

1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992

The Past and Future of Online Worlds

Raph Koster
Chief Creative Officer
Sony Online Entertainment

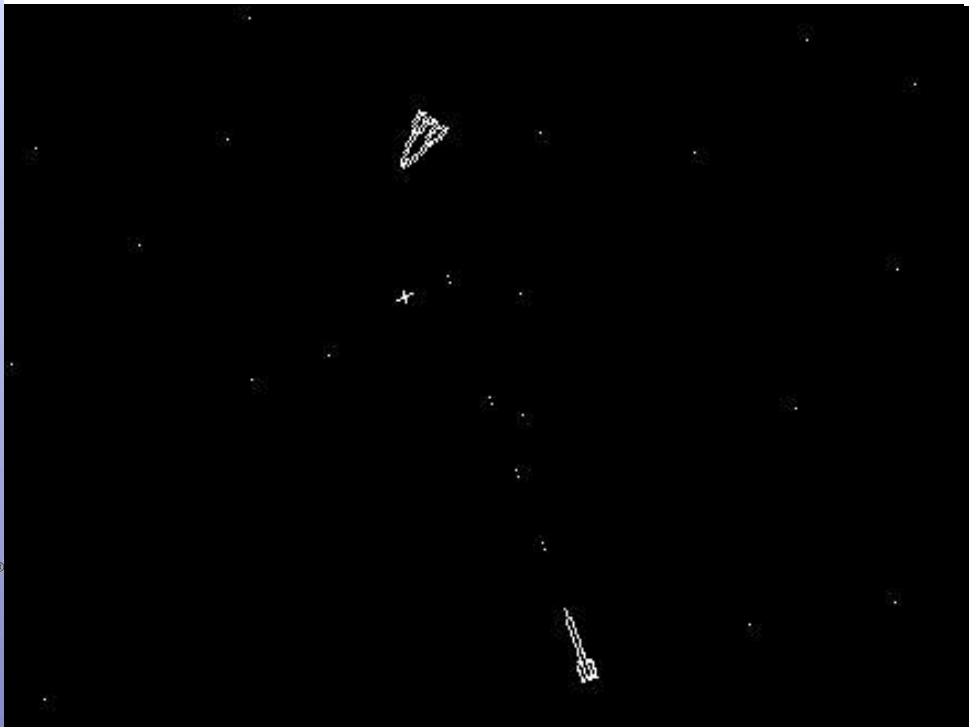
1961

- PLATO is created
 - A graphical network of computers
 - It uses a touch screen



1962

- The first video game: *Spacewar*



1963

- BBN patents the modem
 - They also go on to develop the Internet



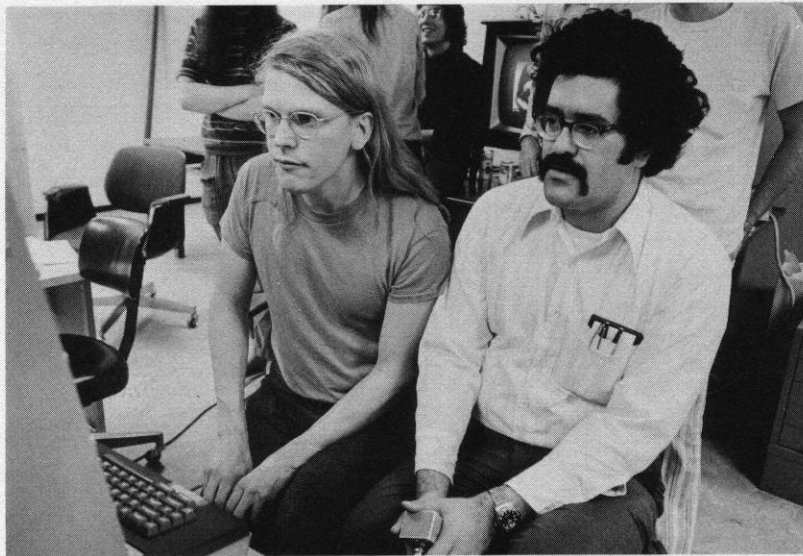
1966

- Ralph Baer conceptualizes the modern videogame.



1969

- Two player *Spacewar* on PLATO
 - This is the birth of networked gaming!



Spacewar concentration. Bruce Baumgart and Ralph Gorin one on one.

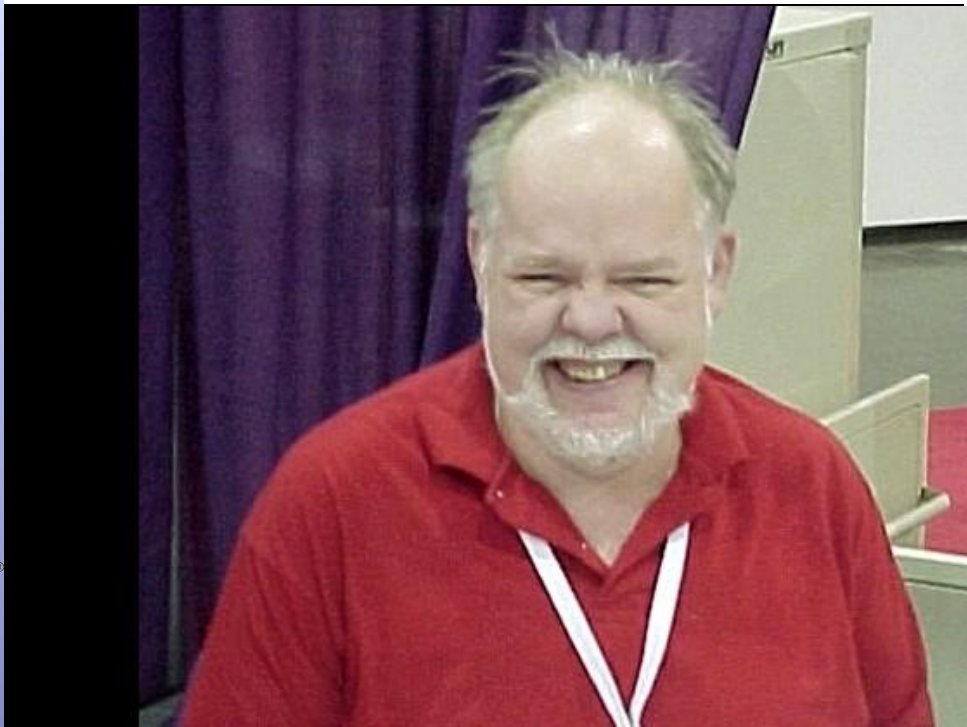
1969, the rest of the world

- The Beatles hold their last concert
- ARPANet is founded
- UNIX is written
- Men land on the moon



1970

- Dave Arneson invents roleplaying games



1971-1974

- Many games develop on PLATO



1975

- The first networked casual game: Bridge on PLATO



1976

- Will Crowther creates the adventure game

```
in the rock.  Downstream th  
>go south
```

```
You are in a 20-foot depres  
dirt is a strong steel grat  
leads into the depression.  
The grate is locked.  
>open grate
```

```
The grate is now unlocked.  
>eat food
```

```
Thank you, it was delicious
```

1978

- Roy Trubshaw and Richard Bartle create MUD1
 - With this, online worlds are born!



1978, the rest of the world

- Advanced Dungeons and Dragons is published
- The first BBS is created
- Camp David peace accords are signed



1979-1983

- Many games are developed
- Minitel launches in France



1984

- Aradath costs \$40 a month
- PLATO costs \$5 an hour on Atari computers
- Islands of Kesmai costs \$12 an hour
- William Gibson coins the word “cyberspace”



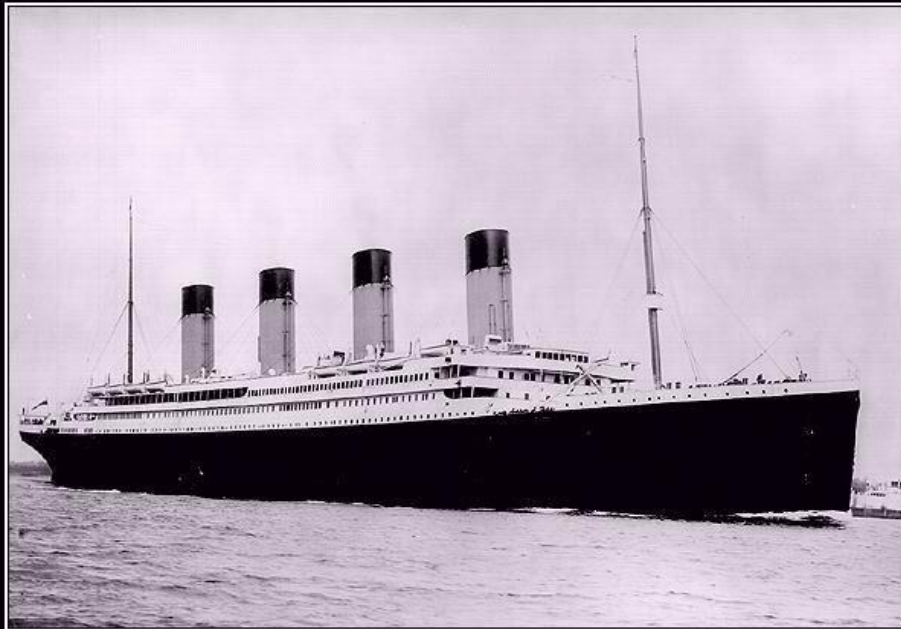
1985

- Habitat is the first graphical online world



1985, the rest of the world

- Mikhail Gorbachev becomes the Soviet leader
- Tetris is developed
- The Titanic is located



© 1995 Smithsonian Institution

1986

- *Netrek* is created
- The first commercial play-by-email game, *Rim Worlds War*

Netrek @ playback

Flags Impulse Spd 2/ 23 Art 0/ 251 Put50e32/600000
SR D T Sh1236/5000 Mkt 44/1301 Kills: 7.63 Torpes: 4
SLM: 11281 Huf 95/600 Etc 6/1000

Phasers have not recharged

GOD->ALL Water Buffalo (F7) [CA] was kill 1.00 For Hojo Riser (R3) [SB] [phaser]
Organic->ROM Organia destroyed by You must die (F1)
F7-R3
GOD->ALL Noonian Kahn (F8) [CA] was kill 2.11 For Ugly (Rd) [CA] [photon]
Ceti Alpha V->ROM Ceti Alpha V destroyed by guest (Fe)
GOD->ALL QuiNote (F6) [CA] was kill 1.00 For Hojo Riser (R3) [SB] [phaser]
GOD->ALL Seville (R4) [CA] was kill 67.72 For No Fear (Fo) [SB] [phaser]
GOD->ALL vec (R9) [CA] was kill 68.72 For No Fear (Fo) [SB] [phaser]
GOD->ALL You must die (F1) [CA] was kill 5.33 For Hojo Riser (R3) [SB] [phaser]
GOD->ALL Plutka (Rb2 armies) [AS] kill 1.06 For Noonian Kahn (F8) [CA] [phas
doodh
GOD->ALL Noonian Kahn (F8) [CA] was kill 4.47 For Hojo Riser (R3) [SB] [phaser]
FC->ALL Lt. Cmdr. Carl Napalm is now Fo (colorshd@naboj.com)
GOD->ALL Water Buffalo (F7) [CA] was kill 1.00 For vec (R9) [CA] [photon]
GOD->ALL Capt Napalm -> Client Of Win. -> Intel@HRS
GOD->ALL IceWolf (R2) [CA] was kill 1.00 For BlueJay (FF) [CA] [photon]
GOD->ALL BlueJay (FF) [CA] was kill 1.00 For IceWolf (R2) [CA] [photon]
GOD->ALL QuiNote (F6) [CA] was kill 5.47 For Hojo Riser (R3) [SB] [phaser]
GOD->ALL Noonian Kahn (F8) [CA] was kill 6.47 For Hojo Riser (R3) [SB] [photon]
GOD->ALL bo (Rat3 armies) [CA] kill 1.63 For You must die (F1) [CA] [phaser]
doodh
GOD->ALL You must die (F1) [CA] was kill 7.63 For Hojo Riser (R3) [SB] [phaser]

Phasers have not recharged

Type	Rank	Name	Kills	Type	Rank	Name	Kills
F0	SB	Commander No Fear	69.72				
F1	HR	Commander You must die	69.72				
R3	CA	Rear Adm Hojo Riser	7.63				
R4	CA	Commander Seville	67.72				
R4	CA	Commander vec	68.72				
F6	CA	Lieutenant QuiNote	0.00				
F7	CA	Ensign Water Buffalo	0.00				
F8	CA	Lieutenant Noonian Kahn	0.00				
R9	CA	Captain vec	1.00				
R2	CA	Lt. Cmdr IceWolf	0.00				
R3	CA	Lt. Cmdr Plutka	0.00				
F6	CA	Lt. Cmdr Carl Napalm	0.00				
F6	CA	Lt. Cmdr Ugly	2.11				
FF	CA	Lieutenant BlueJay	0.00				

Type	Rank	Name	Kills	Min	Loss	Ratio	Offense	Defense	DI
R3	SB	Rear Adm Hojo Riser	7.63	1824	80	22.80	1.73	0.73	146.81

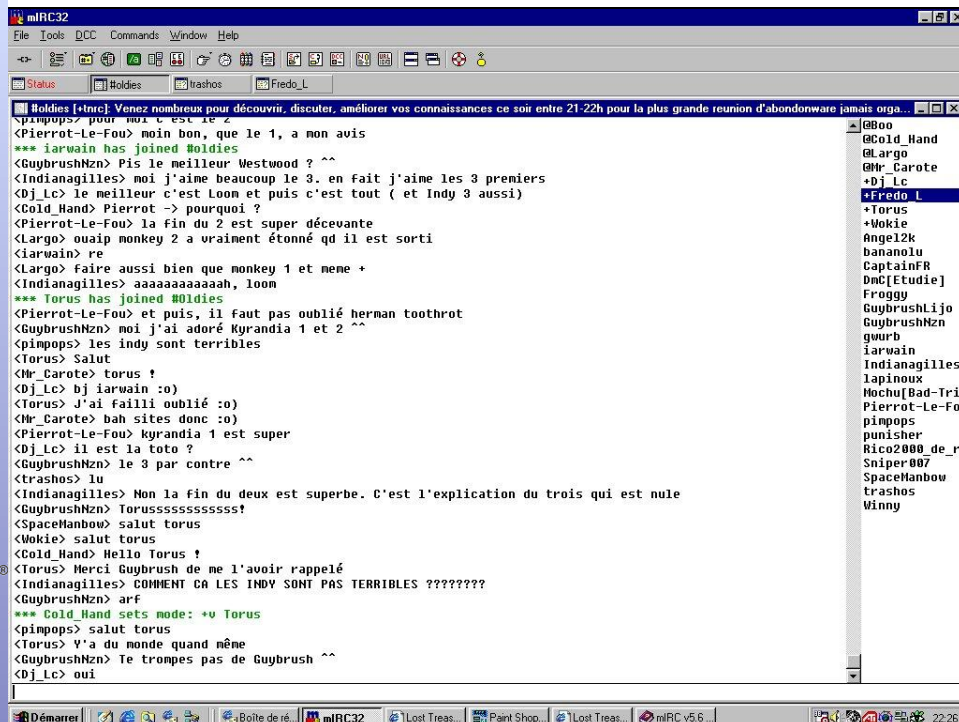
1987

- *Gemstone* opens to the public
 - It's still running today, as *Gemstone III*-and they just announced *Gemstone IV*



1988

- IRC is invented
- AOL is released under a different name



- MUDS take off!
 - TinyMUD is created
 - AberMUD is created
- Legends of the Red Dragon goes on BBSes

```

Telnet - waterdeep.mudsrus.com
Connect Edit Terminal Help
your inventory. This mud has TONS of color, just type COLOR to activate it.
WEB PAGE: Http://www.slic.com/punk/waterdeep/mud.htm
<>
HAVE FUN: To leave this room and go to the Waterdeep Gardens, a place
of learning, just go down, and go north, you'll find your way. If your
looking to get right into the mud, just go down, and west.

[Exits: down] [Doors: none]
  A rolled up map is here.
  A plaque hangs on nothing. READ IT!! (type 'Read Plaque')

100/100hp 100/100mana 1500xp Felonius>
Gort [Q/A] Asks 'whats the directions to the cave'

100/100hp 100/100mana 1500xp Felonius>
Trakand [Q/A] Asks 'what cave?'

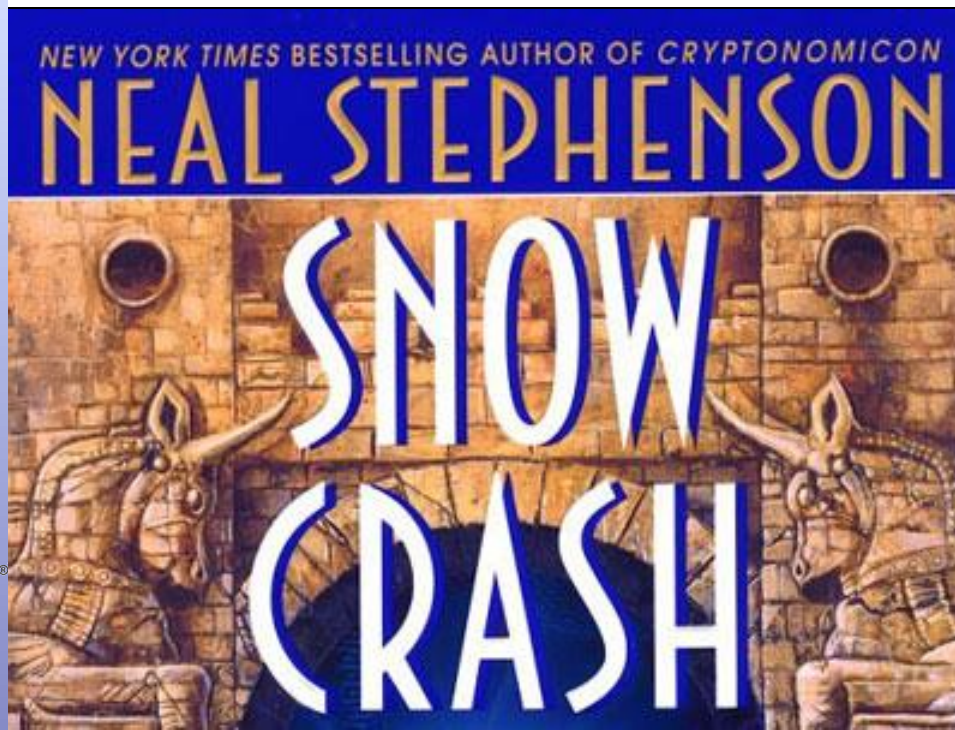
100/100hp 100/100mana 1500xp Felonius>
Gort [Q/A] Asks 'the cave with the duger dwarfs and angry minatours'

100/100hp 100/100mana 1500xp Felonius>
Gort [Q/A] Asks 'anyone know directions?'

100/100hp 100/100mana 1500xp Felonius>
  
```

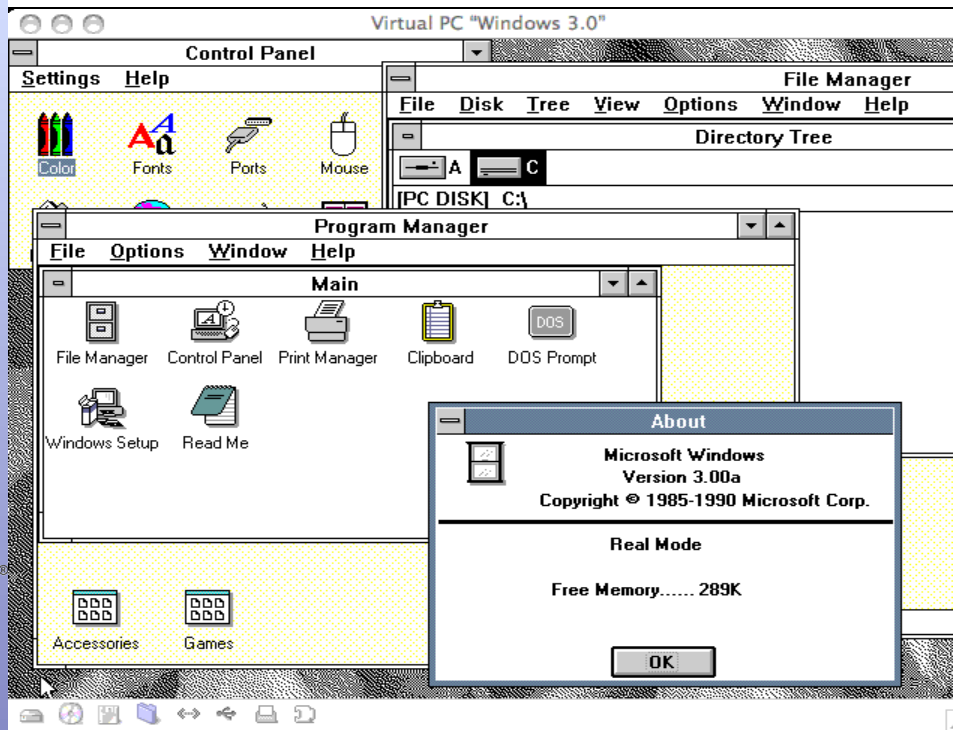
1990

- LambdaMOO is created
- Diku MUDs are released
- FurryMUCK is opened.
- The word “avatar” appears in print.



1990, the rest of the world

- Windows 3.0 is released.
- Germany re-unifies.
- The first web page is written.
- Iraq invades Kuwait.



1991-1993

- An explosion of games, both commercial and hobbyist
- DOOM comes out, and video games go 3d
- Mosaic makes the Web use graphics



1994

- Many chat-only worlds are created
 - WorldsAway, WorldsChat, etc
- Scripting appears in Diku muds.
- *Avalon* is the first commercial mud on the Internet.

The Descent of Avatars



Proto-Avatarus
(Pre-Avatar)

Avatarus Islandius
(Island Avatar)
c. 1985 A.D.
Vienna, Virginia

Avatarus Orientus
(Eastern Avatar)
c. 1990 A.D.
Tokyo, Japan

Avatarus Modernus
(Modern Avatar)
c. 1995 A.D.
San Jose, California

What next?

1995

- *Quake*
- *Air Warrior*



1996

- *Meridian 59*
- *The Realm*
- *Dark Sun Online*
- Nexon's *Kingdom of the Winds*
- *Furcadia*



1997

- Ultima Online
- Lineage
 - With these two, the modern MMORPG is born



Today

- You probably know the history since then
- I started in the industry with *Ultima Online*

1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976

1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992

The facts of history

- Online worlds have been responsible for many of the key innovations of the Internet
- Commercial online worlds are very old

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1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992

Applying past lessons

1. Players will demand complexity over time
2. User participation is inevitable
3. Business models come and go
4. Online worlds have always been the core of the market

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1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992

Complexity

- As we enter a market, the games start simple and grow more complex
 - The additions of new playstyles are what open markets
 - Adding classes, races, items, levels, are just stagnation

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1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992

User participation

- Critical since the early days
- A natural evolution as costs rise
- An entire branch of virtual world development that has not been commercially well-exploited

1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976

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Business models

- Used to be hourly, then flat rate.
- Now we see item sales and advance purchases of time.
- Each time the business model changes, the industry almost starts over

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Online worlds are the core

- They take too much time
- They are too complicated
- But they are where the money has always been

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Development practices

- Static content is growing expensive
- Algorithmic content and simulation are the future

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Architectures

- Template-based content
- Scripting for special events
- User upload of textures and scripts
- Algorithmic or procedural generation of generic content

1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976

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Tomorrow?

- A hit song from an online world?
- Worlds used for education
- Budgets continue to skyrocket
- Consolidation of the industry
- Simulation-based worlds

1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976

1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992