratings in November 2012. With 10 being a perfect score, it is clear that these manufacturers have a long way to go in meeting the very high "green" standards of Greenpeace.

Table 10.1 Greenpeace ratings of the top ten electronics manufacturers

Organization	October 2012 rating
Wipro	7.1
Hewlett Packard	5.7
Nokia	5.4
Acer	5.1
Dell	4.6
Apple	4.5
Samsung	4.2
Sony	4.1
Lenovo	3.9
Phillips	3.8

Source Line: Greenpeace, "Guide to Greener Electronics," © November 2012, www.greenpeace.org/international/en/Guide-to-Greener-Electronics/18th-Edition.

Lesson 2: ICT Industry Code of Conduct (Reynolds,n.d.)

The Electronic Industry Citizenship Coalition (EICC) was established to promote a common code of conduct for the electronics and ICT industry. The EICC focuses on the areas

of worker safety and fairness, environmental responsibility, and business efficiency. ICT organizations, electronics manufacturers, software firms, and manufacturing service providers may voluntarily join the coalition. The EICC has established a code of conduct that defines performance, compliance, auditing, and reporting guidelines across five areas of social responsibility: labor, health and safety, environment, management system, and ethics. Adopting organizations apply the code across their entire worldwide supply chain and require their first-tier suppliers to acknowledge and implement it. The following are the five areas of social responsibility and guiding principles covered by the code:

1. **Labor** - “Participants are committed to uphold the human rights of workers, and to treat them with dignity and respect as understood by the international community.”
2. **Health and Safety** - “Participants recognize that in addition to minimizing the incidence of work-related injury and illness, a safe and healthy work environment enhances the quality of products and services, consistency of production and worker retention and morale. Participants also recognize that ongoing worker input and education is essential to identifying and solving health and safety issues in the workplace.”
3. **Environmental** - “Participants recognize that environmental responsibility is integral to producing world class products. In manufacturing operations, adverse effects on the community, environment, and natural resources are to be minimized while safeguarding the health and safety of the public.”
4. **Management System** - “Participants shall adopt or establish a management system whose scope is related to the content of this Code. The management system shall be designed to ensure (a) compliance with applicable laws, regulations and customer requirements related to the participant’s operations and products; (b) conformance with this Code; and (c) identification and mitigation of operational risks related to this Code. It should also facilitate
5. continual improvement.”
6. **Ethics** - “To meet social responsibilities and to achieve success in the marketplace, participants and their agents are to uphold the highest standards of ethics including: business integrity; no improper advantage; disclosure of information; intellectual property; fair business, advertising, and competition; protection of identity; responsible sourcing of minerals; and privacy.”

Prior to the adoption of the EICC Code of Conduct, many electronic manufacturing companies developed their own codes of conduct and used them to audit their suppliers. Thus, suppliers could be subjected to multiple, independent audits based on different criteria. The adoption of a single, global code of conduct by members of the EICC enables those companies to provide leadership in the area of corporate social responsibility. It also exerts pressure on suppliers to meet a common set of social principles.

The EICC has developed an audit program for member organizations in which audits are conducted by certified, third-party audit firms. EICC members use the audits to measure supplier compliance with the EICC Code of Conduct and to identify areas for improvement.



Assessment Tasks

A. Direction: Write **TRUE** if the statement conveys correct thought, otherwise write **FALSE** if the statement is not true.

_____ 1. Products are ranked in EPEAT according to three tiers of environmental performance with 1 being the highest.

_____ 2. Apple was the highest-ranked manufacturer by Greenpeace for its excellent corporate policies in regard to toxic chemicals, recycling, and climate change in 2012.

_____ 3. Green Computer runs on less electricity than the typical computer.

_____ 4. Electronic Product Environmental Assessment Tool (EPEAT) is a system that prohibits purchasers to evaluate, compare, and select electronic products based on a total of 51 environmental criteria.

_____ 5. Lenovo was the lowest-ranked manufacturer by Greenpeace for its excellent corporate policies in regard to toxic chemicals, recycling, and climate change in 2012.

Part 2. Essay

1. You work for an electronics manufacturer that does not belong to the EICC. Present a strong argument for your firm to join. Then present a strong argument for why it makes sense for your firm not to be a member.

2. You are in the last stages of evaluating laptop vendors for a major hardware upgrade and standardization project for your firm. You will be purchasing a total of 1,200 new laptops to deploy to the worldwide salesforce. One vendor's product carries a Bronze EPEAT rating; the other vendor's product would cost an additional \$96,000 but carries a Gold EPEAT rating. The two products are very evenly matched on other key factors, such as performance, features, reliability, and support costs. How would you decide between the two vendors' products?



Summary

- Computer companies looking to manufacture green computers are challenged to produce computers that use less electricity, include fewer hazardous materials that may harm people or pollute the environment, and contain a high percentage of reusable or recyclable material. These companies should also provide programs to help consumers dispose of their products in an environmentally safe manner at the end of their useful life.
- EPEAT (Electronic Product Environmental Assessment Tool) is a system that enables purchasers to evaluate, compare, and select electronic products based on 51 environmental criteria.
- The Electronic Industry Citizenship Coalition (EICC) has established a code of conduct that defines performance, compliance, auditing, and reporting guidelines across five areas of social responsibility: labor, health and safety, environment, management system, and ethics.
- A number of electronics manufacturers have applied this code across their entire worldwide supply chain and also require their first-tier suppliers to acknowledge and implement the code



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- END OF MODULE FOR FINALS PERIOD –

CHECK YOUR EXAM SCHEDULE FOR THIS COURSE WHICH WILL BE ANNOUNCED ON
YOUR GROUP CHAT

DO NOT FORGET TO TAKE THE EXAM AS SCHEDULED

THANK YOU AND GOD BLESS.