

Human Resource Issues Arise in IT industry Due to COVID-19

ICT2142
Professional Issues in IT

Assignment 01

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COVID-19

What is COVID-19?



COVID-19 is a new kind of virus which has roots to old coronavirus. Old coronavirus is not affected by humans. But, new COVID-19 is a deadly virus which can infect humans. This virus started to spread in China firstly. Then, it's starting to spread through all around the world rapidly.

The patient count which has infected COVID-19 in the world is increasing day by day.

“Coronavirus Cases:” Worldometer. [Online]. Available: <https://www.worldometers.info/coronavirus/>. [Accessed: 15-Dec-2020].

All the governments around the world are focused on taking decisions to control COVID-19 patient count and death count. Some European countries and America get high counts of patients and more countries are added to that list day by day.

J. Fink, Two Weeks After Thanksgiving, U.S. Coronavirus Cases Up 20 Percent; Deaths Top 300,000. [Online]. Available: <https://www.msn.com/en-us/news/us/two-weeks-after-thanksgiving-u-s-coronavirus-cases-up-20-percent-deaths-top-300-000/ar-BB1bVs8T?pfr=1>. [Accessed: 15-Dec-2020].

This kind of scenario is not very familiar to all humans. They did not have any experience of this much impact on a virus. Humans had to change their lifestyle and learn new things to do, they had to learn good health practices and many other things to carry on their lives.

Governments all around the world have decided to close airports and minimize the spread of the virus. Governments started to lockdown the states, provinces, districts, areas and sometimes whole countries.

All international airports to remain closed until further notice, 04-May-2020. [Online]. Available: <https://www.msn.com/en-xl/asia/srilanka/all-international-airports-to-remain-closed-until-further-notice/ar-BB12bgew>. [Accessed: 15-Dec-2020].

After spending months with the activities which are mentioned, humans realized that if they keep hiding inside houses is not a long term solution. Countries have to go ahead and they have to start their day to day activities to survive. The problem was, how to face the COVID-19 virus while doing day to day activities.

Impact of COVID-19 on human lifestyle.



As we have discussed above, COVID-19 affected directly on human lifestyle. They have started their works, studies and all other business to survive and make progress.

Every human being is acknowledged about the new pandemic situation and they have practiced to face the virus with good health practices. Wearing a mask, washing hands frequently, using hand sanitizers and keeping social distance kind of practices is strictly suggested by health organizations and governments.

Besides that, the whole world has started to use remote services, which completely depend on new technology, basically the internet. There are things we cannot do remotely but many things can be transferred into remote activities. The internet usage all around the world got high because of these new lifestyle changes.

Because of the current situation, almost all students started to learn online. They have been introduced to online video conferencing platforms such as Zoom, Microsoft Teams, Google Meetings etc. That all services are related to the Information Technology field.



Besides that, working at home is introduced into the industry. All workers which are capable of doing their work remotely also have embraced those technologies. Addition to that, supporting software and services are introduced to workplaces. All techies and tech forbics have to work with modern technology.

At that point, IT related companies got a significant advantage. Simply, the IT industry has improved while others are failing. On the next topic, we discuss the impact of COVID-19 on industries.

IT industry

What is an industry?



First, let's get an idea about what an industry is. It can be called as a group of companies that are focused in specific areas of business. When we get the automobile industry as an example, it consists of vehicle manufacturers, vehicle parts manufacturers etc.

Rise of industry or failure of an industry can cause a lot of external effects. As an example, the rise of petroleum prices can negatively affect the automobile market. Covid-19 pandemic situation also has an external effect which has affected almost all industries in the world. Specifically we are forced into the IT industry.

The IT industry.



As the same as above example, the IT industry consists of the companies which are related to Information Technology. Information Technology, which is the technology used to transfer, store, manipulate information in the modern age. They can be hardware manufacturers, software manufacturers, service providers etc.

The IT industry is a wide spread industry. It is spread to PC hardware manufacturers, mobile hardware manufacturers, countless software companies which provide different kinds of softwares which are categorized into groups such as commercial software, free and open source software, freemium software etc. And there are service providers such as cloud service providers, hosting providers, network service providers and well known internet service providers etc. It's huge and wide spreaded as a newly introduced industry.

When considering IT as an industry, It has the world's highest ranked and top industries. Apple, Google, Microsoft are the tech giants in the industry. They stand above all the other industries. The special fact is, that giants are based on software instead of hardware.

IT industry vs Other industries.



When comparing other industries with the IT industry, IT industry is easy to manage remotely. Specifically, the software part of the industry can be managed remotely very easily. When Software parts hold the majority of the IT industry, the overall IT industry can be considered an industry which can manage remotely.

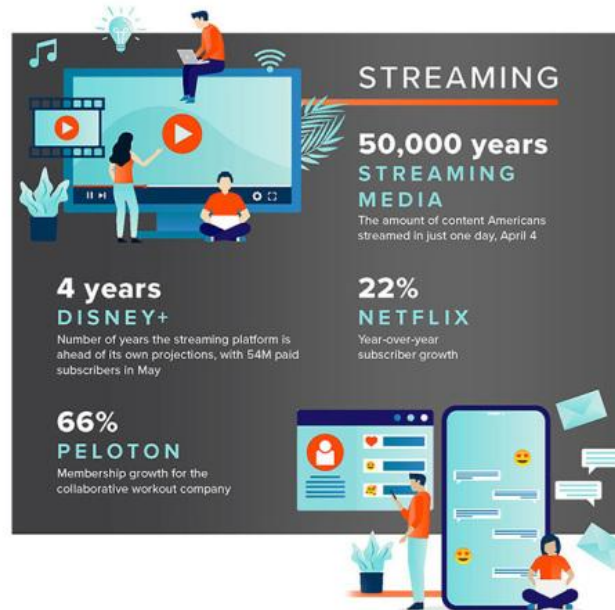
While the IT industry is the one who provides the services and resources for the remote work, IT has the great advantage in this COVID-19 pandemic situation. When looking at the statistics about the industries during COVID-19 we can see a clear growth of the industry.



WELCOME TO THE 4 COMMA CLUB

Overall internet usage surged in Q1 by 47%, largely due to the COVID-19 pandemic. In turn, many households are joining the 4 Comma Club as they surpass 1,000,000,000 bytes, or 1 terabyte, of data used in a single month.

What are the applications and platforms responsible for this incredible growth?



J. Cohen, “Data Usage Has Increased 47 Percent During COVID-19 Quarantine,” PCMAG, 05-Jun-2020. [Online]. Available:

<https://www.pcmag.com/news/data-usage-has-increased-47-percent-during-covid-19-quarantine>. [Accessed: 15-Dec-2020].

The IT industry mainly goes with technology. The people who are working in the IT industry are working mainly using IT tools. Those tools can be easily used as remote tools. That was an advantage for the IT industry.

When considering a report which is published on [researchandmarkets.com](https://www.researchandmarkets.com) reveals the industries which require a significant growth during covid 19 period. Most of them are related to the IT industry.

R. and M. ltd, “30 industries seeing a surge in demand due to the Covid-19 pandemic,” Research and Markets. [Online]. Available:

<https://www.researchandmarkets.com/issues/covid-19>. [Accessed: 15-Dec-2020].

Human Resource

What is Human Resource and how it's important to the industry?



Humans are the people who are living in the world. Humans are needed for humans' bearing. Humans, who can actively participate in the business processes, are a resource. It can be limited and sometimes it can be plenty.

In the Middle East, human resource is very limited for particular job roles. Because of that, those countries import human resources from other countries. On the other hand, countries like China have a lot of human resources. Because of that their business processes become inexpensive. That's how China produces electronics for the whole world with very limited natural resources and raw materials. China is now considered as one of the most powerful countries. Their secret of power is human resource, China has the most population in the world. Now you can get an idea about how human resources are important to a country, to business processes, to companies and to industry.

As we have discussed above, human resource is a fundamental piece of an industry. It's very rare that an industry survives without human resources. Maybe in the future we can see such industries which are completely run by artificial intelligence and robots, but in the present, we are still dependent on human resources.

When we are considering human resources in the IT industry, they can be easily identified by their job roles. Those job roles can be categorized by following main sections.

Web development

Software development

Security specialists

Tech leads

Tech analysts

Database administrators

Customer support staff

Computer network specialists

Cloud computing engineers

There are a lot of job roles which are from human resource under those categories.

Web development

Front End Developer

Senior Web Administrator

Senior Web Developer

Web Administrator

Web Developer

Webmaster

Cloud computing engineers

Cloud Architect

Cloud Consultant

Cloud Product and Project Manager

Cloud Services Developer

Cloud Software and Network Engineer

Cloud System Administrator

Cloud System Engineer

Software development

Application Developer

Applications Engineer

Associate Developer

Computer Programmer

Developer

Java Developer

Junior Software Engineer

.NET Developer

Programmer

Programmer Analyst

Senior Applications Engineer
Senior Programmer
Senior Programmer Analyst
Senior Software Engineer
Senior System Architect
Senior System Designer
Senior Systems Software Engineer
Software Architect
Software Developer
Software Engineer
Software Quality Assurance Analyst
System Architect
Systems Software Engineer

Security specialists

Information Security
Security Specialist
Senior Security Specialist

Tech leads

Chief Information Officer (CIO)
Chief Technology Officer (CTO)
Director of Technology
IT Director
IT Manager
Management Information Systems Director
Technical Operations Officer

Tech analysts

Application Support Analyst
Senior System Analyst
Systems Analyst
Systems Designer

Database administrators

Data Center Support Specialist
Data Quality Manager
Database Administrator
Senior Database Administrator

Customer support staff

Customer Support Administrator

Customer Support Specialist
Desktop Support Manager
Desktop Support Specialist
Help Desk Specialist
Help Desk Technician
IT Support Manager
IT Support Specialist
IT Systems Administrator
Senior Support Specialist
Senior System Administrator
Support Specialist
Systems Administrator
Technical Specialist
Technical Support Engineer
Technical Support Specialist

Computer network specialists

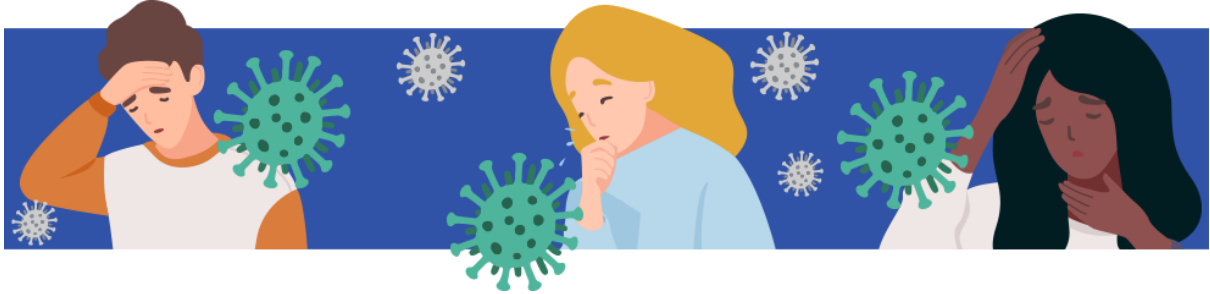
Computer and Information Research Scientist
Computer and Information Systems Manager
Computer Network Architect
Computer Systems Analyst
Computer Systems Manager
IT Analyst
IT Coordinator
Network Administrator
Network Architect
Network and Computer Systems Administrator
Network Engineer
Network Systems Administrator
Senior Network Architect
Senior Network Engineer
Senior Network System Administrator
Telecommunications Specialist

***A. Doyle, "A List of Different Information Technology Job Titles", The Balance Careers, 2020. [Online]. Available:
<https://www.thebalancecareers.com/list-of-information-technology-it-job-titles-2061498>.
[Accessed: 04- Dec- 2020].***

Now you will get an idea about how wide is the range which spreads the human resource in the IT industry and how important it is. Without those, IT companies, which make the IT industry, will not survive. This basic rule is not only for the IT industry, it affects any industry in the world.

Human Resource Issues Arise in IT industry Due to COVID-19

Issues arose because of the COVID-19 pandemic.



We have discussed what is covid-19, how it affects the world, what is human resource and how human resource is important to the industry so far.

As we discussed, Covid-19 virus is affected by humans. When considering business and industry, covid-19 directly affected by human resources. Employees who are working in the industry are starting to maintain social distancing and other safety precautions. The problem was, it's really hard to practice good health practices and maintain social distancing in the working area.



Normally, people working much closer to each other in a company. The purpose of Establishing a workplace is to keep employees close. But, because of the covid-19 pandemic situation, it's not healthy and it's unable to perform at the workplace like before. Covid-19 was a quickly spreading virus and if one employee got affected, it is a matter of time to spread it all around the place. Then it will spread to employee's family members and that will be a disaster.

What companies did to stop the spreading was to temporarily close down companies and institutes and instruct employees to leave the premises and stay at their home while keeping good health practices. That was just a temporary solution and it's not a long term solution.

Closing companies and keeping employees at home is leading countries to economic disaster and locking down states and countries was not a good solution when thinking about the wealth of a country. Without the wealth, countries will not be able to provide health services and the government will not be able to fight against covid-19 virus.

“The Global Economic Outlook During the COVID-19 Pandemic: A Changed World,”
World Bank, 08-Jun-2020. [Online]. Available:
<https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>. [Accessed: 15-Dec-2020].

There are some industries which are very hard to manage without gathering their employees or workers. For example, Textile industry is one of them. Sri Lanka is mostly dependent on foreign employees, textile industry and tourism. Without them, it will be very hard to maintain the country. Foreign employment was problematic already because many european and Middle East countries suffered a lot from covid-19 which mostly provided employment for Sri Lanka. People who have worked there have come back to Sri Lanka and foreign employment has gone down.

Tourism also went down because of the closure of airports around the world. Tourists stop traveling to other countries and everyone prefers to stay at home while keeping social distancing. While those industries are failing, the textile industry was the remaining one and textile making companies were not closed during this period of time. While the danger is still there, employees who have worked in the textile industry were working as usual without minimum safety precautions. The final result was finding a lot of covid-19 patients who have worked in the textile industry.

While the country was going through that kind of situation, the only industry that was rising up was the IT industry.

Fixes for the issues.



As I have mentioned before, the IT industry is the industry which improved during Covid-19. The only problem which has arisen in the IT industry was unable to conduct meetings, discussions and group activities in a physical environment. But fixes were all around the IT industry.

Long time ago before the covid-19 pandemic situation, the IT industry has introduced remote services and work at home concepts. Cloud meetings, team management services such as Slack and Microsoft Teams, online shopping services, digital money concepts, long distance communication methods are few examples for those technologies.

When covid-19 virus started spreading in the society, those technologies started to be used widely in the IT industry and IT industry was easy to transform to online work areas when compared to others.

Fixes for the issues arose because of the covid-19 situation introduced by the IT industry. Briefly, the IT industry was the solution for all kinds of problems during COVID-19 pandemic period. People started using the services which are powered by the IT industry very often and many IT companies showed a significant growth during this period.

There are new concepts, websites, services and apps were started during covid-19 period. Firstly there were introduced Covid-19 information dashboards for sharing information about Covid-19 patients and areas affected by covid-19.

Examples:

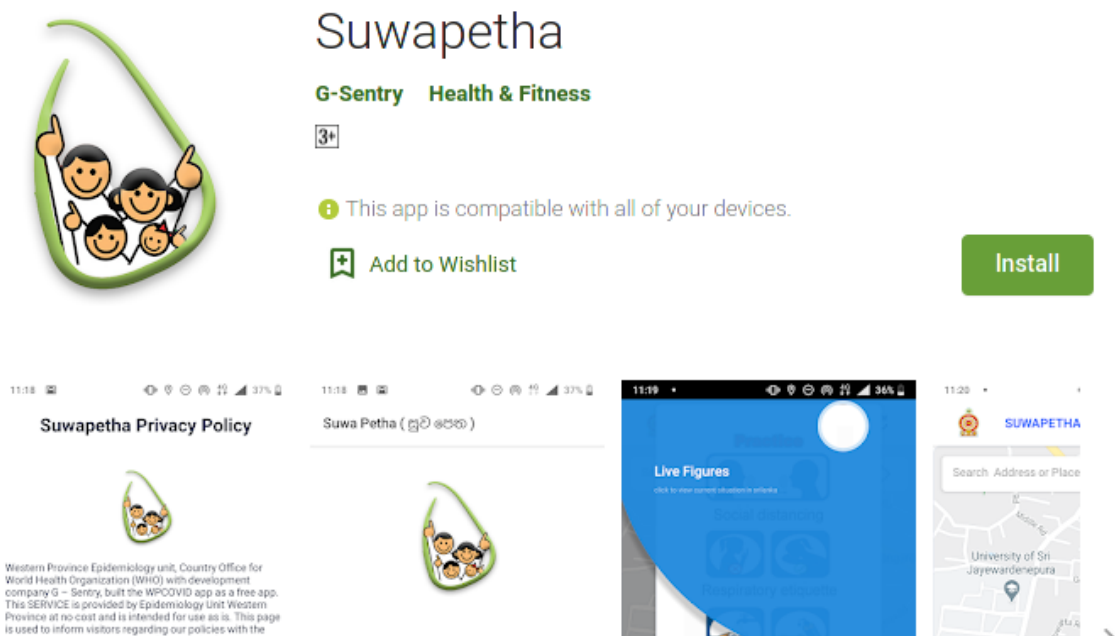
<https://covid19.gov.lk/>

<https://covidsl.com/>

<https://covid19sl.com/>

<https://covid.iq.lk/>

They are completely managed by IT companies. Lately, there were lot of apps and websites introduced for information sharing including "SuwaPetha" app which was introduced in Sri Lanka. Online news services, instant news notification services were popular those days.



There are some passive effects that have arisen in the IT industry because of covid-19 situation. The most popular issue was raised in Internet Service Providers. The Internet was slowed down because of high usage. Another problem was there were people who cannot reach the internet for them because of their economical situation and the lack of network coverage. While studies are transformed to an online activity, there were some students who cannot actively participate in those activities because of the above stated problems.

Government and private sector who represent companies like Internet service providers are finding solutions for those kinds of problems. Some of the solutions are giving free Tablet PCs for students, offering loan schemes for University students for buying laptops and spreading 4G networks to rural areas.

Differences of issues between IT and other industries.



There were significant differences between the issues which have arisen because of covid-19 pandemic in the IT industry and other industries.

Mostly, IT industry has very few issues which has less effect to the industry while other industries have a lot of issues. The reason for that is all the solutions given for covid-19 situation is, based on IT. The persons who are working in the IT industry already have the knowledge to adapt for new changes and the IT industry is very flexible to changes. The IT industry can be easily converted to online.

The IT industry is mostly based on computers, so they can be handled remotely. It's a good advantage for introducing work at home concept, while other many industries are hard to manage like that. While others are failing, the IT industry is providing solutions for other industries to survive from the situation they have fallen.

Conclusion



The IT industry is the industry which has faced minimum problems because of the covid-19 situation. Specially, it's very low when considering human resources in the IT industry. All the human resources which can be called as employees have started working online and they are safer during this period of time than others.

The IT industry was a big advantage for facing the pandemic situation which has risen because of covid-19 virus. Without the IT industry, it will be very hard to survive from this crisis situation. Everyone understood the importance of the IT industry because of this situation. IT helps a lot of other industries for facing this crisis and IT industry was a blessing for the world.

At the top of all, the IT industry is the key for the future. It is the most flexible and futuristic industry of all the time. Almost all other industries are dependent on IT, in future, it will be more straight and all the other industries will depend on IT industry.

While the whole world is failing, we all go for the IT solutions in the pandemic period. That's a good example of the power of the IT industry. Human history has been through a lot of eras like the stone age, industrial age etc. and this is the Information age which is under Information Technology.

Final conclusion is, the IT industry is the most important and valuable industry for the future of humans.

-END-