Paradigm Shifts in the Video Game Industry

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Introduction

This paper is to:
- identify, characterize and discuss paradigm shifts that have occurred in the video game industry
- Catagorizing history of video games

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Introduction

Paradigms

① Entry of video games into arcade sector
② Development of home cartridge
③ Entry of independent game developers-publishers
④ Development of MMOGs

Time Line

First computer game, Spacewar is developed
First game company founded
First commercialized home entertainment
First developer-publisher founded
Boom of ②
Downfall of ②
End of ①

Introduction of the internet
First MMOG launched
Background

What is paradigm

“The set of beliefs, attitudes, expectations, assumptions, and values that determine how people construct their own personal reality”

“One sort of element in that constellation, the concrete puzzle-solution which employed as models or examples, can replace explicit rules as a basis for the solution of remaining puzzles of normal science.”

“Science does not progress smoothly, but goes through periods of turbulence in which one paradigm replaces another.”

(not quite related, but the phrase that I like and the reason of why I like science 😊)
Background

- Tendency of organization
  - creativity → direction → delegation → coordination → collaboration

- Sequential risk of organization during growth
  - leadership, autonomy, control, red tape, one left unnamed

- This paper is to analyze and categorize phenomena in the perspective of an economist, not a developer or technician!
Paradigm 1: Beginning of Video Games

- Entry of Video games into arcade sector
  - Impact
    - Shift from pinball to electronic entertainment
  - Nature of shift
    - Major – changed way segments looked at entertainment
  - Change in competition and competitiveness
    - Rapid rise of new entrants
    - Established firms faced change or decline
  - Characterization
    - Initiation of a sector in the entertainment industry
Paradigm 1: Beginning of Video Games
Paradigm 1 : Beginning of Video Games

- The first video game: spacewar
  - Developer : Steve Russell
  - Original purpose was not to sell, but to demonstrate of expertise.

- The first game company: Atari
  - Who gained in the industry was who made it a business, Nolan Bushnell.

- Industry held on until the late 1990s
  - replaced by video console games
Paradigm 2: Development of Home Entertainment

- Development of home cartridge
  - Impact
    - Shift from arcade to home and eventually hand-held
  - Nature of shift
    - Business approach in taking advantage of available technology
  - Change in competition and competitiveness
    - Similar rise of new entrants with eventual shake-out
  - Characterization
    - Could be seen as an industry life cycle change
Paradigm 2: Development of Home Entertainment.

- Cartridge Games!
  - It was muse of my childhood and headache for my parents

Yousun Ko @ ELC lab
Paradigm 2: Development of Home Entertainment

- Magnavox Odyssey
  - World’s first home video game console
  - But approach never really successful because of wrong product, wrong price, wrong promotion and wrong distributor.

- Home Video Game Boom from 1977 to 1981
- But, three of the other four dropped out of the industry in the 1982 ~ 1984
- Big industry life cycle change
Paradigm 3 : Redefining Industry

- Entry of independent game developers-publishers
  - Impact
    - Changed industry structure, but increased market size
  - Nature of shift
    - Major within the industry
  - Change in competition and competitiveness
    - Shook power of integrated developer-to-platform firms
  - Characterization
    - Eventually Set up co-opetition presently effective
Paradigm 3 : Redefining Industry

- World’s First independent developer and publisher of video games for gaming console

- Cut-throat episode
  - Atari seemed to be constantly suing Activision for making cartridge for their platforms.
  - However, the two firms decided that there were common opportunities in co-operating or *co-opetition*.
Paradigm 3: Redefining Industry

- Now industry is mature enough to think about system and structure of company.

- Old paradigm: vertical integrated company
  - Nintendo, Atari, Coleco, ...

- New paradigm: multi-tiered company
  - Tiers: developers, publishers, platform producers, ...
  - Sony, Microsoft, ...
Paradigm 4: Development of MMOGs

- Development of MMOGs
  - Impact
    - Changed way games were played
    - Emphasized computer nature
  - Nature of shift
    - Shift in both distribution and payment
  - Change in competition and competitiveness
    - Sophistication helped some firms, hurt others
    - Big impact in Far East
  - Characterization
    - Eventually set up co-competition presently effective
    - Really an industry life cycle changed
Paradigm 4: Development of MMOGs

- Introduction of the internet in the mid-1990s made massively multiplayer online games (MMOG) possible.
  - 1997, Ultima Online (Origin Systems, Electronic Arts)
  - 2005, World of Warcraft (Blizzard)
Paradigm 4: Development of MMOGs

- Three accomplishment from this shift
  - Industry tended in part to extend the market from the core segment of teen men insofar as they brought a social element to gaming
  - Industry has blurred the line between video games and other entertainment fields
    - Zackariasson and Wilson, “services were seen as similar to the tourism sector”
  - Payment for these games is by subscription, and change from the one-time cost of basic games
Reflections

- Hard to categorize phenomenon into a supposition
  - Creativity of groups
  - Ongoing demand of gamers for more excitement
  - Availability of funding
  - Enhancement of underlying technology

- Console cycles down to four to five years in duration
- Scale of developing system became enormous
- Console platform is evolving
Thank you for listening.
Any questions?