

An IT Ethics Reader by Roberto Galang Jr.

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Preface

Greetings reader!

The book you are reading now is a written testament of my work and dedication for our IT Ethics subject at the De la Salle – College of St. Benilde. I have taken the subject on my ninth term stay at the college, thus the hardships, as our thesis part 1 goes hand in hand with it, is well more than twice of what's stored last term. The reward I got for sacrificing countless of hours of sleep just to be able to read and type is worth mentioning though – the experience, the lessons, and the ethical concepts that I, together with the whole class, have harnessed during the entire term.

This book has three parts, all of which contains the required content of this reader for this subject. The first part is The Fortune at the Bottom of the Pyramid, the second part being Cyberethics, and the third being the Handbook of Information and Computer Ethics, all containing my reflections and take of each book on a per-chapter basis.

I hope that you capture the lessons and information that this book contains. Enjoy reading and good day!

Faithfully yours,

JR Galang





Dedication

To my Professors

who were all motivated to provide us with their knowledge and use it as we prepare for our professional lives in the IT Industry...

To the Council of Green

the group I consider as a family and shared every second of my college life with as we laugh through all the requirements regardless of how delayed we are in passing...

To my desktop and laptop computers

for being cooperative and reliable at all times within my college life...

To my family

for standing by my side and support me with every step I take in life...

and

To God

who never failed to show me the light through good times and in bad...





THE FORTUNE AT THE BOTTOM OF THE PYRAMID





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CHAPTER 1

Chapter 1: The Market at the Bottom of the Pyramid

Quote: “The dominant assumption is that the poor are not brand-conscious.”

Learning Expectations: To learn how to tap the potential of the BOP market through serving it while eliminating constricting assumptions that bar firms from further exploring it.

Chapter Review:

There are more than 4 billion people who live at the bottom of the pyramid (BOP) on less than \$2 per day. This latent market must be tapped in order to unleash its potential. There are basic assumptions that explain how opportunities are to be created for the poor.

- a. The poor should be given access to products and services which represent global quality standards in order for them to be able to participate in globalization. Choices will be created for the poor if the large firms would take their competition to the BOP market.
- b. The BOP, as a market will be a forum for innovations.
- c. The BOP market should not be part of the large firms' corporate social responsibility anymore. Instead, it should be included as one of the core businesses.

Firms fail to see the potential of the BOP market because they are prisoners of the power of their dominant logic. It is difficult to move away from this comfort zone built by their dominant logic to make way for the BOP market. In addition to that, the BOP consumers also find it equally difficult to move away from depending on government subsidies. Charitable organizations are also imprisoned by their dominant logic, believing that the private sector cannot be trusted in helping alleviate the condition of the poor. In this light, it can be seen that poverty alleviation and





profit motive do not mix easily or well. Each sector should move beyond their long-held perception of the BOP market in order to see the opportunities it presents.

It is a common misconception that there is no money in the BOP market. While it is true that those living under \$2 per day do not have much to spend but their numbers are great, bringing the aggregate spending power of this market to almost equate that of those few, richer ones belonging at the top of the pyramid. What needs to be done is to lift the poverty penalty imposed on the BOP consumers so that there could be maximization of their \$2. This poverty penalty is a result of inefficiencies in the access to distribution and the role of local intermediaries. If the private sector decides to serve the BOP, problems causing the poverty penalty would be corrected. The BOP consumers are willing to spend only their spending habits reflect a different set of priorities.

Urban areas are magnets for the poor. Cities house more and more people as poor from the rural areas move to urban concentrations. Access to markets in urban areas is easier compared to reaching out to the rural poor. Many rural areas are still unreachable by audio and television signals. Not only are the poor in rural areas unable to gain access to products and services, they are also barred from the knowledge regarding what is available and how to use it.

It has been an accepted assumption that the poor are not brand conscious. In reality, it is the opposite because the poor are also brand conscious. They also aspire to own things of value and for them brands add value to the products. BOP consumers are value buyers, expecting great quality at the prices they can afford to pay.

The spread of wireless devices among the poor is proof that the BOP market is connected. Telecommunications providers are offering cheaper handsets and cheaper prepaid cards, making it affordable for BOP consumers to own mobile phones and to avail of telecommunications services. Internet and PC services are now being offered at low rates, making PC calls and emailing possible for BOP consumers. With the strengthening of connectivity among BOP consumers, word-of-mouth becomes a potent force for assessing product quality, services, and options available to them.

Availing of telecommunications and internet services require knowledge of technology and contrary to popular belief, the BOP consumers accept advanced technology readily. Because of lower rates and cheaper prices, technology has become available to them and they are very much willing to learn and integrate the technology into their lives. By using their knowledge of technology, they are now able to utilize it in their livelihood, providing marginal income for them.





Since the BOP is cash-poor with a low-level of income, the capacity to consume must be created for them. One way is to provide products in single-servings or in smaller packages that can be afforded by them. The rationale for this is that BOP consumers have limited cash and tend to make purchases only when they have cash and buy only what they need for the day. Smaller packages enough for a day's consumption suits this market very well. Another approach to creating a capacity to consume for the BOP is through innovative purchase schemes. Creating the capacity to consume is based on three simple principles, or the "Three A's": 1. Affordability, 2. Access, and 3. Availability. The ideal approach in creating the capacity to consume is to provide more opportunities for BOP to earn more. If they earn more, they can afford more.

Because the BOP market has different needs and a different level of consumption from that of the higher levels of the pyramid, exploring the BOP can give rise to new goods and services that are geared to fit their unique needs and purchasing capacity. When the BOP consumers are recognized as regular consumers, they gain more access to products and services, thus, acquiring the dignity of attention and choices from the private sector. However, for this to be possible, trust must be extended by the firms and the BOP to each other.

The BOP would surely be benefitted if they are treated as consumers and poverty is alleviated when businesses focus on them. On the other hand, the private sector will also be benefitted by the huge market potential of the BOP. However, innovation is the key for businesses in order to be able to participate in this market.

What I've learned:

Poverty alleviation is not only a job limited to charitable organizations and to the government. The private sector has a huge part to play in alleviating poverty. It is not a one-way relationship in which only the BOP will benefit. In fact, the private sector has much to gain from reaching out to provide services and products to the BOP.

The private sector must be the first one to make a move to reach out to the BOP. The BOP consumers are limited by their income and the cash they have. No matter how much they aspire to purchase goods and services, if these goods and services are not made available to them or if they are not made aware of the existence of such products, the profits that can be reaped from the BOP market will not be realized.





Targeting the BOP market, which forms the biggest part of the pyramid, can be tantamount to gaining a big percentage of the market. However, because this market's needs are different from the other levels of the pyramid, products and processes implemented or offered in those levels will not work with the BOP. Innovation then is a requirement in order to be able to participate in this market.

Integrative Questions:

1. Is private-sector involvement a crucial ingredient to poverty alleviation?
2. Do the poor have purchasing power?
3. Are the cost disparities between BOP consumers and the rich a result of poverty penalty?
4. Is distribution access to the BOP markets very difficult?
5. Are BOP consumers brand conscious?
6. Is quality or efficacy sacrificed for affordability?
7. Is innovation a critical requirement in creating a new market?





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CHAPTER 2

Chapter 2: Products and Services for the BOP

Quote: “Involvement in BOP markets will challenge assumptions that managers in MNCs have developed over a long period of time.”

Learning Expectations: To learn what products and services to offer to the BOP and how to package existing products and services in order to meet their needs.

Chapter Review:

Product portfolios that have been priced and developed for Western markets did not suit the taste of the BOP markets. This can only mean that products and services have to be developed specifically for the BOP market. The process of reaching out to the BOP market challenges the dominant logic of MNC managers. New philosophies in product development and innovation will be formed to reflect the realities of BOP markets.

The twelve principles of innovation for BOP markets are:

1. Focus on price performance of products and services.
2. Hybrid solutions are required by innovations.
3. Solutions that are developed must be scalable and transportable across countries, cultures, and languages.
4. All innovations must focus on conserving resources: eliminate, reduce, and recycle.
5. Product development must start from a deep understanding of functionality, not just form.
6. Process innovations are just as critical as product innovations.
7. Deskillng work is critical.





8. Education of customers on product usage is a key.
9. Products must work in hostile environments.
10. Research on interface is critical given the nature of the consumer population.
11. Innovations much reach the consumer.
12. Product developers must focus on the broad architecture of the system so that new features can easily be incorporated.

Price is a very important part of growing in BOP markets. Providing products and services to the BOP market means that dramatic changes in price-performance are called for. It is not merely lowering the prices of products by 5-10%. The price-performance improvement should be 30-100 times. However, this entails risk and the risk can only be justified in large and global markets wherein the returns are more commensurate with the risks. In BOP markets, the investor interest is based on expectations of a large- volume, low-risk, and high-return-on-capital employed.

Watered-down versions of existing traditional technology solutions from developed markets cannot be used for the BOP market. This market should be addressed by the most advanced technologies combined with existing and evolving infrastructure. The hybrid is a result of such a combination.

BOP markets can be large or small. Innovations can easily be successful in small markets, however, large markets require more funding. NGOs and small entrepreneurs are able to succeed in small markets. Larger markets require the partnerships of MNCs and NGOs to scale innovations broadly.

Resources are not adequately provided to the BOP. Therefore, solutions must be sustainable and ecologically friendly. More than being ecologically friendly, products to be offered to the BOP market should have the functionality needed by the consumers. Now the needs of the market may not be apparent both to the consumers and the firms. The consumers are not aware of the technological possibilities that could answer their needs. Therefore, it is the duty of the firms to invest time, effort, and money in gaining a better understanding of the market's needs.

Process innovation is the redefinition of existing processes in order to be able to make products and services affordable to the poor. Firms all aim for profit. If products processed using their normal, usual methods, incurring the same costs





were marketed to the BOP consumers at very low prices that is affordable to them, chances are the firm would incur losses instead. Hence, it would be better if the process was “tweaked” to decrease production costs, enabling the firm to sell the products at prices that the market can afford without sacrificing profit.

BOP markets suffer from talent shortage, necessitating deskilling of work. In addition to that, proper education regarding the use and benefits of specific products and services should be given to the consumers. Offering them the product without adequate explanations of how to use the product may lead to its misuse. Firms can collaborate with BGOs in educating consumers. A variety of ways can also be employed such as billboards, posters, and catchy jingles in educating consumers.

The BOP markets are usually found in hostile environments. These are environments with poor sanitation and technological infrastructure and lacking a proper system of education and information dissemination. If a product or service is to be offered to a market in such an environment, it must be designed in such a way that it could withstand the conditions it will be exposed to. Aside from being designed to endure harsh conditions, products should also be designed with user-friendly interface. The rationale for this is that most of the users from the BOP market are first-time users. The interface should be easy for them to understand and the instructions for usage should be simple and easy to remember.

Reaching out to the customers in the BOP market is very critical. Traditional methods of marketing products should be innovated to fit the environment surrounding the BOP market and should cater to its needs which are of a different level than those of the regular market. Accessing the BOP market and exploring its potential as an opportunity for growth is in itself challenging conventional wisdom in delivering products and services. By breaking conventional wisdom, the opportunity in the BOP market becomes attractive.

A zero-based point of view is required when trying to get the right combination of scale, technology, price, sustainability, and usability. Challenging the capital intensity and the managerial cost structures are the biggest advantage that have been assumed in MNCs. By participating actively in BOP markets, MNCs will learn a lot.

What I've learned:

Products made for other levels of the pyramid need to be innovated before they are offered to the BOP market. The twelve principles given also serve as the rationale why innovation becomes necessary in entering such a market. Suddenly,





exploring the BOP market becomes a daunting task. It is costly and risky and yet they say that with the greatest risk come the highest returns.

The BOP is portrayed temptingly, like unknown waters with hidden treasures somewhere beneath it. Firms must think more than twice before diving into these waters. Most of the time, firms think they already know what they ought to know and it is too late when they find out how inadequate their knowledge is. The BOP is a market that promises heaps upon heaps of profit only to those who know their way through it. The twelve principles serve as a guide on what to look out for when exploring the BOP market.

Integrative Questions:

1. Will success in BOP markets break existing paradigms?
2. Will enabling people to buy by accessing markets creatively and designing affordable products break the long-held assumption that BOP markets are not viable?
3. Will large firms learn a lot from active participation in BOP markets?
4. Are innovations in distribution as critical as product and process innovation?
5. Will a new philosophy of product development and innovation that reflects the realities of BOP markets be needed?





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CHAPTER 3

Chapter 3: BOP: A Global Opportunity

Quote: “The flow of ideas, knowledge, and innovation is a two-way street—from the developed countries to the developing as well as the reverse.”

Learning Expectations: To learn about the global opportunities presented by BOP markets and how MNCs will be able to take these opportunities as chances to grow.

Chapter Review:

BOP markets present opportunities for growth. The main issue at hand is whether the opportunities are attractive enough for the MNCs to the point that they would undergo changes in their internal systems and processes just to grab the opportunities presented by the BOP markets. Four distinct sources of opportunity have been identified:

1. Some BOP markets are large and attractive as stand-alone entities.
2. Many local innovations can be leveraged across other BOP markets, creating a global opportunity for local innovations.
3. Some innovations from the BOP markets will find applications in developed markets.
4. Lessons from the BOP markets can influence the management practices of global firms.

MNCs tend to use two ways in engaging the BOP markets. The traditional way is starting from business models and fine-tuning current products and services and management practices. The next approach is starting from a deep understanding of the nature and the requirements of the BOP and then architecting business models and management processes around these requirements.

Some local BOP markets are very large and one of the indicators of market opportunity is the large population base. BOP markets can collapse the time frames that have already been established. Many drivers of change and market growth are





present in BOP markets and they interact with each other. The result of this interaction is a challenge to the “S curve” which is the model for the diffusion of new products and services in the developed world. This challenge is the “I curve” of the BOP markets.

Local innovations made by firms should also be used for global opportunities. This is so that the investments made by the firms in formulating such innovations would be maximized. Furthermore, these innovations made for BOP markets could also be used for other developed markets. Shortage and cost of capital force firms in BOP markets to be very focused on the efficiency of capital use. Firms are only faced with two choices: either to change management systems to cut costs or to incur losses.

A critical element of achieving success in BOP markets is the judicious use of capital. The effective use of capital is measured by the return on capital employed which is separate from gross margin. Capital should be sensibly utilized especially in the experimentation for sustainable development since BOP markets are a great source for such experimentation. Innovations must be sustainable, ecologically friendly. If problems emerge from innovations in existing processes, chances are the redefined process will undergo under phase of innovation to come up with a more sustainable one.

Consumers are value-buyers and any changes to existing processes should be value-oriented. Value is not only on the objective performance of the product but on the subjective performance as well. MNCs end up forming new business models when serving BOPs to be able to adapt to the orientation BOP markets have.

Reaching out to explore the BOP market entails learning to live in a network of relationships, especially those with institutions who already have access to the market. Through interaction with the BOP, MNCs are able to learn more and vice-versa. The flow of ideas, innovations, and knowledge is two-way. MNCs learn how to transform what used to be corporate social responsibility ideals into one of their core businesses. Social sector organizations learn how to scale their still-marginal efforts into viable business models to serve a mass market such as the BOP.

Not all the sectors that will be connected with firms in engaging the BOP are expected to be cooperative. Some would be hostile and some would be very willing to pitch in. Dealing with such groups may be seen as an added burden to the firms but firms could actually benefit from the relationship that will be forged.





What I've learned:

Engaging the BOP market is a good learning experience for MNCs that also serves as a growing opportunity for them. For smaller firms who wish to tap on this market, the innovations they formulate for the BOP can be applied to other developed markets in the same country. For larger firms engaging in global operations, local innovations can be leveraged across BOP markets all over the world. What these firms need to look out for is the unexpected. The BOP markets collapse long-held assumptions and the expected results from the diffusion of products and services are challenged.

When dealing with the BOP market, it is always about novelty: new relationships, new processes, new products, and new business models. What must be ensured is that value should come along with the novelty. The novelty of things does not necessarily mean that value has been added to it. They can be new and yet hold the same value as existing products and services.

Sustainable development is a major issue that must be regarded. Many organizations all over the world are advocates of sustainable development. Everyday, changes in technology take place and all are aimed in preserving the remaining resources we have. All the abuse that has been done over the past decades on the nature is now taking a toll on human race. Global warming is a result of such abuse and people are now starting to act on this problem to avoid further loss of lives from calamities.

By reaching out to the BOP markets, firms are also reaching out to other organizations involved. There is the government, for instance, as well as charitable institutions and NGOs. Relationships are formed and just like ordinary relationships among individuals, problems may arise between the parties involved. Firms should learn their position, where they stand, in such a scenario. They should learn to cope with the differences existing among them.

The BOP market represents 80% of humanity. Whoever said this wasn't a large market worth exploring? If all of those who belong to this 80% would have their lives improved, markets will grow and the world will definitely be a better place.





Integrative Questions:

1. Are business management skills, technology, and contacts pushed down to the local grass roots level?
2. Are BOP markets a great source for experimentation in sustainable development?
3. Must firms focus on all elements of cost just because the BOP forces an extraordinary emphasis on price performance?
4. Can the “I curve” rapidly propel innovations and equally rapidly destroy some traditional markets?
5. Can the BOP be a source of innovations for business models?





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CHAPTER 4

Chapter 4: The Ecosystem for Wealth Creation

Quote: “A business system is at the heart of the ecosystem for wealth creation.”

Learning Expectations: To learn how relationships among the different sectors of society can form a system that is aimed at creating wealth for as many people as possible.

Chapter Review:

The ecosystem of wealth creation in the BOP markets involves a symbiotic relationship between the private sector and social institutional players. The problem is that there is so little effort given in focusing on the symbiotic nature of this relationship. One reason is because of the lack of consensus on what “private sector” means. In the BOP context, it is taken to include social organizations of different kinds that interact to create markets and develop appropriate products and services and deliver value. The heart of the ecosystem for wealth creation is the business system.

Private sector organizations and social institutions are able to act together and create wealth symbiotically in a market-oriented ecosystem. If the whole system is to be mobilized, special attention cannot be given to any one sector. The better solution would be to form more market-oriented ecosystems for broad-based wealth creation. For the creation of more market-oriented ecosystems, the state of the country in which the ecosystem is to be located must be taken into consideration. For developing countries, the competitive conditions, the availability of technologies, the nature of resource endowments, and the education development are vastly different from more developed countries.

In engaging with BOP markets, contracts are formed to strengthen the relationships between the parties involved. The contract, with all its terms and conditions, should be respected in order for the relationship, which it binds, to continue and prosper. The poor are connected to the rest of the world through the ecosystem which they have a contract with. The relationship between the poor and the ecosystem is mutually beneficial and non-exploitative. However, not all contracts





formed promote equality between the system and the poor. The sources of the inequalities or friction in the system should be eliminated in order to truly respect the contract between the player and the system. The four sources of friction in the system are:

1. Asymmetry in the access to information
2. Asymmetry in choice
3. Asymmetry in the ability to enforce contracts
4. Asymmetry in the social standing

Building transaction governance capacity entails building the capacity for self-governance. The private sector, working responsibly, is able to create transaction governance capacity at all levels of society, from the very poor to the entrepreneurs. The government, aiming to protect the poor, tends to over-regulate the private sector or use public sector corporations as a way of creating a culture of subsidies disguised as commercial operations. There are three steps in creating transaction governance capacity based on the marketing ecosystem:

1. Present a win-win situation to the poor and help them understand that such a situation can be achieved by respecting contracts. Contracts must be respected whether they are with a large or small firm, whether seen or unseen.
2. The private sector is empowered to reduce the friction or asymmetries in the system. Information technology is a tool that can be used to motivate people to want to be part of the system.
3. Collective commitment to accountability to contract conditions must be created between the firms and community, not just between the firm and the individual. It would reinforce the motivation set about the benefits of being within the system.





Transaction governance capacity is a pre-requisite in order to be able to attract as many people as possible to enjoy the benefits of an inclusive market. The market-based ecosystem permits for the inclusion of BOP consumers, as well as for the firms to build new and profitable growth markets.

What I've learned:

The market-based ecosystem has great impact on being able to attract people into the market. The private sector holds just as critical a role. They are in the position to eliminate the inequalities in contracts and to show people how to respect the contracts they forge with firms. By inventing new systems, the capacity for more people in the market increase and this is better for the system.

By co-creating a market, MNCs and small-scale enterprises are able to provide more products and services to BOP consumers. At the same time, BOP consumers benefit by the quality and variety of products offered to them, as well as building local entrepreneurship. The role of the government in the ecosystem is to eliminate corruption. Corruption needs to be eliminated because it goes hand-in-hand with poverty and in order to create wealth, poverty should be taken out of the picture.

The new systems that will be invented by firms will serve as baits that will attract people to join the system. New systems impose new disciplines and these have to be accepted along with the benefits of globalization.

Integrative Questions:

1. Is the evolution of a large firm a symptom of a maturing economy focused on system efficiencies through scale and scope?
2. Does a nodal firm facilitate the entire functioning of the network?
3. Can market-based ecosystems be a source of informing the poor of the benefits of transparency in transactions?
4. Is transparent transaction governance an integral part of the ecosystem?
5. Does corruption and poverty go together?





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CHAPTER 5

Chapter 5: Reducing Corruption: Transaction Governance Capacity

Quote: “The bigger problem is with the employees—the functionaries within the government.”

Learning Expectations: To learn how much corruption has an effect on the transaction governance capacity of a country and how it can be eliminated as part of improving the market.

Chapter Review:

The private sector help alleviate poverty through creation of markets at the BOP. Although the opportunity presented is alluring, doubt exists because of corruption. This is largely due to the fact that micro regulations and customs have been interpreted as corruption. There is a difference between local practice and corruption and MNCs can understand this difference better through alliances with local firms and NGOs. Since corruption, in its various forms, adds cost burden and business uncertainty, it must be eliminated. The real costs and impact of corruption on private-sector development and poverty alleviation is not yet recognized. This makes it critical for a system of laws to be fairly enforced to facilitate transparent commercial transaction.

Some basic assumptions have been formed regarding poverty reduction and developmental assistance:

1. The poor are poor because they lack resources.
2. Aid from rich countries would reduce poverty.
3. Investments in education and health care might have the largest multipliers per dollar of investment in economic development.
4. The record of aid and loans from various donor countries and institutions is at best mixed.





According to Hernando De Soto, poor countries are rich in assets but poor in capital. Assets cannot be capital unless the ownership of assets is clear. Through legal ownership, assets are converted into capital. De Soto always pointed out that trapped resources can be significant. Because of the lack of appropriate institutional arrangements, local capital formation and functioning of markets are put to a halt. Several conclusions can be derived from this:

1. All forms of foreign investment in poor countries are but a fraction of the potential for capital that is trapped in these countries.
2. In the absence of enforceable contract law, local commerce is conducted by a vibrant, extra-legal or informal sector (black market).
3. There are contract enforcements that are local.

Not all countries have a poor legal structure. Some poor countries have well-developed laws but only lack the ability to enforce them. The consultants from McKinsey and Company believe that laws on books are not sufficient and it is the implementation of the laws through a system of micro-regulations that really matter. However, the interpretation of the regulations compromises the timely execution of contracts and the clear establishment of ownership resulting in corruption in all levels. Another reason of this phenomenon is that laws are underdeveloped and interpretation is left to the bureaucrats.

A transparent market is fundamental to the evolution of capital markets and a vibrant private sector. Transparency results if rules are widely understood and clearly enforced. The transactions must also be clear and unambiguous. TGC is the capacity of the society to ensure that the process of economic transactions is transparent and commercial contracts can be enforced. Through this, uncertainty is reduced, thereby, reducing costs in the process.

BOP consumers can be found in countries with varying degrees of TGC:

1. Countries that are arbitrary and authoritarian
2. Countries where laws and institutions of a market economy exist
3. Countries with well-developed laws and regulations, institutions, and enforcement systems





What private sector investors seek is certainty in the enforcement of laws because if there is certainty, they are able to compute the cost doing business.

The following are the specifications for the TGC:

1. A system of laws that allows for ownership and transfer of property
2. A process of changing laws that is clear and unambiguous
3. A system of regulations that accommodates complex transactions
4. Institutions that allow laws to be implemented fairly, in a timely fashion, and with transparency

TGC is made up of laws, regulations, social norms, and institutions. Each country needs a different size of portfolio for the elements of TGC. TGC is eliminating the opaqueness of the system and providing easy access. It must be able to meet these four criteria:

1. Access to information and transparency for all transactions
2. Clear processes so that selective interpretation by bureaucrats is reduced if not eliminated
3. Speed with which processes can be completed by citizens
4. Trust in the system

The TGC is not only for large, one-time transactions. It is also about transactions involving the day-to-day existence of the people. Hence, the Development Institute of the United Kingdom set up the Center for Good Governance (CGG) to serve as a watchdog to monitor the implementation of ICT approach to citizen-centric governance and publish independent reports of how the entire process is proceeding. Their approach is based on the premise that democracy is derived from the people and the government must be accountable to them.

The most important impediment is the education of the citizen. The citizens have long associated the government with corruption, long lines, and humiliation. If the government is consistent in breaking away from such an image, even skeptics will be convinced. The bigger problem is with the government employees. By simplifying governmental business processes and interconnecting systems, pockets of graft and corruption will be identified. Citizens must convince themselves that it is





cheaper to be in the system than out of it. The shift will occur if the citizens are confident that:

$$\frac{\text{Cost of being inside the system}}{\text{Cost of being outside the system}} \leq 1$$

Building the TGC is not only the duty of the government but also of firms. In addition to that, digital technologies can rapidly transform a country's TGC.

What I've learned:

Corruption has a big impact on our country's economy, more than what we give it credit for. Sure, investors are attracted by the potential of the resources of a country but they are turned off by the corruption. Politicians impose their own "taxation" rules on these investors in exchange for being able to operate in the country. Investors realize that it is better to operate in more expensive environments that in countries wherein their funds are merely siphoned by corrupt bureaucrats.

Doing business is a risk in itself and corruption only adds to the uncertainty of doing business. Surely, firms would prefer being able to do business without the added risk that the protection they are expecting from the legal system is flawed. It is no wonder that corrupt countries are at the bottom of the tier. Economic improvement just does not mix well with corruption, which is merely the improvement of the lives of the greedy. Eliminate corruption and you get a market that will attract investors like bees to nectar.

Integrative Questions:

1. Is building TGC only the job of the government?
2. Is corruption a market mechanism for privileged access?
3. Will corruption at all levels of bureaucracy become endemic?
4. Does transparency result from widely understood and clearly enforced rules?
5. Is the capacity to facilitate commercial transactions through a system of laws that is fairly enforced critical to the development of the private sector?
6. Is transaction governance capacity about making the entire process as transparent as possible and consistently enforced?





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CHAPTER 6

Chapter 6: Development as Social Transformation

Quote: “We need to make sure that no organization abuses its power and influence, be it corrupt governments or large firms.”

Learning Expectations: To learn how the development and improvement of the lives of the BOP consumers will transform the economy and the society.

Chapter Review:

When the BOP is treated as a market, poverty is reduced. Products, services, and knowledge are made available to the BOP consumers and these enable them to escape poverty. Again, the different sectors of the society should do their part in making this happen. The result is an overall social transformation for all sectors involved.

The changes that will take place will be very rapid because the BOP consumers are very entrepreneurial and can quickly think of ways to earn from their newly- gained product or knowledge. As part of these changes, barriers to communication are broken down, facilitating ease of communication among people from all parts of the globe. Treating the BOP as a market builds a bridge for them to connect with the rest of the world. It gives them the chance to experience and enjoy what used to be exclusive to the other levels of the pyramid.

BOP consumers are always looking for ways that would take them a level higher from the current condition. The main purpose of them striving is to uplift their living conditions, to be able to free themselves from the restrictions imposed by being in the BOP. When BOP consumers are able to gain access to modern technology and good products which have been designed with their need in mind, they are given the chance to improve their lives. Access to high-technology is also access to knowledge for BOP consumers. Now that they are made aware of the possibilities brought about by technology, they start to demand high-technology solutions to their problems.





A problem found by members of the BOP is their lack of “identity” in the eyes of the government. Instruments of legal identity are denied to them and since they are non-existent legally, they cannot be beneficiaries of a modern society. They are treated as statistics, usually referred to by the numbers but never given the individual attention that is bestowed on those who are legally identifiable by the government. Having legal identity is very important because without it, services cannot be accessed. And because services cannot be accessed, people are unable to enjoy the services that would enable them to be freed from the confinements of poverty.

Because of the need to earn more income for the family, women are now a critical part of a country’s work force. They have become part of the entire development process. By being able to access economic independence eliminates the suppression and the denial of opportunities for women. They are empowered by such independence and are given the reins to improve their lives and that of their respective communities. Despite their growing numbers, women are still not given enough focus. This is one aspect that MNCs can keep in mind when creating new markets at the BOP—that women can be of big help in the creation of the new markets.

Checks and balances must be enforced both on the government and large firms. They are in the position to abuse their power and influence and must be constantly monitored so that all the sectors involved with them and their operations are given peace of mind. With the rapid evolution of technology, it has become impossible for any group to abuse its position for too long. Civil society organizations are always on the look-out for any signs of abuse. However, the most important protection is informed, networked, and active consumers. With the evolution of the BOP consumers, they are now adding to the real protection against abuse.

Through an impressive social transformation, the BOP consumers have proven their ability to adapt and their resilience. They are able to do the following:

1. To adapt to new technology and without any difficulty and are willing to experiment and find new and “unforeseen” applications for the technology.
2. Breaking down barriers to communication through technology.
3. BOP consumers now have a chance to upgrade and improve their lives.
4. Participate more actively in society and gain benefits of available opportunities through legal identity.





5. Empowered, organized, networked, and active women are changing the social fabric of society.

The evidence that the society is transforming is that the pyramid is now a diamond. This means that more people are now in the middle-class. The implications of this are:

1. Patterns of income distribution over time can develop both relative and absolute measures of change.
2. Changing nature of the income distribution creates a virtuous cycle
3. There is only one consumer group.

What I've learned:

The poor are the best allies in alleviating poverty. They are more than willing to be free from such a constricting condition and are often striving to ease the difficulties they are experiencing. They adapt easily to changes and are very resilient. They are willing to help themselves only they are not given the tools with which to do so. It is then the job of the firms, the government, and social organizations to lead the change and to equip them with the necessary tools for uplifting their lives.

The BOP is the largest part of the pyramid. It shows that the majority of the people in the world do not live in the comfort enjoyed by the few. By focusing all efforts on this part of the pyramid, the elimination of inequalities in the world will be accomplished. It is a joint effort, a consistent one.

Integrative Questions:

1. Is social transformation about the number of people who believe they can aspire to a middle-class lifestyle?
2. Will the distinction between the BOP consumer and the top-of-the-pyramid consumer disappear as the BOP morphs from a pyramid to a diamond?
3. Are women at the vanguard of social transformation?
4. Are BOP consumers always upgrading from their existing condition?
5. Are the capabilities to solve the perennial problem of poverty through profitable businesses at the BOP now available to most nations?





CYBERethics





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CHAPTER 1

Chapter 1: The Internet, Ethical Values, and Conceptual Frameworks

Quote: “We need thoughtful analyses of situations in which computers have an impact, and we need to formulate and justify policies for using them ethically.”

Learning Expectations: To learn the foundation on which ethical values on the use of computer technology is based and how, as a user, am I affected.

Chapter Review:

Some historical milestones in the history of Computer Ethics are:

- a. 1940s and 1950s: Computer ethics as a field of study was founded by Norbert Wiener.
- b. 1960s: Donn Parker began to examine unethical and illegal uses of computers
- c. 1970s: Joseph Wiezenbaum created a computer program called ELIZA; Walter Maner began to use the term “Computer Ethics” to refer to that field of applied professional ethics dealing with ethical problems aggravated, transformed, or created by computer technology.
- d. 1980s: James Moor published his article “What is Computer Ethics?”; Deborah Johnson published the textbook “Computer Ethics”; Sherry Turkle wrote “The Second Self”, a book on the impact of computing on the human psyche; Terrell Bynum created the Research Center on Computing & Society at Southern Connecticut State University
- e. 1990s: Simon Rogerson established the Center for Computing and Social Responsibility and initiated the ETHICOMP conferences.

As technology develops, issues regarding computer ethics also increase. Online communication is growing at a rapid rate and the demand for it is growing at an even faster pace. However, this is not without problems and most of these problems involve disruptive human behavior. Such behavior ranges from





unauthorized theft of electronic property, launching of destructive worms and viruses, racism, defamation, harassment, and even online rape. Laws are not enough to stop such behavior. What users should realize is that certain behaviors are unacceptable and must be controlled, just like in the real world. Special characteristics of communication in networks include scope, anonymity, and reproducibility. Again these features have implications and problems arise from such. Online issues are not so different from offline issues. Hence, it calls for the following general rules:

1. Know rules of forums and follow them.
2. Respect privacy and property of others.
3. Respect individuals with whom you communicate.

Everybody, nowadays, wish to be citizens of the global village. More and more people incorporate computers into their daily lives and operations. As such, computer ethics is also becoming a very significant issue. There is the Routine Ethics position and the Cultural Relativism position in ethics. However, both views to characterize ethics are wrong. It is because of the logical malleability and informational enrichment features of computers. Information is at the computer user's fingertips. Even warfare is now computerized. Because of this, computer ethics has a very special nature.

Computer ethics has these two parts:

1. The analysis of the nature and social impact of computer technology
2. The corresponding formulation and justification of policies for the ethical use of such technology

In the discussion and application of computer ethics, users often find themselves in a policy vacuum or a conceptual muddle. It can occur in any culture, in any place in the world. Discussions on what is ethical and what values to apply occur on a daily basis. What people need to realize is what values we all have in common. These core values provide standards with which to evaluate our rationality in actions and policies, on what is ethical and not. Ethical responsibility begins by taking the ethical point of view. Having an impartial position will also help in the resolution of ethical issues, even up to the settling of residues from disagreements on the use of the computer technology. What the global village needs to do is to have a global conversation on the social and ethical impact of computing.





According to Philip Brey, an additional approach to computer ethics, called disclosive computer ethics, is needed. It is because mainstream computer ethics are not enough. Although it focuses on morality, it only focuses on the morality of practices and not on the morality of the technology used. Disclosive computer ethics is required to give focus on the morality of the technology used. Its two points are:

1. It tends to be concerned with the uncovering of moral issues and features in computing that had not until then gained much recognition
2. Its focus tends to be on the design features of computer technology

For it to qualify as computer ethics, the values and norms should be moral values and norms. It is disclosive computer ethics that evaluates the morality of the values and norms in question. There are four values widely agreed to be important by citizens:

1. Justice
2. Autonomy
3. Democracy
4. Privacy

As such, disclosive computer ethics requires a multi-level approach in research. These levels are:

1. Disclosure level
2. Theory level
3. Application level

In addition to disclosive computer ethics, another type of ethics that considers women is feminist ethics. Despite the increasing number of users of the computer technology, there is still the problem that women through all levels of computing remain low, meaning that women are still being excluded from employment in well-paid and interesting careers for whatever reason. Studies have been made, trying to see whether females are more ethical than males and vice versa. In the cyber world, gender still exists and the rights of women to be able to join the industry and be on the same ground with men should also be very much considered.





Another issue in computer ethics is whether or not the global information infrastructure a democratic technology. There have been arguments presented regarding value in technology and whether value is present in the GII. There have been four accounts given to suggest possible meanings of this claim. They are:

1. Moral/Metaphysical Meaning of Embedded Values
2. Support Meaning of Embedded Values
3. Material Meaning of Embedded Values
4. Expressive Meaning of Embedded Values

There have been claims that GII gives power to the many and power to the many is democracy. This claim was made with the idea that information is power, while some consider the idea of joint deliberation to be connected with the discussion on such issue.

In the application of ethical and moral concepts and theories to IT contexts, problems and challenges arise. If these theories were to be applied to IT contexts, the following should be remembered:

1. To what kind of questions such concepts and theories can be applied and to what they cannot
2. The limitations of specific concepts and theories so that they can be improved to overcome such limitations
3. Sufficiently detailed knowledge of the domain which they are to be applied.

Consequentialist theories and deontological theories have always been deemed to be incompatible. However, it is the proposed consequentialist theories that emphasize the consequences of policies within the constraints of justice. Therefore, they have become the practical and theoretically sound approach to problems in computer ethics.

What I've learned:

Computer ethics tries to be the umbrella over all the issues that concern computer technology and its usage. However, there are many theories always popping out every now and then. Aside from that, there are also branches sprouting out of established ethics theories, making way for new ideas and new problems to consider as well.





An average user of computer technology is not really aware of these ethical considerations. One cannot expect a young child to know all theories and be able to apply them when using the computer. What most users follow is what they think is right or wrong, as how they are applied in the real world. All these theories are rubbish to the average user. If there is a move to make the whole world aware of such complex theories, they should be simplified, broken down into small chunks that can be digested by an ordinary computer user.

Integrative Questions:

1. Does anonymity contribute to the lack of integrity of online information?
2. Is it because computers are logically malleable that they will continue to be applied in unpredictable and novel ways?
3. Is computer ethics not simply ethics rotely applied to computing?
4. Do core values provide standards with which to evaluate the rationality of our actions and policies?
5. Is the chief threat to computer ethics the failure to debate the ethical issues of computing technology?
6. Is popular sovereignty the overarching idea at the root of many ideas associated with democracy?





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CHAPTER 2

Chapter 2: Regulating the Net: Free Speech and Content Controls

Quote: “It should be clear, however, that in the age of the Internet, the problem of child pornography, like so many others arising in a visual medium, must be construed to involve violations of privacy; indeed, such violations should be counted among the most basic of the harms we should seek to prevent.”

Learning Expectations: To learn the basic regulation issues on the Internet and how the users are protected from indecent material and exploitation over the Internet

Chapter Review:

Many think that the cyberspace is free from control by the government. Many think that there is total freedom in cyberspace. This thinking is wrong because, as a matter of fact, there are certain laws that regulate a part of cyberspace. There is even the potential for cyberspace to be one of the most regulated spaces that we could ever have. The only difference between cyberspace and the real world is the architecture of the space. Regulation in the real world comes easier than in cyberspace. Actions can be monitored easily while in cyberspace, actions can be untraceable. What the government should do in order to be able to regulate that space is to have a good grasp of its architecture and start from that. However, checks should be installed in order to ensure that the power to regulate is not abused by the authorities.

While regulation is being debated so that order would be implemented in cyberspace, there are already decentralized law-makers in that space. Real-time Blackhole List (RBL) is being maintained in cyberspace in order to stop spam. However, there are questions on the reasonableness of such a decentralized “regulation” in cyberspace. It is because it sanctions users of the net without reliance on government authority to do so. There is no central law-making body that is authorized to sanction users that is why a decentralized sanctioning body such as the RBL is being questioned. Despite its efforts to protect users and prevent spamming, it should be supported by legislation. A messy, disordered system is not an answer to the problems encountered in cyberspace.





Censorship of speech in cyberspace is another regulation that is being considered. The censorship and blocking schemes regarding indecent speech over the Internet have raised some eyebrows. Speech over the internet is to be sought; no one is caught by surprise. Furthermore, websites, newsgroups, and chatrooms provide preliminary speech regarding the nature of the material they have. Internet users are warned against proposals that could do damage to the freedom of speech on the Internet. They should be wary as to the proposals that could turn the Internet into another boring medium of communication. It is not television and should not be rated and censored in the same way.

In the USA, however, legislation has required schools and libraries to implement filtering and blocking software that would screen out material that are “harmful” to minors. Despite arguments against the software, the following conditions were asked to be considered:

1. Specific criteria for censoring websites must be approved by the Library Board and made available to the public on request
2. Implementation of this censorship must be in the control of the library staff and not some outside company
3. The black list of censored websites together with the reason for blocking access to each site should not be a secret
4. There should be a procedure for members of the public to ask library staff to reconsider classifications of websites

More than indecent speech, child pornography on the Internet is an issue that has weighed more on the minds of Internet users. The Child Pornography Prevention Act (CPPA) is a law that has been passed in order to put a stop against the exploitation of minors through pornography. However, there have been arguments raised against the CPPA:

1. CPPA violates the First Amendment
2. CPPA's protections are inadequate
3. CPPA can harm our children

Amendments should be made on the existing CPPA. It should be amended in order to have a more comprehensive and a more just approach to dealing with problems presented by child pornography. There would be discussions regarding





the amendments, of course, but the objective of preventing this violation against privacy should always be kept in sight amidst all the debate.

Different children from different countries have different needs. To protect these children, governments are now considering imposing restrictions on online content. However, restrictions on distribution can never meet everyone's needs. With selection software, diverse needs are met by blocking reception using labels for the implementation of context-specific selection criteria. An example is the PICS or Platform for Internet Connection Selection. Since it is values-neutral, it can accommodate any set of labeling dimensions and any criteria for assigning labels.

Finally, the policies and laws governing defamation liability on the Internet requires substantial revision. Libel laws are relevant and should not be abolished. Instead, the laws should be amended in order to articulate a more tenable standard of moral accountability for ISPs. The ISPs may not be the ones causing defamation but they are the ones providing an occasion for it. Actions required of ISPs for stopping defamation are not burdensome and are actually consistent with the ISPs' capabilities. Therefore, should there be any failure on the part of ISPs to prevent defamation or to take certain actions once they are informed that a victim has been defamed, they can be held liable.

What I've learned:

Using cyberspace is free and freedom is enjoyed in that space. However, it is inherent in people to abuse freedom when it is granted to them. Access is easy, anyone can be in cyberspace. You do not have to disclose your real identity or your real location. It makes exploiting and fooling people a fairly easy thing to pull off. That is why governments have to step in and regulate the material distributed in cyberspace.

Despite the need for regulation, the regulation should only be to a certain degree. The cyberspace is not like the television or radio. It should not be regulated the way those are. They are accessed differently; the material available is also different. Therefore, it is just fitting that the regulation for cyberspace be of a different degree.

In cyberspace, no one is totally safe. It is then wrong to say that the priority for protection in cyberspace should go to the minors because adults are also subjected to same kind of dangers. Young and old, everyone should get the same amount of protection.





Integrative Questions:

1. Is a “stable” Internet one that is locked in place, incapable of generating responses to the very problems that it is itself bringing into existence?
2. Will self-rating schemes cause controversial speech to be censored?
3. Will the potential for arbitrary censorship be greater if there are fewer third party ratings products?
4. Would the liability depend upon the role of the ISP?





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CHAPTER 3

Chapter 3: Intellectual Property in Cyberspace

Quote: “We need a politics—a political economy—of intellectual property and we need it now.”

Learning Expectations: To learn how information on the Web can be protected from piracy and plagiarism

Chapter Review:

Because of the increasing multitude of information available in cyberspace, the need for a political economy of intellectual property is verging on the horizon. The clamor to protect the brainchildren of many a genius is getting stronger. But that is not all without a debate and uncertainty. Effects of a “bad” intellectual property regime could:

1. Lead to extraordinary monopoly and concentration in the software industry
2. Extend intellectual property rights even further over living organisms, including the human genome, transgenic species, and the like
3. “Privatize” words, or aspects of images or texts that are currently in the public domain
4. Impose a pay-as-you-read architecture on the Net

The producers of information assume ownership of the information they produce. Just like any other property, information can rake in profits. The main reason, then, why producers of information find intellectual property a very attractive concept is because it enables them to have ultimate control over the information they produce so that they could also have ultimate control over the profits. However, granting rights over information should be dealt with on an individual basis. After all, information is about communication and it is meant to be shared. If rights are granted over information, its use will be limited and fewer people are able to benefit





from it. Screening should be done on which information is to be freely available and which is not.

Then there is the question on whether copyright is ethical or not. Based on how the copyright law is constructed presently, it does not appear to have a consistent ethical basis to provide a consistent policy to promote learning and the useful arts. It merely compromises—balancing the rights of the creators with the rights of the users.

The bigger issue than copyright piracy is plagiarism. Observations have been done that provide evidence that the Web creates an environment that heightens the dangers of plagiarism and lessens the dangers of piracy. Aside from that, courts are more aggressive in dealing with piracy than with plagiarism.

The Web is becoming more and more an important tool for research and distribution of information. Information is available in a click but the volatility of the Web heightens the concern for the reference trail. The need to strengthen guidelines for Web-based citations is required. As an answer to that, the property protections of the copyright owner in cyberspace may be lessened in order to protect the scholarly community against plagiarism in cyberspace. What is being suggested is loosening the notion of fair use for some cases of digital copying and not to totally abolish copyright protections.

Deep linking is the practice of linking wherein links take the user to other web site's subordinate pages. The hyperlink text can appear in many forms, for instance, an image or graphic. It is especially useful for research because it makes searching for information faster through links. There have been disputes regarding the pros and cons of deep linking. The following arguments were given by Richard A. Spinello regarding the controversy:

1. Deep linking can be harmful for target websites in some circumstances.
2. Because of the potential harm, a presumptive claim to the liberty of deep linking without permission is unjustified.
3. The notion that a logical website is a form of intellectual property can be defended by invoking traditional justifications for property rights: utilitarianism, labor-desert, and personality-based theories.
4. If a website is property, according to the liberal theory of ownership, ownership rights should include (among others) the right to earn income and the right to manage.





5. However, the moral point of view has an other-directed component and requires that intellectual property owners also consider the common good.
6. In conclusion, what is argued for is limited and balanced property right in a web site that does impose a moral duty on other web sites to engage in deep linking activities with care, to consider the possible harm that those activities can bring about, and to seek permission for deep linking unless it is abundantly clear that deep links cause no damage and are welcome by the target site.

In his essay “The Cathedral and the Bazaar”, Eric Raymond gives the following maxims:

1. Every good work of software starts by scratching a developer’s personal itch.
2. Good programmers know what to write. Great ones know what to rewrite (and reuse).
3. “Plan to throw one away; you will, anyhow.” (Fred Brooks)
4. If you have the right attitude, interesting problems will find you.
5. When you lose interest in a program, your last duty to it is to hand it off to a competent successor.
6. Treating your users as co-developers is your least-hassle route to rapid code improvement and effective debugging.
7. Smart data structures and dumb code works a lot better than the other way around.
8. If you treat your beta-testers as if they’re your most valuable resource, they will respond by becoming your most valuable resource.
9. The next best thing to having good ideas is recognizing good ideas from your users.
10. Often, the most striking and innovative solutions come from realizing that your concept of the problem was wrong.
11. “Perfection (in design) is achieved not when there is nothing more to add, but rather when there is nothing more to take away.”





12. Any tool should be useful in the expected way, but a truly great tool lends itself to uses you never expected.
13. A security system is only as secure as its secret.
14. To solve an interesting problem, start by finding a problem that is interesting to you.

What I've learned:

Ownership over information on the Web is a sensitive issue. It is more of protection of profits for owners and this is the driving force for the consistent promotion of this right. However, these owners should also realize that there are people who use information on the Web because they are unable to afford books or software sold in retail outlets and that they are relying on free information on the Web.

For me, the mere fact that the information has been posted on the Web means that it is free to be used by other people. The limits on the usage are what are required to be discussed and more specific guidelines should be drafted so that boundaries regarding piracy and plagiarism are clearer.

Integrative Questions:

1. Has computer technology created a new revolution in how intellectual property is created, stored, reproduced, and disseminated?
2. Does copyright no longer have a consistent theory?
3. Is invisible revisability a problem?
4. Are links an indispensable tool for search engines?





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CHAPTER 4

Chapter 4: Privacy in Cyberspace

Quote: “Privacy is not simply an absence of information about us in the minds of others, rather, it is the control we have over information about ourselves.”

Learning Expectations: To learn how our privacy in cyberspace is protected and how information technology affects our privacy in the public realm.

Chapter Review:

Privacy is highly-valued both in the real world and in cyberspace. Specific policies should be drafted that take into consideration all the aspects involved in private situations. The following are principles that can guide the establishment of policies for privacy:

1. The Publicity Principle: Rules and conditions governing private situations should be clear and known to the persons affected by them.
2. The Justification of Exceptions Principle: A breach of a private situation is justified if and only there is a great likelihood that the harm caused by the disclosure will be so much less than the harm prevented that an impartial person would permit breach in this and in morally similar situations.
3. The Adjustment Principle: If special circumstances justify a change in the parameters of a specific situation, then the alteration should become an explicit and public part of the rules and conditions governing the private situation.

It is imperative that zones of privacy be created. There should be different levels of access for different individuals. It forces informed consent, as much as possible, and shows how much security is valued.

In Dag Elgesem’s paper “The Structure of Rights in Directive 95/46/EC on the Protection of Individuals with Regard to the Processing of Personal Data and the Free Movement of Such Data,” he discusses how the Directive will be instrumental





in shaping the European standard concerning privacy rights. In the first part of his paper, he discusses how the Directive handles the problem of further processing of personal data collected for different purposes. The second part of his paper tackles some of the most widely discussed philosophical accounts of privacy. Finally, the last part of his paper presents his own ideas for a philosophical theory of individual rights in connection with the processing of personal data.

Another paper that deals with the theory of privacy is “Privacy Protection, Control of Information, and Privacy-Enhancing Technologies” by Herman T. Tavani and James H. Moor. In their study, Tavani and Moor defend a version of the restricted access theory by putting forth a tripartite model that differentiates the concept of privacy from both the justification and the management of privacy.

The concept of privacy was differentiated from the concept of control. They have been defined separately as:

1. Concept of privacy: protection from intrusion and information gathering
2. Concept of control: used to justify the framing of policies that provide privacy protection and is essential to the management of privacy.

Individual controls are expressed in three different ways, namely: choice, consent, and correction. However, individual controls are not sufficient in the management of privacy, making external controls necessary for the protection of privacy. Examples of privacy-enhancing technologies (PETs) were considered for the argument. Despite being able to provide individuals with a means of controlling their personal information, PETs do not necessarily ensure privacy protection. This is because PETs do not provide online users with a zone of privacy protection that incorporates external controls beyond those at the individual level.

A challenge to the information technology is being able to provide privacy in public. Most existing theories only cover that scope of privacy relating to a personal zone or intimate and sensitive information. They fail to consider the so-called public realms where people need as much protection for their privacy.

Anton H. Vedder describes knowledge discovery in databases (KDD) as the nontrivial extraction of implicit, previously unknown, and potentially useful information from data. The process of KDD is divided into three phases, namely:

1. Data warehousing
2. Data mining





3. Interpretation

KDD has been used for direct marketing, credit scoring, analyzing medical data, checking patterns in criminal behavior for forensic and judicial purposes, and for analyzing data about medical drug consumption. But this is not without disadvantages. The negative impact is mainly on group profiling. The consequences are mainly on how individuals are judged and treated.

Recently, the potential in workplace surveillance has seen growth. Because of the affordability of surveillance technology, organizations are now considering their installation in the workplace to monitor their employees. Again, this issue has not escaped unscathed from those who feel that their privacy in the workplace is being invaded by such surveillance. If ever surveillance technology is to be installed, it should be explicitly justified by the employer. Furthermore, there should be intellectual and organizational resources set up to ensure that workplace surveillance becomes and stays fair.

What I've learned:

Privacy is a sensitive issue because it affects how we deal with other people. We have the power to share information about ourselves to others, only information we want them to know. Our privacy is being able to keep something about ourselves only to ourselves and to the lucky few we deem are worthy of knowing such information. When this information about us is taken without our consent or even if we are aware that it was taken from us but processed in ways we don't know, our privacy is breached.

Most of the time, our privacy is breached because of our own doing. We upload information about us on the Web without thinking about people who will be able to take this information and use them. What would be best for us is to avoid disclosing too much information about ourselves and be wary about the people to whom we share such information.





Integrative Questions:

1. Is information greased in a computerized society?
2. Does the normative aspect of private situations restrict access by individuals, groups, or governments?
3. Does the publicity principle state that the rules and conditions governing private situations be clear and known to the persons affected by them?
4. Does a person's right to privacy restrict access by others to the sphere of personal, undocumented information?





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CHAPTER 5

Chapter 5: Security in Cyberspace

Quote: “In this era of global commerce via the Internet, strikes against the hegemony of bureaucratic capitalism and the commercialization of the Internet will inevitably be carried out on the World Wide Web.”

Learning Expectations: To learn how one’s security can be protected while using the Internet and what the major threats to security are.

Chapter Review:

Boundaries of computer crime must be established. Herman Tavani has the following distinct categories of computer technology crime:

1. Software Piracy- using computer technology to produce one or more unauthorized copies of proprietary computer software or distribute unauthorized software or make copies of that software available for distribution over a computer network.
2. Electronic Break-ins- using computer technology to gain unauthorized access either to an individual’s or an organization’s computer system or to a password-protected website.
3. Computer sabotage- using computer technology to unleash one or more programs that disrupt the flow of electronic information across one or more computer networks, including the Internet, or destroy data resident in a computer or damage a computer system’s resources, or both.

Computer technology has provided a new forum for certain illegal activities that may be taken to be computer crimes at first glance. On closer inspection, it will be seen that they are not really computer crimes despite the use of the computer technology in pulling off such acts. Clear definitions of computer crimes must be set in place to ensure that proper sanction is meted out and proper classification of the crime has been performed.





People are finding more and more ways to use technology. One of the latest discoveries is using computers for hacktivism. Hacktivism has been defined as the clandestine use of computer hacking to help advance political causes. Despite still being in its infancy, hacktivism will bear witness to the movement's growing pains and increasing maturity. Arguments are still ongoing as to whether electronic civil disobedience is justifiable or not.

Information technology promises security and privacy. Even so, the market has failed to give protection to privacy as there is only limited legal protection and technological protection, though available, is unused. One cause is the delay between the introduction of new technologies and the extension of privacy rights to the users of that technology. The concern for privacy is present. What are invisible are the threats to privacy, while the privacy protection is not. Moreover, users of technology are not knowledgeable about privacy protection. The use of privacy protection technology needs time and skills and ordinary users of the Web are not equipped with these.

Anonymity is another relevant issue for the users of the Internet. Tools such as the Anonymizer and pseudonymity agents such as Lucent's Personalized Web Assistant both enable users to roam the Web under pseudonyms or anonymously. This is a desirable feature for users who want to protect their privacy when using the Internet. The downside to this is that terrorists and criminals can also roam the Web anonymously and they may exploit the technology for illegal activities.

The final issue tackled in this chapter is that of biometrics. Biometrics involves the collection of digital representations of physical features that are unique to an individual, such as fingerprints or the pattern of the iris. Despite being considered as the "next big thing" in information technology, there are challenges that still have to be overcome by this technology.

What I've learned:

Information technology is a double-edged sword. It can be for good or for evil. Not having a mind of its own, it can be manipulated for both legal and illegal activities. It cannot choose who will be its user. It merely lends all its capabilities to all who will be knowledgeable in using it.

People seek security in cyberspace as much as they do in the real world. Their best weapon is information—information about what could be done against their safety in cyberspace and how they can better protect themselves against these threats. More informed users are the biggest weapons against terrorists and criminals who are now exploiting the possibilities cyberspace can offer.





Trust is very difficult to give when in cyberspace. One can never really know who is behind the other computer. It is very easy to create another identity or to hide one's identity in cyberspace with all the capabilities technology offers. You never know when that person you just added as a friend on Friendster or just chatted with in a Yahoo! Chatroom is a criminal or just an ordinary person. People can claim to be what they are not. People can change their age, how they look, where they live, and what they do for a living. You can never really confirm these things, especially if the person you are communicating with is in another part of the globe. That is why trust must never be totally given. Even when communicating with people you personally know in real life. You never know if it is really them you are communicating with in cyberspace or a criminal pretending to be them.

Integrative Questions:

1. Does hacktivism have the potential to play an active and constructive role in the overcoming of political injustice?
2. Is security often confused with privacy?
3. Does information availability depend upon the type and version of the customer's browser?
4. Is achieving anonymity in an information age a more demanding business than merely allowing people to withhold their names?
5. May web browsers also purchase information?





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CHAPTER 6

Chapter 6: Professional Ethics and Codes of Conduct

Quote: “Those who write moral codes (or things that could be mistaken for them) need to be aware of the possibility that they may be abused.”

Learning Expectations: To learn how professional ethics and codes of conduct affect and regulate the behavior of computer professionals, as well as to determine the scope of such ethics and codes of conduct.

Chapter Review:

There are computer ethics issues that have a direct impact on computer technology professionals. These span two distinct areas of applied or practical ethics. These are:

1. Policy issues involving free speech, intellectual property, privacy, security, etc.
2. Issues arising from the conduct of certain individuals in the computing profession

Elizabeth Buchanan’s paper “Ethical Considerations for the Information Profession” provides an overview of the new professional field of information ethics. According to Buchanan, this new professional field of information ethics is the bridge between many disciplines such as library and information science, computer science, records management, and many more. This field should be understood to affect every member of the information society. Therefore, it can be concluded that this field affects all of us who are now living in the information age, not only those who we consider as the information professionals.

Contrary to Buchanan’s view that information ethics affects us all, there are those who believe that information ethics only affects those who are employed in that particular profession where it applies. Computer ethics, then, is distinguished from other branches of professional ethics. It is a set of issues that affect computer professionals. This is according to Don Gotterbarn.





While Gotterbarn may have a contradicting view to that of Buchanan's, what he means by computer professionals is different from what Buchanan means by information professionals. In addition to that, many have described Gotterbarn's view of computer ethics as far too narrow. Despite such fact, his view has been adapted by many computer science professionals.

There are specific codes of ethics and codes of conduct for computer professionals that regulate their behavior. Such codes are in place because there is a need to regulate the behavior of computer professionals, to ensure that their actions are always for the good and benefit of all. Large computer organizations, such as the Association of Computing Machinery (ACM) and the Institute for Electrical and Electronics Engineers (IEEE), have adopted professional codes of ethics.

Don Gotterbarn, Keith Miller, and Simon Rogerson, in their essay, describe many of the salient features of the new professional code that has been developed by the IEEE-CS/ACM Joint Task Force on Software Engineering Ethics and Professional Practices. This new professional code aims to educate and inspire software engineers by specifying ethical and professional responsibilities and obligations of software engineers.

Despite the aim of codes of conduct to emphasize the profession's obligation to the public at large, they have still been criticized. According to John Ladd, the codes rest on a set of confusions that are both intellectual and moral in nature. He believes that they are not really ethical codes but legal directives with sanctions. Ladd believes that ethics is about deliberation and when ethics are codified, they are transformed into a set of directives similar to law. He has also pointed out that a certain organization adopts a set of code of ethics in order to project that they behaving in an ethical way.

N. Ben Fairweather also had concerns pertaining to ethical codes. In his essay, "No, PAPA: Why Incomplete Codes of Ethics are Worse Than None at All," he pointed out that codes of conduct for computing professionals are often influenced by conception and information ethics and this is limited only to accessibility, accuracy, privacy, and property. Because the codes are incomplete, loopholes are present and this provides an easy way for organizations when addressing certain ethical issues. Because of the limited scope of PAPA, Fairweather is worried that issues involving weapons, environmental injustice, and telework and telecommuting may not be covered.

In David Cleason's paper, "Subsumption Ethics," he gives ways in which computer systems subsume design and development decisions over which users





have little or no control. He defines subsumption ethics as the process in which decisions become incorporated into the operation of information technology systems and are subsequently forgotten. He gives four axioms which he combines with four ethical frameworks which are rooted in four prominent philosophical traditions.

The need for responsible businesses to be aware of the potential for misuse of technology is discussed in Duncan Langford's paper "Ethical Issues in Business Computing." He defines business computing as any activity using computers which is undertaken by business. In his essay, he examines four possible levels of business computing and he identified where certain general and specific ethical issues arise. He continues on to point out the business computing is concerned more with the real world than with theory. Langford concludes his essay by giving a series of rules for the proper use of business computers.

Frances Grodzinsky's essay "The Practitioner from Within: Revisiting the Virtues," is the final reading. In her essay, Godzinsky encourages instructors to look to some of the principles of character-based ethics so that they will serve as guides in teaching material on ethical issues. She suggests that instructors who teach courses on ethical issues to computer science students to better prepare future computer professionals to behave as morally responsible professionals.

What I've learned:

Computer ethics concerns all of us, not just computer professionals. Why? It is because almost all of us are computer users. We use computers on a daily basis, especially the World Wide Web. Even young children nowadays have a Friendster or a Facebook account. People, even ordinary users, should also be aware of computer ethics. Since they use the technology, they are required to use it appropriately.

Training for computer ethics should start in school. Grade school students now have computer classes and lessons on computer ethics should be incorporated in these classes. Young as these computer users are, they should be brought up respecting the technology and other users.





Integrative Questions:

1. Does today's social obsession with technologies, especially information technologies, raise many serious concerns and considerations?
2. Is attention taken away from other moral issues when focusing on the four areas of privacy, accuracy, property, and accessibility?
3. Do design and implementation decisions dictate the structure and operation of systems?
4. Is there a close relationship between computer systems and organizational policy?
5. Do virtue ethics offer character-forming theories that are more successful with students than the action-guiding theories of computer ethics texts?



An IT Ethics Reader by Roberto Galang Jr.

3rd Term, SY 2008-2009



THE HANDBOOK OF INFORMATION AND COMPUTER ETHICS





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CHAPTER 1

Part I - Foundational Issues and Methodological Frameworks

Quote: “We are but whirlpools in a river of ever-flowing water. We are not stuff that abides, but patterns that perpetuate themselves.

Learning Expectations- In this chapter, we were about to learn the importance of the foundational issues and methodological frameworks concerning Information Technology.

Review

Part I covers Chapter 1 to 4 which includes the foundations of information ethics, the milestones in the history of information and computer ethics, the moral methodology and information technology and the values sensitive design and information system.

I. The Foundations of Information Ethics

We call our society “the information society” because of the pivotal role played by intellectual, intangible assets. The information society has already posed fundamental ethical problem, whose complexity and global dimensions are rapidly growing and evolving.

According to Froehlich (2004), the expression “information ethics” was introduced in the 1980’s by Koenig et. Al and Hauptman in 1988 who then went on to establish the Journal of Information Ethics.





The Information Ethics began to merge with computer ethics only in 1990's when ICT revolution became so widespread.

The emergence of the information society has further expanded the scope of IE. The more people have become accustomed to living and working immersed within a digital environments.

According to Einstein, human being is part of the whole, called by us "universe" a part limited in time and space.

II. Milestones in the History of Information and Computer Ethics.

The academic field of computer ethics was born unintentionally and almost accidentally in the middle of the Second World War. At that time, philosopher scientist Norbert Wiener was working with a group of scientists and engineers who were involved with him in the invention of digital computers and radar, and the creation of a new kind of anti-aircraft.

According to Wiener (1985), the way of analyzing and trying to resolve information ethics issues, there is a nexus of existing practices principles, and laws.

Information Ethics includes:

1. Identify an ethical question or case regarding the integration of information technology into society.





2. Clarify an ambiguous or vague ideas or principles that may apply to the case or issue in question.
3. If possible, apply already existing ethically acceptable principles, laws, rules and practices that govern human behavior in the given society.
4. If ethically acceptable, precedents, traditions and policies are insufficient to settle the question or deal with the case, use the purpose of a human life plus the great principles of justice.

The birth and growth of a discipline is cooperation among critical mass of scholars as well as the creation of courses to teach, conferences to attend, research center for planning and conducting research projects, and journals and other places to publish the results of the research.

Since 1985, computer and information ethics developments have exponentially proliferated with new conferences and conference series, new organization, new research centers, new journals and textbooks.

Compared to many other scholarly disciplines, the field of computer and information ethics is very young. Wiener's insights were far ahead of everyone else.

In thermodynamics theory and cosmology, we would probably resist that the redescription of our moral lives is a human aspect of the universe.

Larry Lessig and Peter Singer have achieved for our thinking about, respectively, converging technologies, freedom in the age of the internet and animal rights has no counterpart in the purely academic world.





III. Moral Methodology and Information Technology

Information technology shapes the space of action of people, imposes constraints and affordable and requires us to address the development and design of technology at a stage when ethics can still make a difference in the light of ethical beliefs held in a wide reflective equilibrium.

Value Sensitive Design is a theoretically grounded approach to the design of technology that accounts for human values in a principled and comprehensive manner throughout the design process. It employs an integrative and iterative tripartite methodology.

IV Value Sensitive Design and Information Systems

Value Sensitive Design is a theoretically grounded approach to the design of technology that accounts for human values in a principled and comprehensive manner throughout the design process.

There is a growing interest and challenge to address values in design. Our goal in this chapter has been to provide enough detail about Value Sensitive Design so that other researchers and designer can critically examine, use and extend this approach.

Ideally, Value Sensitive Design will work in concern with organizational objectives. As part of the empirical investigation, it is useful to interview stakeholders to better understand their judgments about a context of use, an existing technology or a proposed design. A semi-structured interview often offers a good balance





between addressing the questions of interest and gathering new and unexpected insights.

What I've learned

In the said chapters, I've learned that Regulation and Governance on the Internet raises information about industrialization and information prepared on the ground for its emergence.

Understanding the foundation of ethics is that "human being is part of the whole called the Universe"

That on the basis of human nature, Wiener (1994) concluded that the purpose of the human life is to flourish as the kind of information processing organism that humans naturally are created for existence. That human being must be free to engage in creative and flexible actions that maximize their full potential as intelligent decision making being charge of their own lives.

Integrative Questions

1. Are ethical concepts humane?
2. Does the birth of ethics on computers natural?
3. Does modern technology affects our economic situation?
4. Does the government can protect individuals against those who abuse the use of the internet?
5. Why is it that a system design on ethical concepts being devised?





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CHAPTER 2

Part II - Theoretical Issues Affecting Property, Privacy, Anonymity, and Security.

Quote: “When the artist creates, be he an author, a painter, a sculptor, an architect or a musician, he does more than bring into the world a unique object having only exploitive possibilities; he projects into the world part of his personality and subjects it to the ravages of public use. There are possibilities of injury to the creator other than merely economic ones; these the copyright statute does not protect”.

Learning Expectations-

In part II, we were about to learn what is intellectual property, the justifications of intellectual property, the rule of utilitarian incentives based argument for intellectual property, the rule of patents, the theories of informational privacy, concepts, theories and controversies. We were also about to learn what is online anonymity, the concept of anonymity, and the ethical issues involving computer security and how to counteract hackers.





Review

Ch.5 Personality Based Rule Utilitarian, and Lockean Justification of Intellectual Property.

Intellectual property is generally characterized as nonphysical property that is the product of cognitive processes and whose value is based upon some idea or collection of ideas.

Intellectual property is protected by the legal regimes of copyright, patent, and trade secret. Copyright protection extends to original works of authorship fixed in any tangible medium of expression.

Systems of intellectual property protect rights to ideas by protecting right to produce and control physical embodiments of those ideas.

Personality based defenders maintain that intellectual property is an extension of individual personality. Personality theorists like Hegel, maintain that individuals have moral claims over their own talents, feelings, character traits, and experiences.

Property rights are important in two ways:

1. Controlling and manipulating objects, both tangible and intangible.
2. Personality becomes infused with an object.





The Rule-Utaltarian incentives based argument for intellectual property is the system that adopt the copyright, patent, and trade secret that leads to an optimal amount of intellectual works being produced. Intellectual works can be held by everyone at the same time, cannot be used up or easily destroyed and are necessary for many lifelong goals and projects it would seem that the prima facie case against regimes of intellectual property would restrict such maximal use.

In this rule, the government grants rights as an incentive for the production of intellectual works, and production of this sort. Rights are granted to aturhors and inventors, not because they deserve such rights, or have mixed their labor in an appropriate way, but because this is the only way to ensure an optimal amount of intellectual products.

Trade Secret protection appears to be the most troubling from an incentives-based perspective. Trade secret protection allows authors and inventions to slow low the dissemination of information and the resulting increase in social progress.

The strategies for justifying intellectual property rights is something of value and the value of claim is easily clouded by replies like creating the rights to control what is being produced.

Chp.6. Informational Privacy Concepts, Theories and Controversies

Here, some key concepts theories and controversies affecting un-informational privacy is being discussed.





The concept of privacy demand recognition of our right to privacy, privacy is not simple a static concept, instead, it has a dynamic concept that is basic and thus capable of standing on its own.

Volkman (2003) argues that matters of privacy can be adequately accounted for by unpacking our natural rights to life, liberty and property.

The restricted access theory limits or restrict others from access to information about herself. This theory recognizes the importance of zones and contexts that need to be established to achieve informational privacy.

In analyzing the principal focus on controversies affecting informational privacy.

Ch. 7. On-line Anonymity

The term anonymity has been used to denote a number of related things such as detachment, unidentifiability, lack of recognition, loss of sense of identity or sense of self, and so on. Anonymity and privacy are also considered to be to be closely related with anonymity being one means of ensuring privacy.

The concept of anonymity is to mean “un-name-ability, or namelessness. To be fully anonymous means that a person cannot be identified according to any of seven dimensions of identify of knowledge.





Ch. 8. Issues involving Computer Security, Hacking, Hacktivism and Counter-hacking

Hacking constitutes a digital trespass onto the property of another person. Unauthorized entry into some other person's computer seems not relevantly different than uninvited entry onto the land of another person.

Attacks on government site and corporate sites can be justified as form of civil disobedience (CD). According to Manion and Goodrum (2000), CD is morally justifiable as a protest against injustice, is permissible to stage a sit-in in a commercial or government building to protest such laws.

Hacktivism can be defined as the commission of an unauthorized digital intrusion for the purpose of expressing a political or moral position. Qua activism, hacktivism does not seek to achieve its political purposes, unlike terrorism, by inspiring terror among the population, it attempts to achieve these purposes by stimulating discussion and debate.

What I've learned

The Internet is a global network connecting a vast number of computers, computer programs and a massive amount of information. Most of us access the Internet via the telephone network. There are a lot of technical details about how the Internet works that you probably don't need to understand. You've possibly heard the phrase TCP/IP bandied about. TCP/IP stands for Transmission Control Protocol/Internet Protocol and is a suite of protocols (or rules) that define how information is transmitted across the Internet. TCP and IP are also protocols in their own right.





A cookie is a piece of information that an Internet website sends to your browser when you access information at that site. Upon receipt of the information your browser saves the information on your hard-disk. Each time you use your computer to access that same website, the information that was previously received is sent back to the website by your browser. Most commonly used browsers support the use of cookies.

We can protect ourselves against hackers by following the instruction advised on our internet.

Integrative Questions

1. Can everyone about the hackers?
2. How can we protect ourselves against hackers?
3. Does the concept of anonymity adviseable?
4. Can we really be private while on the internet?
5. Does the government can protect their security on the net?





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CHAPTER 3

Part III – Professional Issues and the Information Related Professions

Quote: At the center of the librarian's commitment to humanity's search for truth and understanding is the goal of remaining always neutral in the battle for competing ideas.

Learning Expectations-

In part III, we were about to learn the information on ethics and the library profession, the ethical interest in free and open source software, the health information technology, challenges in ethics, science and uncertainty.

Review

Ch. 9- Information ethics and the Library

Libraries are organized depositories of documents have existed at least from the time of the Sumerians.





According to Dowell 2002, librarianship as a distinct profession. With the advent of the printing press, collections of works became larger and more complex, thus creating a greater need for someone devoted to organizing and cataloging such collections.

Moral Quality would have been included in what the librarian should be evaluating. Librarians ought to evaluate works based on their possible “moral teaching or effect”

Enabling maximal intellectual freedom might imply providing access to all legally available information. Public library collection should fit with the needs of its users, but this solution is not the panacea that it might appear to be.

Librarians must take selections, but on so doing, they face the possibility of personal or political bias entering into the process.

Librarians continue today to see their central value as the promoting of intellectual freedom. Those who promote the values face many challenges. Librarians respond to the fact of social injustice within the society it serves.

Ch. 10 Ethical Interest in Free and Open Source Software.

The Free Software (FS), is a concept developed by Richard Stallman in the 1980's and has served a foundation of important and related movements that have become possible because of the internet. The Open Source Software (OSS) movement. OSS is a concept rooted in software methodology and analyzed by Eric Raymond.





The history of Free Open Software stems from the close ties that early software developers had with academia. The project was to establish a software development community dedicated to developing and promoting free software.

Whereas the Free Software Community grew substantially after the introduction of the Internet and Linus Torvalds contribution of Linux as free software.

On philosophical grounds, Stallman the ardent critic of Open Source Software states that the ability

Service learning, a concept that is becoming part of the mission of many higher education institutions, also influences the choice between open source software and proprietary software.

Ch. 11 Internet Research Ethics – the Field and Its Critical Issues

Internet Research Ethics is an emerging multi- and interdisciplinary field that systematically studies the ethical implications that arise from the use of the Internet as a space of locale, of, and or tool for research.

The evidence of the recognition and development of IRE came through the release of the Association of Internet Researcher's Ethics working Groups report on Ethical Decision-Making and Internet Research.

Internet Research Ethics in Western countries emerged initially from models of human subject research and human subject protections in the life sciences.





The diverse disciplines involved in online research, is clear that the research ethics implicated by a given ethical problem or difficulty is deeply entwined with and defined by the specific methodology that shape a specific research project.

Understanding the privacy and research practices regarding human subjects protection, differences reflecting still more fundamental differences between Western affirmation of the atomistic individual as a moral autonomy to be affirmed and protected.

Protecting the privacy of internet users and online subscribers, are being done to prevent hackers from penetrating the internet.

Human subjects protections models are grounded in respect for persons, and a careful balance is necessary in protecting individual rights within the greater societal good.

The global reach of the Internet means that research participants may be drawn from a wide range of nations and cultures. Coupled with the often international collaborations behind online research, this fact of a global range of participants forces a still more demanding question for ethicists.

Ch. 12 Health, Information Technology, Challenges in Ethics, Science, and Uncertainty.

Ethics is a branch of philosophy that has a task of studying the morality, or generally public accounts of the rightness or wrongness of actions. All professional that give rise to ethical issues.





There is arguably no better trigger for reflection on morality and its relationship to the law and society than privacy and its cousin, confidentiality. Public distrust imperils the growth or expansion of electronic medical records which in turn are seen as needed to replace an aging, fragmented and inefficient paper – based system.

For centuries, physicians have kept notes on paper about patient encounters. By the late 1960's, hospitals created electronic information systems to collect and route medical orders, give clinicians access to laboratory tests, and identify chargeable services. These early electronic medical records had evolved, but these records and the systems used to maintain, develop, and share them are generally inaccessible to the people whom the information is about. Personal health records encompass a widely range of application that enable people to collect, view, manage or share copies of their health information or transactions electronically.

Privacy and confidentiality has been designed by various system authors in order to protect the welfare of every individual.

Chp. 13 Ethical Issues of Information and Business

Businesses and the economic system have an important influence on ethical issues arising from information and communication technology.

Drawing on some of the debates in computer and information ethics, the chapter points out areas where these two sets of discourses overlap and where they have the potential to inform each other.





The concept of business have a large influence on how we live our individual lives and also on how society is regulated. Businesses are social facts buty tyey are also the objects of theoretical and academic attention.

Business Ethics deals with the relationship between business and ethics. A possible view might be that business and ethics simply have nothing to do with each other and the term business ethics is an oxymoron. Immoral behavior of individual market participants such as high-profile managers or corporation sometimes seems to support this view.

The corporate social responsibility is an approach quite popular in the Anglo American world that attempts to find an answer to the question of under which condition the behavior of a corporation as a whole would be considered ethically acceptable.

What I've learned

In part III, I have learned that ethics is still the multi-imaginary field present in this study. Every chapter highlights the important details on information ethics . That developing a global Internet Research Ethics can open up new research possibilities . The growing global dialogue regarding the ethics of online research will confront to shortage of intriguing new examples and issues.





Integrative Questions

1. Does business and economic system have influence on ethical issues?
2. Does the theory on ethical concepts being applied by every individual?
3. How can you do your own social responsibility?
4. What is the relationship between business ethics and internet ethics?
5. Does every corporation can behave properly on the internet?





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CHAPTER 4

Part 4 – Responsibility Issues and Risk Assessment

Quote: Most fundamentally, the human genome projects produce entities of a different ontological kind than flesh and blood organisms, natural races or any other sort of normal organic being.. the human genome projects produce ontologically specific things called databases as objects of knowledge and practice.

Learning Expectations

In part IV, we are going to learn the responsibilities of information on the internet, the virtual reality and computer simulation, the genetic information, epistemological and ethical issues, including the practical mechanism for ethical risk.

Chapter Review

Chp. 14. Responsibilities for Information on the internet

Electronic information and networking is a new and very rapidly developing area of public and private activity. The Library recognizes that these developments pose new challenges as well as new opportunities for the Library Board, the Library





staff, and Library users and their families. The Library believes that these challenges and opportunities are best addressed by adherence to the fundamental principles of traditional library use and the principles of a free society.

Congress and the courts have recognized that there is no single organization to govern, control, or select information for the Internet. Because of this freedom of information, the breadth of information on the Internet, the unstructured and unregulated nature of the Internet, and the unreliable state of filtering, the North Scituate Public Library cannot control the content of resources available on the Internet.

The Library does not select the material on the Internet, and has no means or statutory authority to assure that only constitutionally protected material is available on the Internet.

The Library adheres to the American Library Association's stance regarding access to electronic information, services and networks: "Electronic information, services and networks provided directly or indirectly by the library should be equally, readily and equitably accessible to all library users . . . Some information accessed electronically may not meet a library's selection or collection development policy. It is, therefore, left to each user to determine what is appropriate. Parents and legal guardians who are concerned about their children's use of electronic resources should provide guidance to their own children . . . Libraries and librarians should provide access to information presenting all points of view. The provision of access does not imply sponsorship or endorsement."

According to *Access to Electronic Information, Services and Networks: an Interpretation of the Library Bill of Rights*, 1996, the Library's Internet Use Agreement further provides that:

- Users may not make any changes in the set-up or configuration of the Library's computer system hardware or software.
- Users may not modify or gain access to the Library's computer system files, passwords or data.
- Users may not seek unauthorized access to any computer system or network.
- Instant messaging, chat rooms and news groups are not available on the Library's Internet terminals.
- Users may not use personal software on the Library's Internet terminals.
- Internet terminals are available to users in half-hour blocks of time, but users are limited to no more than one hour of access per day. Library patrons may reserve time slots for Internet terminal use one day in advance.





- No more than two people shall be allowed at any given Internet terminal at a time.
- Users may print materials off of the Internet at a cost to the user to be posted in the library.
- Users may download information off of the Internet onto floppy disks. Blank floppy disks are available for purchase at the Library's circulation desk at a cost to the user.
- Misuse or abuse of computer or Internet terminal access may result in the loss of a patron's Internet use privileges at the Library and/or the imposition of damage charges if applicable.

Confidentiality:

The North Scituate Public Library upholds the right of confidentiality and privacy for all Library users. In order to protect the privacy of the user and the interests of other library patrons, the Library will manage access to the Internet by judicious placement of the terminals, and other appropriate means as determined by the Library staff and Board of Trustees.

Users are urged to respect the sensibilities of others when accessing information that may reasonably be offensive to someone else. However, absolute privacy for patrons using electronic resources in the Library cannot be guaranteed. There exists a possibility of inadvertent viewing by other patrons, either by watching the user's screen, or because a user may leave the screen unattended.

Responsibilities of Users:

The Internet is a global entity with a highly diverse user population and information content. Although the Internet provides users with a wide array of excellent information, it also contains information that may be inaccurate, outdated, or personally offensive. Library patrons use it at their own risk. A good information consumer evaluates the validity of information found. Use of Internet resources carries with it a responsibility to evaluate the quality of the information accessed.

The availability of information does not constitute endorsement of the content by the North Scituate Public Library.

Access, use, or dissemination of information via the Internet in the Library is the responsibility of the user. In the case of minors, it is a joint responsibility of the user and the parent or guardian.





Supervising Children's Use:

The public library, unlike schools, does not serve *in loco parentis* (in place of a parent). Librarians cannot act in the place of parents in providing constant care and supervision of children as they explore the Internet. The responsibility for what minors read or view on the Internet rests with parents or guardians.

The following are recommended guidelines for parents and guardians to ensure that children have positive online experiences, whether at home or in the Library.

- Use the Internet as a family. Join your children in Internet exploration.
- Explore the wide range of available information and tell your children about sites you consider inappropriate for them.
- Counsel children to avoid sites you consider unsuitable.
- Provide guidelines for your children on the amount of time they spend online, just as for television viewing.
- Instruct children NEVER to give out personal information (name, address, password, telephone number, credit card number, etc.) online.
- Teach children to be good online consumers. As with print information, consider the source, date, and accuracy of online information.

As it does with other library resources, the Library will provide training on electronic resources. It will also make information available to help parents and guardians in their efforts to exercise their rights and responsibilities regarding their own children's use of electronic resources.

Chp. 15 Virtual Reality and Computer Simulation

Virtual reality and Computer Simulation have not received much attention from ethicists. It is argued that there are important ethical questions that can be raised in relation to these technologies.

Computer simulations are computer-generated versions of real-world objects (for example, a sky scraper or chemical molecules) or processes (for example, population growth or biological decay). They may be presented in 2-dimensional, text-driven formats, or, increasingly, 3-dimensional, multimedia formats. Computer simulations can take many different forms, ranging from computer renderings of 3-dimensional geometric shapes to highly interactive, computerized laboratory experiments.





Virtual reality is a technology that allows students to explore and manipulate computer-generated, 3-dimensional, multimedia environments in real time. There are two main types of virtual reality environments. Desktop virtual reality environments are presented on an ordinary computer screen and are usually explored by keyboard, mouse, wand, joystick, or touch screen. Web-based "virtual tours" are an example of a commonly available desktop virtual reality format. Total immersion virtual reality environments are presented on multiple, room-size screens or through a stereoscopic, head-mounted display unit. Additional specialized equipment such as a Data Glove enable the participant to interact with the virtual environment through normal body movements. Sensors on the head unit and Data Glove track the viewer's movements during exploration and provide feedback that is used to revise the display enabling real-time, fluid interactivity. Examples of virtual reality environments are a virtual solar system that enables users to fly through space and observe objects from any angle, a virtual science experiment that simulates the growth of microorganisms under different conditions, a virtual tour of an archeological site, and a recreation of the Constitutional

Ch. 16. Genetic Information: Epistemological and Ethical Issues

The use of human genetic information on individuals which will be made available by the Human Genome Project (HGP). The mainstream bioethical tradition, influenced by the liberal tradition, emphasizes the principle of autonomy. It considers, therefore, the individual as an autonomous being and promotes privacy and confidentiality as the most appropriate ways to deal with the issues raised by the availability of genetic information on individuals.

Stress on autonomy positively contributes to put the individual, and ones rights, at the center of the ethical reflection. At the same time, it simplifies the scope of the ethical reflection because ethical analysis and decisions become a reserved domain of individuals in their singularity. It also presupposes ones ability to make decisions individually and the availability of all the data which are necessary to choose. However, this ethical approach lacks a more explicit assessment of the social implications associated with the development of genetic information. To





achieve this goal, it is necessary to consider and address social needs. The importance of promoting the common good makes this possible. This approach characterizes the Roman Catholic teaching on social ethics but is also shared by other ethicists from outside the boundaries of this tradition. Searching for what favors the common good does not diminish the emphasis on the individual but includes a larger set of concerns. In my proposal, therefore, the need of pursuing the common good becomes the overarching paradigm which should inform the reflection on the use of genetic information.

Because of the progress and achievement of the HGP, our genetic information will be gradually available to ourselves but also to social agents, that is, insurance companies, employers, medical institutions, law enforcement agencies, and governments which appear to be extremely interested in obtaining genetic data concerning their insured, employees, and/or citizens. In the near future it will be enough to perform genetic tests on one single cell to have access to the genetic information concerning an individual

The equal access to genetic data made possible by the Internet represents a major value, therefore, scientifically, socially, and economically. However, the future possibility of easy access through the Internet to data stored by various institutions raises concerns. Researchers in universities world-wide could be interested in using for their research data stored in hospitals of their own country or elsewhere. Law enforcement agencies could share their data too as well as insurance and multinational companies. The Internet will simplify, therefore, the access to genetic information of individuals as well as large numbers of people, facilitating an uncontrolled use of those data for various purposes, some of them potentially dangerous and problematic for individuals and entire peoples.

To address those issues, is it enough to raise concerns about the possible violations of ones privacy and confidentiality? On the one hand, the pervasiveness of the Internet seems to require a more globally sensitive approach, that is, an ethical tool more suitable to address issues which are not limited to the individual and ones limited circle of relationships. We need to be able to deal with the specificity of genetic information and, at the same time, with the possibility of its immediate universal diffusion and availability which is made possible by the Internet.





On the other hand, the focus on the defense of ones autonomy does not seem to be sufficiently appropriate to address the involvement of the market. Biotechnological companies have been largely involved in the HGP. They have played an important role in launching the HGP.

Chap. 17. The Ethics of Cyber Conflict

Ethics deals with placing a “**value**” on acts according to whether they are “**good**” or “**bad**”. Every society has its rules about whether certain acts are ethical or not. These rules have been established as a result of consensus in society and are often written into laws.

When computers first began to be used in society at large, the absence of ethical standards about their use and related issues caused some problems. However, as their use became widespread in every facet of our lives, discussions in **computer ethics** resulted in some kind of a consensus. Today, many of these rules have been formulated as laws, either national or international. **Computer crimes** and **computer fraud** are now common terms. There are laws against them, and everyone is responsible for knowing what constitutes computer crime and computer fraud.

The **Ten Commandments of computer ethics**

1) Thou shalt not use a computer to harm other people: If it is unethical to harm people by making a bomb, for example, it is equally bad to write a program that handles the timing of the bomb. Or, to put it more simply, if it is bad to steal and destroy other people’s books and notebooks, it is equally bad to access and destroy their files.

2) Thou shalt not interfere with other people’s computer work: Computer **viruses** are small programs that disrupt other people’s computer work by destroying their files, taking huge amounts of computer time or memory, or by simply displaying





annoying messages. Generating and consciously spreading computer viruses is unethical.

3) Thou shalt not snoop around in other people's files: Reading other people's e-mail messages is as bad as opening and reading their letters: This is invading their privacy. Obtaining other people's non-public files should be judged the same way as breaking into their rooms and stealing their documents. Text documents on the Internet may be protected by **encryption**.

4) Thou shalt not use a computer to steal: Using a computer to break into the accounts of a company or a bank and transferring money should be judged the same way as robbery. It is illegal and there are strict laws against it.

5) Thou shalt not use a computer to bear false witness: The Internet can spread untruth as fast as it can spread truth. Putting out false "information" to the world is bad. For instance, spreading false rumors about a person or false propaganda about historical events is wrong.

6) Thou shalt not use or copy software for which you have not paid: Software is an intellectual product. In that way, it is like a book: Obtaining illegal copies of copyrighted software is as bad as photocopying a copyrighted book. There are laws against both. Information about the copyright owner can be embedded by a process called **watermarking** into pictures in the digital format.

7) Thou shalt not use other people's computer resources without authorization: Multiuser systems use **user id's** and **passwords** to enforce their memory and time allocations, and to safeguard information. You should not try to bypass this authorization system. **Hacking** a system to break and bypass the authorization is unethical.

8) Thou shalt not appropriate other people's intellectual output: For example, the programs you write for the projects assigned in this course are your own intellectual output. Copying somebody else's program without proper authorization is **software piracy** and is unethical. **Intellectual property** is a form of ownership, and may be protected by copyright laws.





9) Thou shalt think about the social consequences of the program you write:

You have to think about computer issues in a more general social framework: Can the program you write be used in a way that is harmful to society? For example, if you are working for an animation house, and are producing animated films for children, you are responsible for their contents. Do the animations include scenes that can be harmful to children? In the United States, the **Communications Decency Act** was an attempt by lawmakers to ban certain types of content from Internet websites to protect young children from harmful material. That law was struck down because it violated the free speech principles in that country's constitution. The discussion, of course, is going on.

10) Thou shalt use a computer in ways that show consideration and respect:

Just like public buses or banks, people using computer communications systems may find themselves in situations where there is some form of queuing and you have to wait for your turn and generally be nice to other people in the environment. The fact that you cannot see the people you are interacting with does not mean that you can be rude to them.

Chap. 18 A Practical Mechanism for Ethical Risk Assessment

The current ethical and legal framework for protecting human subjects rests on the principles of autonomy, beneficence, and justice. The first principle, autonomy, requires that subjects be treated with respect as autonomous agents and affirms that those persons with diminished autonomy are entitled to special protection. In practice, this principle is reflected in the process of informed consent, in which the risks and benefits of the research are disclosed to the subject. The second principle, beneficence, involves maximizing possible benefits and good for the subject, while minimizing the amount of possible harm and risks resulting from the research. Since the fruits of knowledge can come at a cost to those participating in research, the last principle, justice, seeks a fair distribution of the burdens and benefits associated with research, so that certain individuals or groups do not bear disproportionate risks while others reap the benefits.





One of the fundamental principles of research ethics, beneficence, obligates researchers to maximize possible benefits from the research and minimize harms and risks to their subjects. Benefits can be defined as gain to society or science through contribution to the knowledge base, gain to the individual through improved well being, or empowerment of the individual by giving him or her a voice. Harms may include death and injury, psychological abuse, loss of privacy and public exposure and may not only affect individuals, but specific population subgroups as well.

What I've learned

The Internet provides an exciting medium available to classrooms. It has been described as "a worldwide personal library, one that allows for retrieval of new information, data, images, and software. Sometimes this data is only available online. In addition, the interactivity can provide a whole new depth of experience for students. Projects can be experienced in real-time, communication can occur with sites around the world, students can learn and develop totally new search abilities. This type of learning can be very engaging and invigorating for students as well as teachers.

While the Internet combines the permanence and convenience of text with the timeliness of the electronic media, it also provides many new challenges to overcome. Because the World Wide Web has exploded so quickly, there are no guidelines for material that is published in the medium. The world of print has evolved a set of guidelines through editorial processes and review boards so that readers can expect a certain quality with published works. When a reader purchases the New York Times or a National Geographic, there is a certain expectation about the type of material that will be included. On the Internet, anyone can publish whatever they desire.

This presents a serious issue for the educator who wishes to incorporate the rich possibilities for learning presented by the Internet. "Many genre categories exist as sources for Internet sites including universities, commercial services, electronic journals and commercial magazines, special interest groups, companies and organizations, advertising pages, personal pages, search engines, software sites, city and state pages, federal government pages, and special interest groups. Just as educators need to determine if textbooks or supplemental materials are appropriate and valid for their classrooms, so will Internet sites need to be assessed.





Six categories are presented here to help in assessing the validity of an Internet site: Purpose, Authorship, Currency, Content, Site Design, and Technical Issues. A simple list of [criteria](#) is presented by the Association for Library Services to children.

Integrative Questions:

1. Do you think everyone should be responsible users of the internet?
2. Does the service provider must also be responsible to the users?
3. How can we protect our children against malicious information on the internet?
4. How are we going to help our nation in protecting the overuse of information on the net?
5. Is virtual reality beneficial to internet users?





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CHAPTER 5

Part 5 - WEB Security and Privacy and American Perspective

Quote: “No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising the land of naval forces; nor shall a person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be witnessed against himself nor be deprived of liberty, or property without due process of law”.

Learning Expectations:

In this chapter, we will about to learn how to secure our privacy, and the need to protect everyone’s privacy.

Chapter Review

This chapter consider issues that are either directly or indirectly related to security on the internet.

It is important to not that in information and communications technology contexts, the term security is often used ambiguously and sometimes equivocally. The sense of security refers so much to the vulnerability to attacks on a computer’s





operating system software, application programs, and disk drives, but rather with vulnerability to unauthorized access of data that either resides on or is transmitted through that system.

Since criminal activities involving computers have been highly publicized since the 1970's and 1980's, and much has been written about the "hacker culture", Deborah Johnson (1994) have suggested that a distinction drawn between hacking for fun and hacking for profit, have distinctive civil rights and have gone so far as to set up a legal defense fund for individuals arrested for certain kinds of hacking activities.

The recent incidents involving cyber attacks on commercial web sites, the leashing of the Iloveyou virus and the transmission of proprietary MP3 files or the Internet via the Napster Website, Herman Tavani (1994) contrasts this set of crimes with a series of criminal acts in which pedophiles use the Internet to lure young children, stalkers use the internet to harass ex-lovers and pornographers use the internet to distribute child pornography.

Issues relating to Anonymity Helen Nissenbaum critically examines the meaning of anonymity. She considers whether anonymity should always be protected in online interactions.

Albert Vlug and John Van der Lei, in their essay entitled "Double Encryption of Anonymized Electronic Data Interchange, discuss why electronic collection of medical data requires double encryption to ensure that the data are really sent by the sender and received by the receiver. In the double encryption protocol, the identification of the sender is needed in order to decrypt the message with the sender's public key.





Computer technology has provided a new forum for certain illegal activities which might seem like instances of computer crime. Cases of Criminal activity involving computer technology may cause us to reexamine the tripartite scheme of computer crime. A criteria for computer crime as a descriptive category may turn out that for reasons beyond those considered computer crime or cyber crime as legal category that makes any criminal activity on the internet.

With the rapid proliferation of computer laws during the 1980's the U.S. Congress had formulated various laws that will govern the public. American common law was originally based upon case law from the United Kingdom.

The American tradition of concerns for privacy varies from the European approach. The constitutional right to privacy is based on rights of autonomy. The US Supreme Court found the right to privacy implied in the Constitution in the First, Third, Fourth, Fifth, Ninth and Fourteenth Amendments.

The state and Federal Bureau protects the privacy of individual stated in "The Right to Financial Privacy Act.

There are privacy promises of information technology. Many of the conflicts between data availability and privacy can be resolved. The use of access control lists allow tighter constraints on the sharing of information. Data availability and privacy can be resolved in some cases using anonymous updates to aggregates and verifiable pseudonyms.

Though the Americans are concerned with privacy, privacy threats are invisible, while privacy protection are not. Use of privacy protecting technology requires time and skills that many users of the Web do not have lack of technical savvy and legal protections that limit privacy and therefore personal and political autonomy in the information age.





What I've Learned

In this chapter, I have learned about the security and privacy on the internet, however, on the American Perspective, privacy is difficult to protect since privacy on the net is invisible.

That though there are certain act and institution protecting privacy, it is still difficult to trace the hackers because they are invisible.

Today, the Web is the meeting place of both marginal groups and mainstream groups who are sometimes the target of violent attacks. Gay rights advocates, feminists and advocates of reproductive rights have all be subject to violent attacks. The failure of the Electronic Communications Privacy Act to protect Web Browsers is because it is based on a telephony mode, with one to one communication, rather than the publishing model of the Web.





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CHAPTER 6

Part 6- Access and Equity Issues

Quote: Production of Universal totalizing theory is a major mistake that misses most of the reality and taking responsibility for the social relations of science and technology.

Learning Expectations

In the following chapters, we were about to learn the ways of censorship and access to expression on the internet, the gender agenda in computer ethics, the digital divide: a perspective for the future and intercultural information ethics.

Chapter Review

Chap. 24. Censorship and Access to Expression

It is relevant to the research process to understand something about censorship in libraries and how the debate has changed in the electronic age. Most companies libraries extended its position on censorship to include information accessed over the Internet. "Freedom of expression is an unalienable human right





and the foundation of self-government. Freedom of expression encompasses the freedom of speech and the corollary right to receive information." Information retrieved from the Internet has not gone through an evaluation by librarians. When libraries begin to offer broad Internet access, they open the door to access to all sorts of information that would otherwise never appear on a library's shelves.

However, for most librarians the idea of censorship is abhorrent. In lieu of censorship, libraries have taken a few precautions in providing broad Internet access to users. Among the most common precautions are having Internet access computers in a public area of the library and assisting us. A society where intellectual activity and creativity, freedom of expression and debate, and access to information are encouraged and nurtured as vital elements underpinning individual and community fulfillment in all aspects of human life. It is the role of a library and information service that is funded from the public purse to provide, as far as resources allow, access to all publicly available information, whether factual or fiction and regardless of media or format, in which its users claim legitimate interest. [In some cases this will be limited to those areas reflecting the primary purpose of a parent institution; in others it will be generalist in nature in finding appropriate resources to meet their information needs.

Chap. 25. The Gender Agenda in computer Ethics

The question of gender and engineering has received more attention since the traditionally male-dominated profession has seen a significant rise in female members in recent decades. Alison Adam, of the Information Systems Research Centre at the University of Salford, Manchester, U. K. finds that treatments of engineering ethics tend toward the "hero" model of the masculine individualist. Drawing upon works such as Carol Gilligan's *In a Different Voice*, she proposes an alternative "sibyl" model, an ideal for the ethics of care which embodies wisdom and encourages cooperation and the seeking of advice.





As one of the papers summarized above points out, engineering ethics is now an academic discipline in its own right. Many papers in Technology and Society Magazine deal with aspects of engineering ethics theory and applications to specific problems. Those seeking to learn more about the field of engineering ethics before teaching it can benefit from these papers.

Michael Davis teaches philosophy and engineering ethics at the Illinois Institute of Technology in Chicago. He shows in this paper that three things "everybody knows" about engineering ethics are, if not absolutely false, at least open to serious question. Contrary to popular belief, early codes of engineering ethics did not exalt the engineer's loyalty to his employer above the public welfare. The idea that codes of ethics are moral guidelines and not legal documents is another common notion. Davis shows that like legal codes, they are simply in need of interpretation, which is a skill that many engineers are unfamiliar with. Finally, the same point about interpretation shows that the apparent vagueness of codes of ethics is a necessary feature of statements that are intended for an entire profession, but does not detract from their usefulness.

Chp. 26. The Digital Divide: A Perspective for the Future

Digital divide is a term used to describe the inequality between technology haves and have nots. Sometimes, this can refer to the gaps between first world and third world countries, other times it's used to refer to differences among various population groups within an industrialized country (such as the United States). For the purposes of this paper, I will focus on the latter aspect, on inequities internal to one society, rather than on broader international disparities.

The technology being measured has been a moving target. Early news articles talked about general computer penetration among households. Then, as the Internet became more predominant, Internet access by individuals became the measure. Now, with free Internet access available through most public libraries, experts discuss the quality of access and usage.





What is meant by a digital divide is a separate question from whether such a divide exists. Word choice affects the perception of the problem, its severity, and how to solve it. For example, calling something "a barrier" implies more resistance than merely saying someone "trails behind the national average" Statements like "the gap ... narrows" suggest that problems may resolve themselves without intervention. (NTIA, 2002: pgs 75, 7, 46).

Even the term "digital divide" is controversial. "Digital" focuses attention on technology over other factors. "Divide" implies a distinct split. My opening sentence referred to haves and have nots, but can everyone really be separated into one group or the other, or is the difference more graduated?

Disparities definitely exist, broken down along many demographic factors. A Nation online (NTIA, 2002) found computer and Internet use correlate with family income, employment status, and educational attainment. Interestingly enough, there does not appear to be a gender gap in computer or Internet use, although there are differences in which online activities each group practices.

There is a significant divide along racial lines. Blacks and Hispanics have much lower rates of computer ownership and Internet access than Whites and Asian Americans. Other surveys report similar problems among Native Americans. This disparity holds true across income brackets and location. Of those accessing the Internet at public libraries, Whites and Asian Americans are more likely to also use the Internet at other locations

Ch. 27 Inter-cultural Information Ethics

The UNESCO Universal Declaration on Cultural Diversity defines the concept of culture in line with the conclusions of three world conferences: the World Conference on Cultural Policies (Mexico City, 1982), the world conference of the World Commission on Culture and Development (1995), and the world conference of the Intergovernmental Conference on Cultural Policies for Development (Stockholm, 1998) as follows:

Reaffirming that culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it





encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs. (UNESCO 2003)

The question of culture is, as this Declaration also stresses, at the heart of contemporary social and political debates particularly since the appearance of Samuel P. Huntington's influential book "The Clash of Civilizations and the Remaking of World Order" (1997) and the events of September 11, 2001 and March 11, 2004. The current discussions in the field of intercultural philosophy and sociology (Hoffmann 2003) show that there are no clear borders among cultures and that cultures are not homogenous and static. A closed and static vision on cultures as largely presupposed by Huntington, argues with clichés and does not pay attention to the complex diachronic and synchronic hybridizations or "polyphonies" inside as well as between cultures. Even the idea of humanity that lies behind universalistic approaches to ethics, rests on an essentialist paradigm and can be considered only as a regulative one, as I will show (Merwe 2000). When we speak about cultures we deal, as the UNESCO Declaration stresses, with fuzzy and contingent sets of life styles, value systems, and beliefs that are themselves the product of hybridization.

Michael Walzer distinguishes between "thick" and "thin" morality, i.e., between moral arguments as rooted or located in a culture as opposed to disembodied ones. It is a misunderstanding to envisage the intercultural "thick" ethical dialogue for instance in relation to the validity of human rights as a kind of moral relativism (Paul 2003). Universality is, in Kantian terms, a regulative idea that can only be perceived and partially achieved within the plural conditions of human reason, i.e., through a patient intercultural dialogue on the maxims that may guide our actions. The fixation of ethical principles in a moral or quasi-legal code such as the Universal Declaration of Human Rights (UDHR) has highly pragmatic and indeed political significance, namely as a global strategy for global survival and well being. But the idea of a universal code of morality remains problematic in the Kantian sense of the term





What I've learned

Educational systems and learning societies, recognizing the cognizance of the acquisition of knowledge, collation, organization and interpretation — has undergone a tremendous change in recent past, with the global access to information. Learning styles have necessitated changes in the existing pedagogic approaches. The role of the teacher has become more of a co-learner and a strong facilitator of learning.

Successful national and international experiences have shown how new and innovative uses of IT for e-Governance, e-Learning through digital technology tools, health care delivery and to provide livelihoods opportunities.

E-Education and e-Commerce are making a difference to the lives of people. Rural and urban connectivity with a reliable, available, affordable, maintainable, robust ICT infrastructure, can benefit the farmers by giving them better and quicker information on market conditions thereby eliminating the middlemen and by securing better prices for their produce. Speedy and accurate issuing of land records through IT is another example that has captured the imagination of rural population. Therefore, the methods for taking the digital revolution benefits to the rural population have to be explored far more urgently, and vigorously. A unique model called "Re-urbanization" which advocates clustering of villages for establishing schools, health centers and service facilities and connecting them can become important force.

A knowledge society aims to achieve societal transformation and ethical wealth generation. As a third dimension emerges as a country transforms itself into a knowledge superpower, knowledge protection becomes a critical factor. India is well placed at the dawn of knowledge era. For India to become a knowledge society, it has to be a learning society first. For life long learning, it is not only the settings of formal education that are important, but also the settings of home, the work place, the community and the society at large are important. For a pervasive life long learning movement in India, we will have to strengthen the learning foundations, provide a broad range of learning opportunities and recognize and reward learning regardless of why, where and how it takes place. Policy initiatives on life long learning, should focus on

- motivation for the individuals to learn on a continuing basis
- equipping them with necessary cognitive and other skills for self direct learning





- providing economic as well as easy access to opportunities for learning on a continuous basis
- creating incentives to individuals to make it worth while to participate whole heartedly in the process of life long learning

In a knowledge society, people are the creators of knowledge capital. And, generation of trained and skilled human resources is a key challenge. The market estimates a requirement of more than three million knowledge workers in multiple technologies. It is also essential to encourage domestic private sector and people of Indian origin living in other countries to invest in a massive way in education in India, particularly in technical and higher professional education.

Integrative Questions:

1. With the growing trend of internet and information technology, do you think that the young generation will benefit from it?
2. How do you assess the current gender agenda in computer ethics?
3. Does the computer can make better the lives of the young generation? How?
4. Can you identify the problems concerning ethical issues?
5. How do you challenge the present government in providing policies on the internet?



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END

