

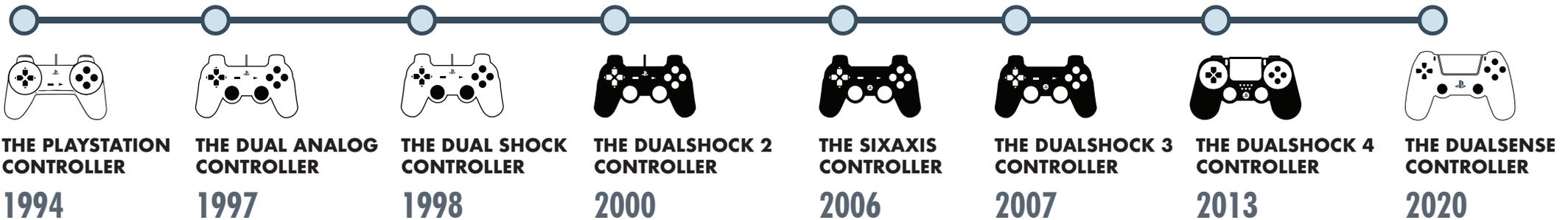


Soheil Khavari

A History of User Experience Design



PLAYSTATION CONTROLLER TIMELINE



INTRODUCTION

The gaming controller. The point of entry for every gaming console and the tool use for all their gaming interactions. Based on that sentence alone we can indicate how important experience of a user with a controller is.

While some of the competing brands and gaming pads have taken strange and unnecessary steps in their evolution, we can point at the Sony's gaming controllers as an example of redesigns and updates in the right way which is done with keeping the user in mind and at the centre.

How can we immerse our players more in world of the game? In the dawn of 3D games, how can we come up for a perfect way for the players to navigate and explore these new worlds? In an age of social media and streamers how can we make sharing gameplay easier for our users?

These are the questioned that caused evolution of PlayStation controllers by keeping the users in mind. Following is short breakdown of how these questions were answered over time.



1994

THE PLAYSTATION CONTROLLER

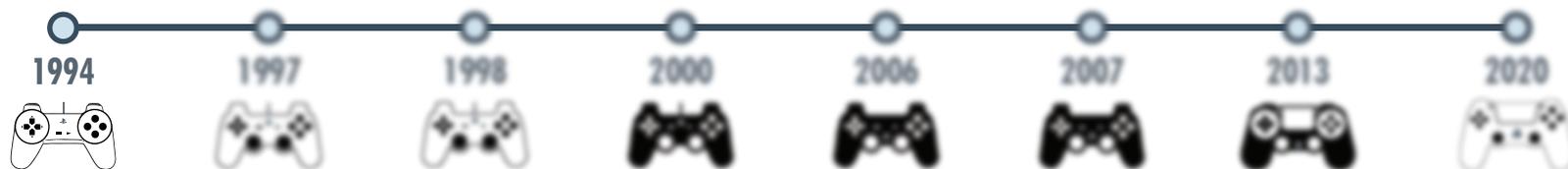
The PlayStation Controller, inspired by a vintage SNES controllers with updated features to make it look different, this was the first ever PS controller launch with the console in 1994. This was a very light and small remote that while it looked very simple compared to its next stages of evolution, it would set the general direction and experience with a PS remote from early on.

While this was a technically sound and well designed and simple gaming pad, it did very little to immerse players in the game world or offer anything more. Just a simple tool for a singular job.

This is the **buleprint**, as they keep adding to this design but keep features like the shoulder buttons and digital direction buttons. Also, the notorious four symbol (X, triangle, O and square) buttons that are not only kept in today's Sony's controller designs but are a part of PlayStation legacy and marketing.

Due to their longevity and constant use, they have become an integral part of the human computer interaction with Sony devices in general (used on PS Move and more), as they have their own meaning like a language: X is always confirm, O is always back, Triangle is settings. Every PS player knows that.

This is also the smallest PlayStation controller ever. They would slightly grow and shift size with each generation, but never this light and small!



1997

THE DUAL ANALOG CONTROLLER

The Dual Analog controller was the first step of the PlayStation controller evolution and the shape and direction for the PS controllers for generations to come. With the development of the 3D games starting and being a clear direction for the future of gaming, users and players needed something more than just the digital buttons to be able to navigate these more complex worlds.



Introduced in 1997, this update saw the first major change to PS controllers in the shape of **two analog sticks** and a button to activate them.

Due to development issue, lacking vibrating feature and legal complications (**remember that last one**) Sony had to quickly introduce the next version just a year later.



1998

THE DUAL SHOCK CONTROLLER

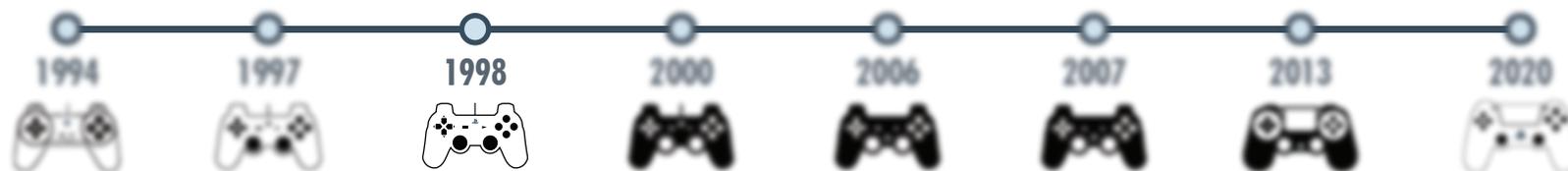
The Dual Shock had all the features of its predecessor, but with important addition of two **vibration motors**, one under each joystick which allowed the game designer do more to immerse players in the game. Plus rubber on top of analog sticks to make them more comfortable for the user for the first time.

From then on to the next stages the overall design and basic features of the PS controller would go through minimum changes for the next few generations.



This would be one of the examples of UCD integration for problem solving: how can we make the user navigate these 3D worlds easier? With two joysticks, often one controlling the view and the other, the movement. How can our users feel immersed in the environment of the game more? By feeling the rumbles and vibrations their protagonist feels.

Worth mentioning is that pressure sensitivity sensors for all the face and shoulder buttons were added in his update, which is another step towards making games more immersive. Games such as Gran Turismo 3: A-spec (a driving game) for acceleration or breaks in the game.



2000

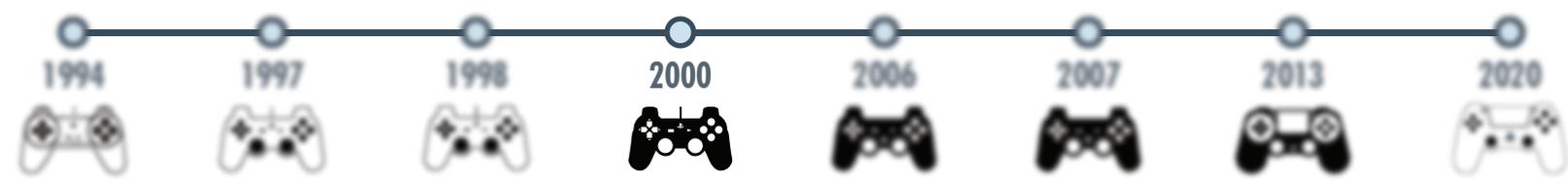
THE DUAL SHOCK 2 CONTROLLER

You try to look up the differences between the controllers Dual Shock one and two, you'll keep running into this sentence:
"don't fix what it ait broke".

This was Sony's policy as they released PlayStation 2 in 2000 with minor updates to it controller since the last generation.

Dual Shock 2 came in a slick black finish to match the new PlayStation, and was lighter than the previous generation, but bigger changes were happening under the hood.

Pressure sensitivity sensors for all the face and shoulder buttons were added in his update; which is another step towards making games more immersive. Games such as **Gran Turismo 3: A-spec** (a driving game) for acceleration or breaks in the game.



2006

THE SIXAXIS CONTROLLER



Originally launched with PlayStation 3 in 2006, this was a big step in PS controller evolution as it was the **first wireless** iteration of the device! These wireless remotes could be charged with USB ports. This feature has generally remained the same since.

But this model wasn't without its...complications. Sony dropped the rumble or vibrate feature from the controllers partly due to an ongoing law suite with Immersion Corporation who had the vibration technology patented. Swapping rumble in favour of adding **motion sensor** technology; allowing players in certain games to tilt the controller in X, Y and X axis for control.

Unfortunately, this innovation didn't work out as well as they thought it would as there is no functionality outside the very limited and (mostly poorly received) games which supported this feature.

Motion sensors would be part of PlayStation controllers moving forward, but certainly not as a highlighted feature like it was with these remotes.

LAIR PlayStation 3
SCEA | Release Date: Aug 30, 2007

Summary Critic Reviews User Reviews Details & Credits Trailers & Videos



53
Metascore
Mixed or average reviews based on 55 Critic Reviews

What's this?

Summary: In a world ravaged by endless conflict and natural disaster, a call for peace turns into a bloodbath of betrayal and deceit. Playing as a warrior riding a voracious dragon trained for deadly aerial and ground combat, and capable of scorching, clawing and smashing thousands of enemies, gamers... [Expand](#)

Buy Now

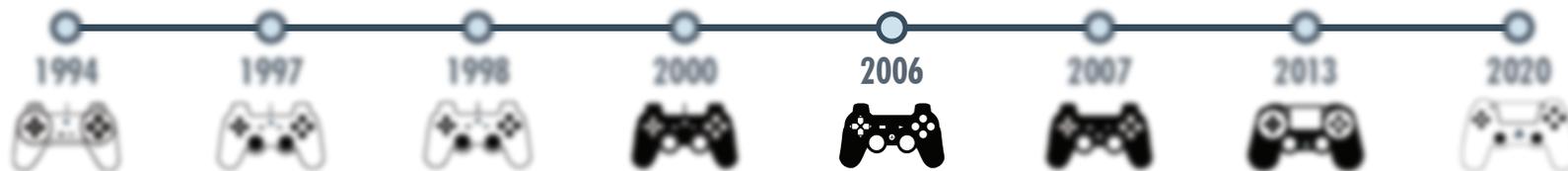
Buy on [amazon.com](#)

6.2 User Score
Mixed or average reviews based on 246 Ratings

Your Score:

Developer: Factor 5, SCE/WWS
Genre(s): Action, Action Adventure, General, General
of players: 1 Player
Cheats: On GameFAQs
Rating: T
[More Details and Credits](#)

Lair is an action-adventure video game that utilizes sixaxis features





PS3 Home screen design, a first for PlayStation



Another major change was adding the **home button** on the controller which is used for turning the device on or going back to home screen.

While this is seemingly a small addition to the overall design of the controller itself, it's important to note inclusion of the home button signals the gaming and computer system getting more complicated, which results in user having to perform and navigate their way through more complicated tasks.

They need direct and easy ways to complete these tasks as they've gone from popping the disc in and being thrown into the game to having to manage downloads and log in settings.

On top of that for the first time these consoles would support blue ray DVD format and support application like YouTube, turning PlayStation in to an **all-in-one home entertainment system.**

They needed to develop a literal universal remote for that those needs.

Worth mentioning that Sony originally was going to step away from the classic PS controller design and initially revealed a slick (but awkward) **boomerang shaped controller** which was more in line with the design of the new PS3.

Due to fan reaction and criticism they went with something that resembled a classic PS controller.



2007

THE DUALSHOCK 3 CONTROLLER

A return to the norm and “dualshock”.
Sony quickly realized the importance of vibrating gamepads for the gamers and their experience. They settled their lawsuit a year after PS3’s launch and in 2007 introduced The DualShock 3 Controllers to the mix.

These new controllers would have the **rumble feature available again on top of The Sixaxis** controller features to create a full immersive experience for the users.

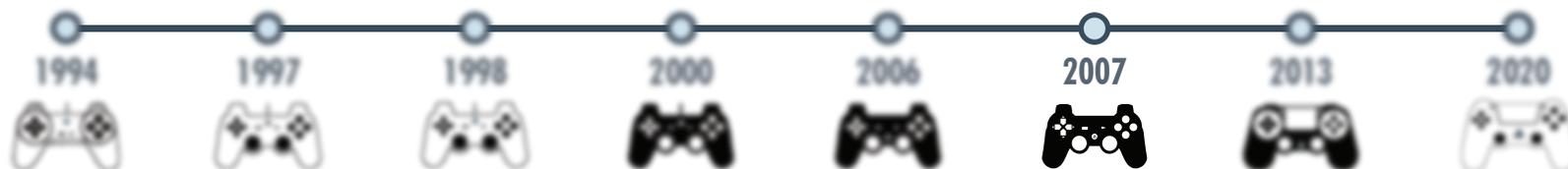


BIG LEGAL ELEPHANT IN THE ROOM!

Sony was involved in a lawsuit with **Immersion Corporation** who had the vibration technology patented. Because of that Sony released the Sixaxis controller without the patent infringing rumble feature.

This was a massive legal case that even saw Microsoft and Xbox get involved.

Later they were able to settle and add this important and fan favorite feature back in the PS controllers.



2013

THE DUALSHOCK 4 CONTROLLER



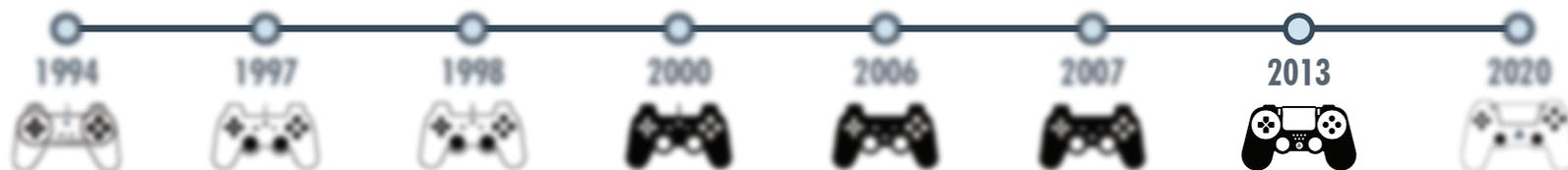
We're entering the current era of the remotes, as these work on not only a PS4 which they were released with in 2013, but also a PS5 (on the PS4 games running on a PS5 system anyways which as June 2022 make up most of its game library).

The biggest design change to the PS remote since addition of the dual analog sticks happened in this stage in the forms of adding a **Touch Pad & a "Share" Button** used to capture and share gameplay. There is a small speaker on the remote that plays some of the audio from the game, a headphone audio jack and an LED light of the from that would change according to game or player status.

For me personally as a user whose spent hours with this remote, it really was the first time that I felt a gaming remote controller is doing more than just being a device to navigate games and settings, but it contributed to making the gaming process more immersive. It felt like these remotes had personality; for example, if you're playing with 3 of your friends on the same PlayStation, each remote would have a different color **LED light** lit up and the players would be highlighted in game with same color. It really felt like remotes were a part of the experience for the first time.

Share button also seemed like an obviously necessary addition in the word of streamers and social media. You could capture a screen shot or a video from your recent gameplay, trim it and share it on your social media directly from your PlayStation! You could do more with share factory to edit your video or just livestream it to your followers on YouTube or Twitch.

There were some minor updates like making the LED lights visible on top of the touch pad and longer battery lifespan, but not a lot changed for this controller which was being sold with updated variants of PS4 itself, such as PS4 Pro or PS4 Slim.



2020

THE DUALSENSE CONTROLLER

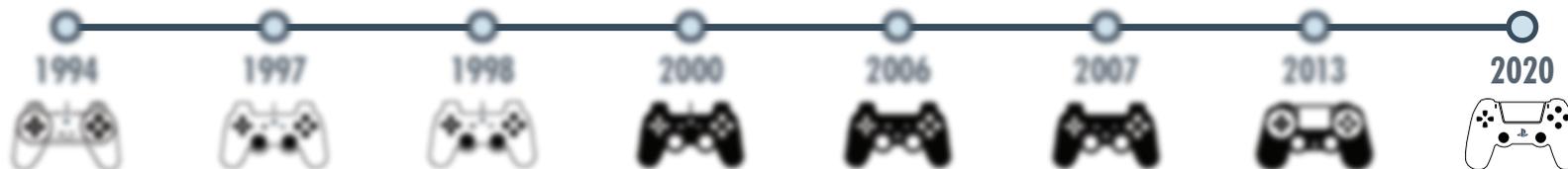
This is my favorite entry in the series.

While its amazing to see the general layout is the same as it was over two decades ago, it still feels like true miracle of modern technology. Released alongside PS5 in 2020, this is an updated version of The DualShock 4 Controller keeping the features such as built-in speaker, rumble and motion sensors, but with some major and minor updates.

It does even more to full immerse you in the world of the game you're playing by having **updated Haptic & rumble feedback, introducing Adaptive triggers** and a blowing/ wind sensor!

Besides from having a headset/ audio jack you can chat with your friends using the new microphone (or use the new mute button to turn off your microphone)!

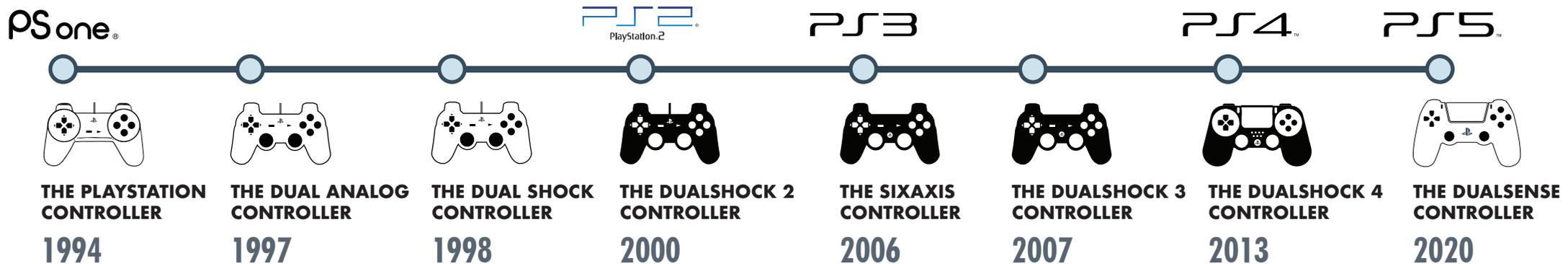
Being the advanced piece of tech that it they are, The DualSense Controllers get their own software updates which over time adds to their capabilities such as being able to connect and update with a PC system.



CONCLUSION

It was amazing to think back and test out older PS controllers. Seeing how much less of a gaming pad they are nowadays and how more of a universal remote for entertainment, socializing and even editing it has become is certainly mind-blowing

The changes and additions to the PS controllers over the years has had a lot of business complications at the core but were done to give their audience what they were looking for. Adding the rumble feature back on top of motion sensors to create a more immersive experience, adding audio jacks and share buttons were all additions that were clearly added based on user needs. That why I think this line of product is a success and a shiny bright example of User Centred Design Done right!



RESOURCES

The Evolution of PlayStation Controllers From PS1 to PS5:

https://www.youtube.com/watch?v=TNGy_t3hJBw

<https://www.youtube.com/watch?v=rxu8XwkOILo&t=257s>

PS controller timeline

<https://www.makeuseof.com/how-playstation-controller-evolved-ps1-to-ps5/>

Sony VS Nintendo

https://www.nintendolife.com/news/2018/09/feature_5_times_sony_shamelessly_copied_nintendo

Sony vs Immersion operation

<https://www.cnbc.com/id/17390509>

Can you use a PS4 controller on PS5?

<https://www.dexerto.com/gaming/can-you-use-a-ps4-controller-on-ps5-1790744/>

PS Share

<https://www.playstation.com/en-us/editorial/this-month-on-playstation/the-playstation-guide-to-sharing/>

DualSense™ Wireless Controller

<https://www.playstation.com/en-ca/accessories/dualsense-wireless-controller/>

