

## COMPARATIVE ANALYSIS OF VIDEO GAME CONSOLES

**Prytula V. O.**, *prytula.valentin@gmail.com*

*Dmytro Motornyi Tavria State Agrotechnological University*

In the age of digital technologies consumers face the problem of selection. It's quite difficult to make a decision whether to pick one device or another. Therefore, people who want to buy a video game console also wonder what would be better to buy and often approach this question with high attention. In this study two most popular consoles of the new generation are compared: PlayStation 5 and XBOX Series X.

First of all, some technical characteristics should be researched. The primary analysis of both consoles demonstrates that they don't have obvious differences but the complete investigation reveals all advantages and disadvantages between the consoles. The first research object is PS5. As it was said at the manufacturer's presentation this console will have CPU AMD Zen 2 with 8 cores and 16 streams with nominal frequency 3,5 GHz. Graphic adapter AMD RDNA 2 will be provided with 36 calculation units (2304 cores) with frequency up to 2230 MHz. Also this console is provided with 16 GB of GDDR6 RAM with throughput up to 448 GB/s. And the main advantage is SSD storage device with the capacity 825 GB that allows to work with data on impressive speed of 5,5 GB/s.

The XBOX Series X has the same CPU and GPU with the differences in nominal frequency from 3,6 to 3,8 GHz for CPU and 52 CU (3328 cores) with 1825 MHz for GPU. It also has the same 16 GB RAM but it is divided to 10 GB for GPU (560 GB/s) and 6 GB for CPU (336 GB/s). The storage device is SSD type too but it maintains the speed half as much as PS5, only 2,4 GB/s.

The comparison proves that XSX is better than PS5 in nearly every point. Therefore, XSX seems to be the perfect choice, but there are some contradictions. For example, XSX console's performance in graphic processes is higher but not only the hardware is important. PS5 has its own unique API that has better performance and provides better development tools than DirectX which is in turn widely used on many devices. Also PS5 has many exclusive games which you can't play on a PC or other consoles. For the consumer there is one more thing that matters, it is the price. The XSX costs 400\$, but there is a cheaper model (which also has less performance), that costs 300\$. As for PS5 it has 2 identical models for 500\$ and 400\$, the difference between them only in blueray drive. The cheaper model doesn't have it.

To sum up, consoles actually demonstrate equal capability as the main differences are in the software. For those people who have outdated PCs or laptops, or those to whom exclusive games don't matter it would be better to buy a XBOX Series X or Series S, it would be much cheaper than buying a new high-performance PC. For those consumers who follow the video game industry and have a new, high-performance PC it would be better to opt for PS5.

### References

1. Всє о Sony PlayStation. URL: [https://www.igromania.ru/article/31456/Vsyo\\_o\\_Sony\\_PlayStation\\_5.\\_Harakteristiki\\_razmery\\_igry\\_geympad\\_obratnaya\\_sovmestimost\\_sr\\_avnienie\\_s\\_Xbox.html](https://www.igromania.ru/article/31456/Vsyo_o_Sony_PlayStation_5._Harakteristiki_razmery_igry_geympad_obratnaya_sovmestimost_sr_avnienie_s_Xbox.html) (дата звернення: 23.11.2020)

2. Полные характеристики Xbox Series X и демонстрация возможностей консоли. URL: <https://stopgame.ru/newsdata/42284> (дата звернення: 23.11.2020)

**Language adviser:** *Zaitseva N.V., Senior Teacher of the Department of Foreign languages, Dmytro Motornyi Tavria State Agrotechnological University*