

Reflection:

The course proceeded to develop step by step the understanding of the relation between data, the privacy, and management of power. This class, MIS 1100, has sensitized me toward the extent to which data collection and surveillance have affected our government, businesses, and individual lives. The discussion topics, from big data's moral implications to the details in cybersecurity, have all inspired me with deeper reflection of my role in the 21st century, both as a technologist and as a global citizen.

The course really managed to transfer knowledge from theory to practice using case studies, open discussions, and exercises-everything to further insights into the world of data-driven technologies. It provided a guide for the way of approach towards the technological aspect. Hence, reflection is going to light up everything that was important, its reason, and how those link to my future.

Key Takeaway

In fact, discussions of technological successes and failures set a proper platform on which in-depth studies of how technology impacts human life can be performed-particularly its gigantic proportions of benefits, including unforeseen side effects of technological advancement. Among the technologies which revolutionized communication among people from different parts of the world are social media and smart phones, which therefore give way for social networking, job employment, and education. Internet addiction, privacy, and dissemination of fake news are the new thorny subjects joining the rest.

Indeed, throughout the course, there kept cropping up its dual nature-technology. If anything, it strengthened my belief that with immense problem-solving potential technology can further aggravate problems already there or give rise to new ones, provided it is used without any foresight, paying heed to only its immediate needs.

Setting the scene for me by the case study "Should Companies Embrace Social Business?", in the light of responsibility that awaits them for solving sharp global problems, made me reflect on what the social role that businesses can best play is. Businesses with the social business approach, like Microsoft, Google, and Meta, are pioneering and stay in close contact with the community. How such social initiatives couple with business objectives, that is the problem. That struck me-the hard balancing these organizations go through-balancing between profit and common good. It only goes without saying that businesses will always be working to make sure their social impact becomes valid and relevant. It was within this case study that the above methods were learned, which, other than useful in the solving of social issues, could also be lucrative. It is at this point-that the social impact and mission of the company complement the financial objectives-which changed my prior assumption that

businesses cannot be considered successful using only measures of profit, and their social contributions must be part of that metric of success.

The two that really shaped my view were: How Dangerous Are Smartphones?

Can Big Data Be Reliable? Discussions that went on during the class raised my awareness of the omnipresence of phones in our everyday life—a link of productivity, convenience, and ways of staying in touch, yet at the same time a source of rather high risks, continuous surveillance, and addictive patterns of use. Indeed, it was this class that made me revise my relation to the cellphone; it gave me a high drive toward being sensitive as to how it could influence me as a person. About Big Data, it made me give much more reflection to ethical characteristics with respect to gathering and usage of data.

There's no doubt that big data brings unequalled insight into customer behavior that can be used to improve the offering. But let's face it: huge amounts of personal data are gathered, cumulated mostly without consent, which also raises a number of questions around accountability, privacy, and the potential for abuse.

It really brought me to the discussion of the ethical frameworks that regulate how the data is collected and how we, as people and technologists, could support more significant transparency and protection of privacy. In fact, one of the case studies that interested me most is Grocery Wars.

It argues for making it easier for more businesses than ever groceries to latch onto data-driven processes and technologies. The tag-of-war between Amazon, the technological giant, and Walmart, the brick-and-mortar grocery retailer, aptly demonstrated how technologies and data can outcompete. A few of the important lessons that this case taught me were that companies have to innovate in order to stay ahead in a dynamically changing market scenario. This case underlined some of the ethical consequences of using data for competitive advantage, while, with the use of the same, all means are possible in order to optimize business processes and improve the customer experience; though business actors should not violate the rights of workers and compromise customers' trust. Other things which this case has taught me: always being able to give an ethical explanation of the consequences of each business innovation. Probably the most far-reaching insights throughout the whole course came with the IBM Watson case study he gave on how AI can be a real game-changer when solving hard problems for companies provided it is applied to substantial datasets.

The victory of Watson in Jeopardy!

It also showed that AI could indeed process and harvest data at a far better level compared to human beings. Other discussions about problems with ethics which AI could bring started coming in.

Although AI has been much of a "Saviour" in places like health care or protection of the environment, still it is taken as a "destroyer" if used for improper purposes. Other strong possible ethical consequences of deepfakes, surveillance, and job replacement are legion-all begging for rules and protections. This set of discussions furthered my understanding of the need for governance of AI and the technologist's role in assuring that AI does mitigate risks while continuing to advance society. Most of the material dealt with the course and was well derived from the book *Data and Goliath* by Schneier, elaboratively looking at the invasion of privacy and surveillance. The regular quizzes concerning the book, coupled with discussions in the class, actually helped to provide the insight regarding the scope within which mass information gathering is done by both governments and corporates, most of the time without the people's knowledge or consent. What struck me first was such insight; it underlined how much the growth of surveillance has grown into everyday life.

Key Lessons:

Mass surveillance covers the insidious ways in which businesses and governments collate data in ways unimaginable and mostly unbeknownst or even with our consent. Invasion of privacy involves one situation wherein not just the individual problem is attacked but, more so, the very foundation of democracy is confronted. Personal accountability: I, as a future technologist, should be more concerned with the ethics of using data and should be working on transparently and securely keeping private data private.

This really crystallized in class with the Snowden leaks-the struggle of one man against elements of his government was very much a struggle that weighed upon considerations of how individual freedom and national security could balance against one another. This was a discussion furthered by our discourse on surveillance and security.

Whereas AI systems allow for partial openness, the case of Watson further emboldens me to discuss a number of key issues relating to trust. In as much as confidence in AI technologies among the general public needs technical explanation, so does the necessity of frank speech about the ethical issues raised by AI. The above example showed ideas that illustrated that openness, responsibility, and participation by the public are major pillars upholding confidence in emergent technology.

It is bringing all these pieces of knowledge on educational and technological know-how together that helped in fostering the sense of responsibility as a future computer scientist. Most importantly, it gave awareness about the making of logical decisions during discharge of duty. More significantly, several ethical issues concerning data usage and privacy are apparent. IT professional, I do know that I have in my hands the power to decide on the use of data, and I

should make sure that my work will not go against ethical norms and the rights of every human being.

Technology and Society:

The most salient thing this class has taught me so far is that technology as such is useless. Indeed, technology can either be used or misused, serve or disserve. Other topics, such as Big Data, AI, and Surveillance, have made me think really that technologists do hold responsibility in impacting the course of technology. We must ensure that with the advancement in technology, the benefit derives to humankind and not vice versa.

Final Thoughts:

I feel this course, in retrospect, carried pretty major implications on the way I came to view technology and its place within society. Even more so, reflective work regarding the technology used daily and the systems one is aspiring to eventually build carried over from many of the lessons learned outside of this class.

These will be the lessons that I will carry with me as I head on towards becoming a responsible technologist in the future-someone who innovates, doing so in a manner that is morally and socially responsible. In fact, this class really made me much more aware of data, privacy, and surveillance; it increased my determination to contribute positively in this age of digital literacy.