

Task talk notes – Gaming

by Mark Beach

Play short videos Slide 1

- Ah the memories it takes me back to when I was a lad. Good evening my name is Mark Beach I am your speaker this evening. I have been playing Arcade / computer and video games since they were invented...almost. I have a lot of experience and played quite a few games in my time. For some of you who know me. There is always room for more.

Press for next slide 2

- Tonight I am going to share with you things you may know and things you may not know about video games. If you have questions stick your hand up and I'll try and answer your question as best I can. Or I don't know. But there is always an answer, ask Marius or John!

Press for next slide 3

- You have now 15 seconds to decipher the next slide tech heads play music and then slide will turn over itself.

Slide 4 Aims of This evening

- My aims this evening are to cover the following. I will not go into much detail as we could be here all night and I couldn't put you through that. Some of you may of notices I have brought a games console over. You can have a play or a look around after my presentation.
- So our mobile phone, computer, living room, and practically everywhere else are overtaken by the video game storm. Not so long ago video games were just a fad with simple physics-based games like Pong. But as video game technology has progressed, so too has the popularity and limits that are associated with games in today's society.
- Where do we start? With History of course, the beginning. When we say what was the first computer we seem to have a lot of different answers. So I am going to talk about the first programmable computer. To start our journey

Press for Slide 5

- Here we have a picture of the Z1 made by Konrad Zuse in 1936 to 1938 this plucky German made it in his parent's living room. It's considered to be the first electro-mechanical binary programmable "modern" computer and first functional computer. It was a binary electrically driven mechanical calculator with limited programmability, reading instructions from punched tape.

Press for slide 6

- But the first electric programmable computer was in fact Colossus, developed by Tommy Flowers its first demonstration was in December 1943. It then helped our country win the war!!

Press for slide 7

- Next we have a picture of The Manchester Mark 1 another first computer. This computer was built in 1947 and 1948 The Manchester Mark1 punched holes into tape.

Press for slide 8

- Finally the world was Introduced to the ENIAC -- Electronic Numerical Integrator and Computer -- was developed by J. Presper Eckert and John Mauchly at the University of Pennsylvania' weighing in at 50 tons and size about 1,800sq feet. It was used for calculating artillery-firing tables, the settings used for different weapons under varied conditions for target accuracy.
- The point I am trying to make is that without those computers we would not have computer games. The computer has changed the way of experiencing gaming from pong to today's games.

Press for slide 9 - Silicon Valley

- Silicon Valley is where the software and hardware is developed and some gaming companies are based in Britain and helped to develop the bigger games in the rush to hit our streets. It takes on average 2 years to develop a game from start to finish. But it can take longer if you add more information for gamers to explore. The latest GTA game took 5 years to make because of the complexity and the detail in the game.

- Since 2007 the gaming Industry worldwide was worth about \$41.9 billion. This number is expected to grow 9.1% annually to \$48.9 in 2011.as they say in the old film Robo Cop, I'd buy that for a dollar!

Press for slide 10 Design

Play video and talk

- Designing games is important to us gamers as it can make or break us. Here is a character that you might have heard of. If not her name is Lara Croft. With brains and military training I'm not sure if I am should worship her or be afraid of her.
- The first female lead game became a number on hit in 1996. She was very pointy in her first outing but soon became very smooth as time goes on. If only that could happen in real life!

Press for slide11 Game engine.

- The other thing that all games need is a Game engine in order to work. Physics in Today's Technology: If you were to jump, you'd expect to land back on the ground within a second or two, right? Well, this very action is associated with equations and formulas that scientists have developed. All that a video game developer needs to do is look at these equations and apply them to their games.
- Physics in the original Pong are impressive. It shows well displayed geometry physics. But in today's video games, physics are becoming increasingly realistic. You might jump off a mountain, stumble, and get back up. You might get punched from an enemy, fall down, and try to turn the tides of the fight. Some of the more interesting physics technology deals with lighting and water. How should light be refracted when it hits a liquid surface? And how would the sun's glare look underneath the ocean? These questions and more have been answered by video game developers for such games as Crisis.

Press for slide 12 Games Video console

- Can you believe we are already into our eight generation of gaming console?
- Magnavox Odyssey was the first commercial home video console sold in August 1972 it sold nearly 100,000 units and this was out 3 years before Atari's pong. Odyssey had 30 games to choose from so you would never get bored. With tennis to shooting gallery.

- Here we have the second gen console five years later Atari release the Atari 2600
- Moving on to the latest game console the Xbox one and the PS4
It is still very new and the games are out of this world as these console are the most powerful to date and are as good as a pc. Well almost.

Press for next slide - Computer game & films

Play videos and talk

- As I said earlier technology has grown along with the interest in games and some games have become films. Whether you like games, films have played a part of introducing the wider audience to the gaming world. As you can see these are just a few of the films that have become games, or the other way round.

Press for slide 18 - Today games

- Today, technology influences our every move. It is the basis of our global society and without it we would spiral back to the ages of using a string and a cup between windows to talk to our next door neighbours, rather than logging into our Facebook, Twitter or Live Messenger accounts.
- Communication is a big part of our lives and as software has continued to advance, the world has become smaller. This being due to the fact that technology has enabled us to stay in contact with friends and families wherever we may find ourselves in the world.
- You could say that the proof is no longer in the pudding, but in our mobile devices. Such proof of technology's continual, rapid and dramatic advances can be seen when comparing a phone from 2006 to one in 2011. Here's a quick fact for everybody: it is a million times cheaper, one thousand times more powerful and about a hundred thousand times smaller than the one computer at MIT in 1965. A statement from Ray Kurzweil supports the continual advancement of technology. He said "what used to fit in a building now fits in your pocket, what fits in your pocket now will fit inside a blood cell in 25 years."
- Can Artificial Intelligence "Think like Humans": Artificial intelligence isn't anything new; it was present every time you served a ball in the computer game Pong? But what is new is the fact that artificial intelligence is starting to mimic human beings more and more every day.

- In today's games, enemies will try war tactics such as flanking. They might try to throw a grenade when they can't get a clear visual of you. They'll help their own teammates to bring your life to an end. Sound familiar? This is something very similar to what we call real life warfare. With each passing year AI is becoming increasingly intelligent. It's only a matter of time before humans are truly outsmarted in video games (by their own creations, no less!). Skynet!!
- Graphical Upgrades in Video Games: Pong wasn't such a beautiful game. It didn't make use of complicated shades, textures, or sprites found in all of today's modern games. As time has marched on, there have been vast improvements in how graphics are rendered on gaming platforms.
- Part of the reason technology has allowed for better graphics is through hardware upgrades. With limited processors of the Pong era, not much action could take place before choppy performance would have been observed. With today's high-speed hardware we can allow for more pixels, instructions, and shading to take place- sometimes on a massive scale.
- Technology has recently allowed for game development to be accessible to anyone- even without a computer science degree! Tools such as the Microsoft XNA Framework allow developers to create video games in much less time and without the need to know a lot of computer jargon.

Press for slide 19 Conclusion

- Where is Video Game Technology Going? Technology 20 years ago looked like it was the cutting-edge of what was to come, and now look! How would you compare a game of Pong to today's 3D shooters? You couldn't, and we can only hope in another 20 years we will be thinking the very same thing.
- In conclusion, despite all the positives of technology, the breakthroughs and the advances, there have always been negative arguments surrounding the positive buzz. Some studies argue that because society is devoting a good portion of their lives to technology, this is having a negative effect; some statistics suggesting an increase in diabetes and other health issues related to the increasing use of technology.
- The truth is, technology needs to be embraced. It is the future and though it may forever be changing, we can at least count on the fact that it is continually becoming greater, faster and even more convenient, maybe not the new Facebook Chat but people learn from their mistakes, don't they?

- The benefits of technology do not conclude at the end of this presentation, the list could literally go on and on and on. We leave you on this final note: ask yourselves this, belonging to the technological generation, could you really imagine life without technology, whether it be a phone, laptop, iPod, online games or your dearly beloved Facebook account, just think about it?"

I'm Mark Beach and thank you for your time.