Game Developers Conference

Business & Technology
Trends in the PC Gaming Landscape

Kim Pallister
GM, Gaming Solutions and Worldwide Developer Relations
Intel Corporation
A Global Phenomena

2.8 BILLION

People Play Video Games

Source: Newzoo
A Broad Set of Needs

2.8 BILLION GAMERS

1.3 BILLION PC GAMERS

>100 Million Enthusiasts

>1 Billion Mainstream Players

Source: Newzoo
Significant Gaming Market Across Platforms

All platforms are significant markets - growth coming from elsewhere...
Where’s The Growth Coming From?

1.4 Trillion
Global Media & Entertainment Spend

*PWC Global Media and Entertainment outlook 2018-2022
Games Evolving

- PC Only: 2019 (4%)
- Mobile Only: 2019 (7%)
- Console Only: 2019 (1%)
- All three: 2019 (53%)

*other names and brands may be claimed as the property of others*
Market Opportunity

Enthusiast (100M)
“Gaming *is* my lifestyle”

Mainstream (600M)
“Gaming *fits* my lifestyle”

Casual (500M)
“Games are my secret habit”

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Hyper-Segmentation

Broad spectrum of PCs – the platform evolves to meet user needs

- Workstation
- Gaming desktop
- All-in-One desktop
- Mini-desktop
- Mobile workstation
- Enthusiast Gaming
- Thin Enthusiast
- Ultraportable
- 2 in 1 convertible
- 2 in 1 detachable
- Ultrabook
Gaming Market Opportunity

Market TAM

2020 Gaming Sales

>15% ¹

YoY growth in gaming sales across laptop and desktop

PC Gamers in 2022

1.4B ²

Population growing by 69M when compared vs. 2020

Market Research

IDC PC Gaming Executive Brief³

$37.4B

worldwide gaming PC HW spend by 2023
+9% 6-year CAGR

60%

of Enthusiast & Hardcore gamers also consider themselves console gamers

“Role of PC during COVID”⁴

Entertainment

Gaming

Creation

We have seen rapid, systemic change across key consumer categories...
some will return to previous norms (travel, wellness, social) while others will CONTINUE…

1. NPD & GFK sales out actuals through November; projections for December included
2. Newzoo Global Market Games Dashboard July 2020
3. IDC 2019 Multi-Client Study (12K gamer survey study across 5 major regions)
4. Intel Internal study - Digital Ethnography study: “Role of the PC during COVID-19” US and PRC
Balance of Power

- Power Conservation & Form Factor Thermals
- Over-clocking & Configurability
- Power-sharing within the platform
- Hybrid SoC Architectures
- Relevant GDC Session:
  - Program Your Games Today. Prepare for Tomorrow.
All PCs are Gaming Capable

- Growth of gaming has played a role in driving demand for capable graphics
- Mainstream PCs exceeding Gaming PCs of only a few years back
- Old rules no longer apply – make these part of your design targets!
- Relevant GDC Sessions:
  - Developing for Intel Graphics: Today & Into The Future
  - Up Your Game! Know Your Intel GPU Architecture

Test on wide range of configurations - Don’t make decisions based on configuration, vendor, outdated assumptions
Further Specialization Within Gaming PCs

**MAINSTREAM**

Gaming performance on a budget

- 1080P gaming at 60 FPS
- Med/High Settings

**PERFORMANCE**

Performance Sweetspot

- 1080p 144Hz vs 4K 60Hz+

**ENThusiast**

Ultimate performance

- 1080P 360Hz vs 4K 60Hz

Consider play modes & settings to cater to gamers with desires (e.g. Competitive-tuned vs max-immersion settings)
Extending the Games as a Service Trend

First wave of Games as a Service
→ Reach Users on All Devices Equally
  ▪ Device Agnosticism
  ▪ Maximize Player Engagement

Possible future
→ Reach Users on All Devices Best
  ▪ Tune Play to Device
  ▪ Maximize Player Empowerment

“Four Arrows, Five Questions”
(Jesse Schell, 2019)
Fragmentation of the Business

Trend toward wider number of business models, stores, communities, streaming platforms, and paths to reach customers

Again, the PC leads – Open platform can be your friend, if you are ready to innovate
PC Strengths

**Highest Performance:**
Highest fidelity
Gaming

**Open Platform:**
Breadth of content
and innovation

**Versatility:**
The PC is the world’s workhorse
Approaches for PC developers

- Decide on your audience
  - Enthusiast: Range of Specialty designs tuned to needs
  - Mainstream: Expectations of good experience, wider variance in form factors – all capable of great mainstream games experiences!

- Embrace innovative and open nature of the platform – redefine rules
- Understand the HW trends and prepare for them
- Attend our other GDC 2021 Sessions
- Sign up for GameDev Boost (software.intel.com/boost)

PC continues to evolve and thrive. Developers have opportunity to do the same.
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