IST 621 Assignment 1

Group 7

Animesh Gupta, Shourya Goel, Vishwas Wardhani, Manvith Ravishankar, Rutwik Ghag

Date: 09/20/21

Organizations, in particular, have always been associated with certain norms, values and shared beliefs known to be Organizational Culture which binds with Information culture for effective growth of an organization. Information Culture can be broadly classified into four main categories. Firstly, there is the Result Oriented Culture. The goal of Information Management here is to help the organization with its market, aims, objectives and goals. Next is the Rule following Culture whose goal of Information Management is to follow the internal policies, norms and strictly abide by the organization’s integral policies. Third, we have the Relationship-based Culture. The goal of Information Management here is to develop mutual understandings, Behavioral approach, Active participation, and Communication. Finally, there is the Risk-taking Culture and it’s goal of information Management here is to innovate new ideas, taking up risks during affirmative decisions, and information regarding the growth of new trends in the market.

An extremely well-developed information culture in an organization would give effective production which leads to successful business strategies to win markets. Data-driven choices utilize realities and information to direct key trade choices that are in line with the company’s objectives and activities. When organizations recognize the significant esteem of their information - everyone whether a sales supervisor, a HR manager or a trade investigator - is enabled to make superior choices with information every day. An organization must make data-driven decision-making the standard, cultivating a culture of basic considering and interest. All six articles center on data-driven bits of knowledge and enormous information in business intelligence systems or AI systems.

Let us take the example of a case study conducted on a company called Helping Hand. Assumptions made by the employees during the study of the informants working at Helping Hand were few but significant. Firstly, the informants assumed that the data would be accurate, consistent and integral enough for the company to make data driven decisions accurately. The employees assume that the data would be precise enough to make accurate enough predictions for the company to always benefit off it. Third, the employees assumed that accountability is shared among all the individuals of the organization. Instances like the one where the employees tested their hypothesis using Domo to access the data warehouse to show how a butterfly effect occurs if even one missing quota in production levels exists.

The main ideology behind a lucrative organization have always been like-mindedness of

the people working for it. This can be achieved when they have a tactful groove among

themselves. According to Cameron and Quinn, there are four distinct sets of

Organizational effectiveness attributes. The Market Culture is the first one. The main intention of this shared assumption is towards goals and the success of an organization. Next, we have the Hierarchy Culture whose main intention of this shared assumption is to organize and formalizing a particular framework for effective productivity. Then we have the Clan Culture. The main intention of this shared assumption is particularly to emphasize open communication by creating a flexible environment. Lastly, the Adhocracy Culture, the main intention of which is shared assumption is for innovation and new ideas by creating new opportunities and building new customers.

All of these articles focus on the need for a "human element", whether in the form of management or in the form of quantitative data, but the result for all is surrounded by human understanding. It is always advisable to make both technical and social efforts to help the organization overcome obstacles and shortcomings.

Going back to the case study mentioned above, the assumptions made about humans by the employees at Helping Hand were primarily based around the fact that humans would not make errors during the data entries into databases. In fact, the whole system of a data driven culture depends on the fact that the data entries are accurate. If some entries are inaccurate, again, the butterfly effect could affect the entire data driven decision making chain and make it ineffective.

The main ideology of segregating the cultures is for effective productivity considering

all the departments of an organization, but predominantly speaking only Rule-following

and Relationship-based cultures are more stressed rather than any of the other cultures.

For instance, consider a hypothetical university department of a particular organization,

here the emphasis is only on Rule-following were in all the students and professors

have to abide by certain norms and rules. Let us take an example of the current situation

in classrooms wherein everyone has to wear masks. With or without their concerns or

willingness people have to adhere to rules by wearing masks. The second dominant

culture would be Relationship-based where people would talk share their doubts and

come up with their ideologies and clarifications and also create good ambiance to learn

things. Risk taking Culture mainly deals with innovation and creativity which is not given

a lot of importance as it solely depends on personal interest and is not common among

people and it would not be the same with result oriented as people have independent

goals. The main reason of trying to take this example is to bookmark that even though

we divide cultures and give equal priorities to all; we end up having two or more

dominant cultures which result in an framework which is imbalanced.

Let us take the example of a case study conducted on Google. A problematic sociotechnical trend is the way Google hiring process works. The article mentions that the Google workplace environment can be extremely competitive and stressful because the majority of its employees are type A personalities. Their hiring process is skewed in such a way that it favors the type A personalities. This can be a great way for the company to make profit however such people are extremely ambitious and therefore are more susceptible to stress and burnouts. This problematic sociotechnical trend paired with another such trend is the use of multiple surveys every year to gauge employee performances can prove to be disastrous for the engineers mental health. The article mentions the company feared that their employees might get burnt out due the several feedbacks and surveys they have to complete in a year. Putting type A personalities in close competition due to a skewed hiring process while also subjecting to intense pressure of not being at the bottom of survey ratings can certainly be viewed as a problematic sociotechnical trend.

People are still considered way more effective than machines when it comes to decision-making powers, taking care of troublesome circumstances, conceptualizing, and bringing a sense of emotion and empathy into a workplace. Although robots can be prevalent to people in a few perspectives, they are not as capable as people. They cannot compete with humans’ capacity to understand things like humans. Robots and humans must co-exist, as machines have always been built with the purpose of completing repetitive tasks.

Quality communication is act of receiving and conveying each other’s messages and it is

one of the most important subjects for any organization be it any startups or any other big

tech organizations like Google, Facebook, Microsoft. Good Communication is when a

person knows when to talk and what to talk regardless of any situation. Communication

is key in an organization, as it allows smooth functioning of a firm and maintains healthy

relationship between the employees of the firm. Good Communication can boost morale

of a team as they are clear of tasks to finish up head. Good communication can avoid

conflict among people and handles opinions with civility and respect. I personally feel

communication as a key trend as it is one of the main factors where people are allowed

to interact, come up with ideas and come with peers in workplace and in

understanding a person’s emotions clearly.

An extremely significant tool utilized by major corporations to measure their employee performances is surveys and feedback. When Google had to make a case in favor of managers being useful for the company, they launched Project Oxygen. The project relied on gathering data from past performance reviews and surveys about current managers, the survey turned out to be successful as the researchers were able to pinpoint the qualities of an efficient manager. Surveys are a perfect blend of technology and people since it requires gathering humongous amounts of data and applying data analytics on the data to extrapolate useful information. Also, the surveys rely on humans to accept the surveys while honestly answering the questions free of any biases. Surveys and feedback rely heavily on the use of data analytics techniques such as planning the project, data collection, data cleaning, exploratory data analytics techniques, building models and finally production. This basic framework of data science needs to be applied to the terabytes of survey responses.

Assumptions about data/information in all articles. State specific instances.

A boom in Robotic Process Automation seen over the years has left a lot of people wondering if their own jobs can be automated and replace them. A majority of workers who have jobs which involve highly repetitive tasks have seen a sudden takeover by automation in the past few decades. Tasks including copying data in spreadsheets, moving files, reconciling bank statements and approving expense reports which once required moderately to high skilled workers are now being actively replaced by software packages and tools backed by a variety of Artificial Intelligence. This trend has seen a drastic increase ever since the pandemic since now executives and organizations have to deal with growing demand, closed offices and budget constraints, though for some it has just been a cover to implement their ambitious automation plans which would have otherwise faced backlash from workers’ associations.

A lot of the misconception in the air around Artificial Intelligence and Automation is also due to the misrepresentation in popular culture about these new generation technologies taking over jobs and rendering people jobless. Though, it might be true to some extent, but not to the severity it is broadly publicized. It is natural for technology to improve how industry works. A lot of Automation hype is just using bots to perform mundane tasks which are highly repetitive.

In “The Robots are coming for Phil in Accounting”, the author talks about Holly Uhl, a technology manager at State Auto, who believes that rather than replacing humans with Artificial Intelligence, we should discover ways to work alongside them. She applied the same in her organization by employing data and information in areas such as underwriting and human resource management, therefore alleviating the strain on those working in those fields and enabling them to work on important tasks that need their attention, making them more productive.

A lot of Organizations, however, have been using small scale automation or as mentioned in the NY times article, “so-so automation”, to reduce the cost of labor as these are just productive enough to be adopted and cause displacement rather than creating more jobs for skilled workers. A rather common example of this is grocery store checkout machines. These machines don’t cause the customers to shop more groceries or help them shop significantly faster, they simply allow store owners to staff slightly less employees in a single shift. Not only that, but today’s automation also has been so sudden for a lot of workers to cope with, when automation started back during the industrial revolution, it arrived gradually, factory machine by factory machine. But today’s white-collar automation is so sudden — and often, so deliberately obscured by management — that few workers have time to prepare.

To protect workers from the apparent takeover by automation, the organizations need to focus on developing the kinds of human skills that can’t easily be replicated by machines. And to achieve that, Management is going to play a very important role in the near future. Organizations are going to need managers who understand that workers aren’t just some costs cutting means, rather, they possess the intuition and leadership skills that machines can’t just replicate. The Harvard Business Review article does an excellent job at providing the solution to this trend. Rather than over-exploiting Artificial Intelligence and disregarding Human Intelligence, we should strive to make use of both that will allow for organizations to be more efficient and accurate, but at the same time creative and proactive. This new type of intelligence has been called Augmented Intelligence and it will be the key for determining which organizations will succeed as it is a step forward to the future of intelligent work.

Word count – 2097