**The Truth of The Game**

The gaming industry changes dramatically during these recent years. Frankly speaking, I am a gamer. When I was a child till now, I am one of the one who witnesses the changes of the gaming industry. When I was the age of 6 till 10, the first game of my life was “Karate”. This game is played on now what we now call Apple iMac. It is my first PC, the first version of iMac named “Apple I”. In order to play games, like now, we need to install it on the “Apple I” from the floppy disk. What is a floppy disk? You can think as like as an **usb** flash drive, for storage purpose. The floppy disk size ranges from 5.5 inches to much smaller 3.5 inches of size, you need to have a floppy drive, just like you need to have a DVD-Player to play CDs or DVDs. The game is copied to the floppy drive for you to install on the “Apple I”. If the game size is large, you will need to copied it to more than one floppy drive. As I remembered the game “**Blue Force**”, a police game created by Siearra, requires about 10 floppy disks, in order to install the game on to the computer. After, several years, Japanese gaming industry started to emerge. Which dominate most of the gaming industry in the world. They invented hand held gaming device – “Game Boy” or even TV game “Nintendo”. Like now, several series (version) of hand held or TV game devices are invented. As the market becomes larger, different gaming company started to invent their own devices and games. Such as “PC Engine”, “N64”, “Saturn”, “PlayStation” ...etc. As a child, I have played “Game Boy”, but never owned one. I choose to buy another gaming device – which was called “Game Gear”. Why is so different? It is one of the color versions of hand-held gaming device. Talking about “Apple I”, as years pasted, “Apple” is not the only brand of Personal Computer. There are lots of custom-made Personal Computer for you to choose. Why custom? You can “DIY – Do It Yourself”, based on your budget and needs. That is the beginning era of the whole gaming industry, gaming company creates games which can be installed on the PC which requires an operating system. At that time, the most famous operating system is “Microsoft Windows”. As new games are invented, quality of the game becomes an issue, high speed CPU, RAMs, hard disk, Display Card or even sound card are invented. By parallel, Japan still invented new games and upgrading the gaming console. At that time, game is usually a single or both player games. Till after years, World Wide Web (WWW) and internet starts to grow. Gaming is not only for one or two. Gaming companies start to switch the game mode to multi-player online. That means you can play games with people from all around the world, still you need to install the game on your PC, however the differences are you can open the web browser to play the game, instead from the software installed on your PC. As I remember, the most dominate online game is “Ultima Online”, this game has players from all over the world, you are not alone in the game, you will be able to see different characters inside the game, but the character is not computer generate, rather it is a true player. Gaming Companies in Japan, sees this as an opportunity, start to build games in an online mode, but the basic requirements are they need have the same console and also need to registered their gaming account. Why they need to have the same console? Why can’t we accept players from different kinds of devices, why can’t we just install the same gaming software and play together. That’s right! But not quite! Why? because of **fair play**. As I mentioned before, gaming quality are based on how you invest on your hardware. The more money you invest on your hardware, the more speed or even display quality you gain. I forgot to mentioned, when I played “Ultima Online”, I don’t know why, some of the characters in the game is kind of slow and not moving quite smooth, I think that is the reason, different players around the world have different kinds of hardware specification and internet speed, each affects the motion in the game. So Japanese Companies foresee this issue, therefore, in order to play multi-player online game, the basic requirement is, they each must have the same console and game installed, also they need to registered an account in order to play.

By the year late 2000, another era starts to emerge. “**Smart Phone**”, developers start to develop apps for the smart phone. Gaming Apps starts to becoming popular. Playing on smart phone is as playing on hand held devices, except, their hardware requirements is not so concern as traditional gaming hand held devices developed typically for only games. So Japanese’s still invest on hand held gaming devices and they have their supporters. Large China corporate like Tencent, invest a lot on mobile gaming apps (like PUBG). How this companies gain money. They gain money through selling virtual items, as you know how winners win the game is not only by strategy and techniques but also the items they owned. Buying high level virtual items is the key point of success. But as the virtual item level increases, so as the money they need to pay. That how gaming company gains money.

I once heard, in order to play online games for whatever devices, I must need a very high-speed broadband network. Is that the case? No! You don’t need to have a very high-speed network, but needs to have a high specification hardware for PC. Why not high-speed network? If you are playing multi user online games, all the graphics, video and motion is rendered on your PC or console. Playing online multi-user games, the only data you need to transmit between players is **coordinates**. The game is just like a chessboard (all players playing the same game have the same chess board) when a player moves, what you need to tell other players is which coordinate you have move, that’s all! Transmitting this data, does not require high speed network. Not like Netflix, live streaming video requires to transmit enormous amount of data to the network.