

## Research for creative direction in retail:

### 1.) Research how technology is currently being used in the space

- integration of “Magic Mirrors” into retail stores: magic mirrors have built-in cameras that allow consumers to try on products virtually

- for example, clothing, accessories, jewelry, makeup, etc..
- Brands already using this technology (Nike, Neiman Marcus, Tommy Hilfiger, Coach)
- use of virtual try-on features, 3D catalogs, and AR technology to show customers more realistic examples of what products would look like in person (implementing these technologies has helped boost the sales of luxury goods online; by 2025, it's predicted that 25% of luxury sales will be online)
- Lululemon Mirror: The pandemic sparked an at-home fitness craze. Lululemon bought Mirror for \$500 million. Since its acquisition, the Mirror has depreciated to \$58 million, and Lululemon has thrown in the towel and partnered with Peloton for their immersive fitness initiatives.

<https://www.theverge.com/23681859/lululemon-mirror-review-at-home-fitness>

- after Gucci released a new sneaker try-on feature and saw a 300% boost

- Technology being used for experiential pop-ups (3D sensory experiences, using surreal visuals and design)

- examples Louis Vuitton, Jacquemus

<https://poplar.studio/blog/magic-mirrors-smart-mirrors-are-the-future-of-in-store-retail/>

<https://www.brandxr.io/why-magic-mirrors-are-the-future-of-retail>

<https://www.lsretail.com/resources/6-technology-trends-reshaping-luxury-fashion-industry>

### 2.) Who are the biggest players in the segments:

Louis Vuitton, Prada, Dior, Gucci, Nike, Neiman Marcus

<https://www.marketingcharts.com/industries/retail-and-e-commerce-232987>

<https://www.statista.com/statistics/267948/brand-value-of-the-leading-10-most-valuable-luxury-brands-worldwide/>

### 3.) Understand the largest demographic of their clients thus far

**Hermes:** target demographic 30 years of age or older, value exclusivity, and appreciate high-quality craftsmanship

**Gucci:** In its digital strategy, Gucci uses a curated selection of words and phrases to convert prospects into paying customers. It also allows consumers to "wear the product" before purchasing.

**Dior:** Dior markets its products for high-class and high-income groups, using quality assurance and exclusive creations to target elegant customers with social distinctiveness.

**Nike:** According to YPulse, Nike is one of the top luxury brands that Gen Z and Millennials want to own.

**Prada:** A popular choice for Gen Z, especially with the "office siren" look. Prada is Gen Z's number-one most-searched brand on The RealReal.

**Casa Blanca (French-Moroccan luxury fashion label):** I think this would be an excellent target for Sony because the brand has already worked with a lot of new technology

#### 4.) Identify those who are breaking into the space of emerging technology & that profession

<https://www.emerald.com/insight/content/doi/10.1108/QMR-11-2017-0144/full/html>

<https://www.forbes.com/sites/neilsahota/2024/03/15/weaving-elegance-with-intelligence-how-luxury-brands-are-embracing-ai/>

<https://www.publicissapient.com/insights/how-luxury-brands-create-exclusive-digital-experiences>

<https://mobidev.biz/blog/7-technology-trends-to-change-retail-industry>

Louis Vuitton is one of the brands most committed to bringing new technologies to revolutionize the luxury retail space. LVMH, LV's parent company, owns many luxury brands, which will impact many familiar brands. One of their commitments is to bring in AI technology to help customers find products specifically catered to their interests and palette, bettering their customer service efforts and increasing the exclusivity and luxury nature of the brand. Gucci is also paving the way in the space of new technologies by incorporating AI in the design process in collaboration with their design team to create even more desirable products that cater to the palette of their customer. Additionally, Dior has limitedly introduced AR into their dressing room experience. This technology enables customers to try on items without putting them on. This technology is not widespread but would change how customers go about their shopping experience. Generative AI is also emerging in many retail spaces outside of the luxury space. Bath and Body Works is working on a generative AI model that lets customers describe a scent

they are looking for and will provide recommendations. This could also be applied to the luxury space with luxury items. Another use for AR that has not broken through yet but is readily available is AR planograms. This technology would help luxury stores envision their layouts before going all in and making on-the-spot changes.

#### **5.) Where to find these people:**

- New York Fashion Week
- Paris Fashion Week
- Milan Fashion Week
- London Fashion Week
- Vancouver Fashion Week
- Crafting Dreams Los Angeles Exhibition

The luxury retail sector is undergoing a significant digital transformation, with major brands embracing cutting-edge technologies to enhance both their online and in-store experiences. Magic Mirrors, featuring virtual try-on capabilities, are being widely adopted by prominent brands like Nike, Neiman Marcus, Tommy Hilfiger, and Coach. This technological integration is proving successful, as demonstrated by Gucci's 300% boost in engagement after implementing their virtual sneaker try-on feature. The industry is projecting substantial growth in online luxury sales, with estimates suggesting that 25% of luxury sales will be digital by 2025.

The landscape is dominated by traditional luxury powerhouses such as Louis Vuitton, Prada, Dior, and Gucci, alongside retail giants like Nike and Neiman Marcus.

Leading the technological revolution is LVMH (Louis Vuitton's parent company), which is heavily investing in AI technology for personalized shopping experiences. Gucci is incorporating AI into their design processes, while Dior is experimenting with AR dressing rooms. These innovations, including virtual and 3D catalogs, generative AI for product development, and experiential pop-ups with 3D sensory experiences, are reshaping how luxury brands interact with their customers. This technological integration allows luxury retailers to maintain their exclusive appeal while adapting to modern shopping preferences and expanding their digital presence in an increasingly connected world. This opens up the perfect opportunity to introduce the Sony SRD into the luxury retail space.

### **SWOT ANALYSIS (Retail)**

#### **Strengths:**

- Technology in the consumer-facing retail space is not as prevalent and can increase exposure and awareness of the SRD
- Builds on existing success of AR/VR implementations in retail (e.g., Gucci's 300% boost from AR features)
- Potential to enhance the premium shopping experience that luxury brands seek to deliver
- Aligns with existing technological initiatives of major luxury brands (LVMH, Gucci, Dior)
- Can be integrated into existing experiential pop-ups and retail spaces

### **Weakness:**

- SRD technology is relatively unknown at the moment and thus does not have much foothold in the channel
- May face adoption hesitancy due to Lululemon Mirror's market failure (\$500M to \$58M depreciation)
- Higher implementation cost compared to traditional retail displays
- Limited market testing in retail environment
- Requires dedicated space in retail locations
- May need specialized content creation for each brand/product

### **Opportunities:**

- Growing luxury e-commerce market (predicted 25% of luxury sales online by 2025)
- Strong target demographic alignment with tech-savvy Gen Z and Millennials
- Potential partnerships with major luxury brands already investing in technology (Louis Vuitton, Gucci, Dior)
- Can be showcased at major fashion weeks (New York, Paris, Milan, London)
- Integration potential with AI-driven personalization (following LVMH and Gucci's AI initiatives)
- Could revolutionize virtual try-on experiences beyond current magic mirror capabilities
- Potential application in store layout visualization (AR planograms)

### **Threats:**

- Risk of being perceived as a gimmick rather than a practical retail tool
- Dependency on luxury market's continued growth and technology adoption
- Need to compete with other emerging retail technologies for brands' investment
- Economic uncertainties affecting luxury retail spending

### **Research for sports/entertainment:**

- 1) How technology is currently being used in the space

<https://cri.com/news-and-insights/how-technology-is-transforming-the-stadium-experience-for-fans-and-businesses#:~:text=Another%20huge%20advancement%20that's%20revolutionizing.re%20at%20within%20the%20venue.>

**2) Who are the biggest players in the field?**

College: Donors, fans, sponsors, NIL

NFL: Fans, sponsors, owners

[https://www.espn.com/blog/playbook/dollars/post/\\_id/743/multiple-ways-to-finance-college-stadiums](https://www.espn.com/blog/playbook/dollars/post/_id/743/multiple-ways-to-finance-college-stadiums)

**3) Understand the largest demographic of their clients thus far**

College: <https://www.statista.com/statistics/1105202/college-football-interest-age/>

NFL: <https://www.statista.com/statistics/1098885/interest-level-football-age/>

**4) Identify those who are breaking into the space of merging technology & that profession.**

<https://universidadeuropea.com/en/blog/smart-stadium/>

<https://edtechmagazine.com/higher/article/2013/09/5-high-tech-college-football-stadiums>

<https://www.thesportster.com/entertainment/top-15-technologically-advanced-stadiums/>

The sportster article is a mixture of college and professional level sports, not sure if all the info is needed but definitely think the nfl and college pieces could be useful

Extra Websites:

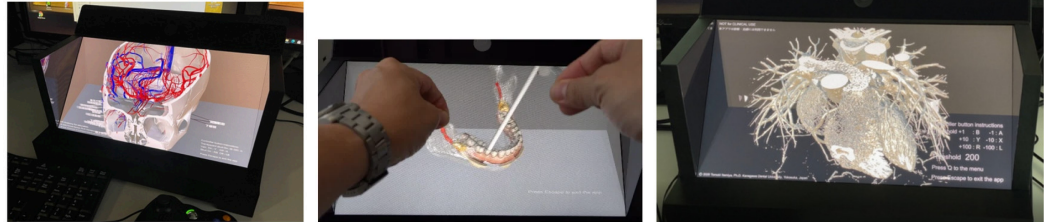
<https://roadtofb.com/college-football-stadiums/>

<https://www.visualcapitalist.com/u-s-sports-stadium-revenue-by-league/>

<https://constructiondisputes.com/school/the-30-most-expensive-sports-stadiums-ever-built/>

## Research for medical planning:

1. **Research** how/if this tech is being used in this field
  - a. Currently, there are NO applications in the field, but studies have been done to see if they would be useful.



- b.
  - i. “The dental students’ experiences with SR Anatomy suggest the usefulness of this application. In addition, the level of understanding of anatomy using the SRD was related to students’ satisfaction with SRD use and the sufficient amount of information in the SRD. The University Hospital dentists’ experiences with DSR View also suggest the usefulness of this application.”
  - c.
2. Who are the biggest players in the field? (Healthcare Tech companies) [1](#) [2](#) [3](#) [4](#) [5](#)
  - a. Johnson & Johnson
    - i. \$8,145m revenue → \$1,981m profit (24.3% profit margin)
  - b. Stryker Corp
    - i. \$7,675.3m revenue → \$1583.3m profit (20.6% profit margin)
  - c. Permobil AB
    - i. \$4,339.4m revenue → \$475.1m profit (10.8% profit margin)
  - d. Also Breg Inc., Coloplast Corp., Laborie, Inc., and more major players
  - e. Maybe look for forensic or educational competitors?
    - i. Also look for **biggest hospitals** / big medical schools as clients
3. Understand the largest demographic of their clients thus far
  - a. Johnson & Johnson –

- b. [Stryker](#) – “We serve healthcare customers including hospital administrators, surgeons, and healthcare professionals in all healthcare environments, from large, integrated hospital systems to small, outpatient surgery centers.”
  - c. Permobil AB –
4. Identify those who are breaking into the space of merging technology & that profession

Sony's imaging technology demonstrates exceptional capability in dynamic visualization, offering precise control over angles, movement, and zoom functionality. The company offers an interactive product ecosystem supported by an extensive existing asset library. Their established track record includes significant experience in the medical sector, where they've successfully marketed various imaging solutions including specialized cameras, monitors, recording and storage systems, IP imaging platforms, and medical printers. This medical imaging background showcases their expertise in creating high-precision visualization technology.

The market currently presents a unique opportunity due to limited competition in this specific technological space. Major healthcare institutions, including hospitals at OSU, Northridge, and Rochester, show potential interest in incorporating this technology to enhance nursing workflows and improve patient comfort during pre-surgical preparation. Additionally, prestigious medical education facilities like Harvard, OSU, Johns Hopkins, Stanford, and University of Michigan could utilize this technology to provide students with enhanced surgical training and more comprehensive anatomical understanding. This aligns with a growing shift in both educational and professional environments, where traditional learning methods such as textbooks and verbal explanations are being supplemented or replaced by interactive technological solutions, indicating a timely market opportunity for advanced visualization tools in medical education and practice.

Examples of existing / theoretical use:

[Virtual Reality Educational Tool for Human Anatomy](#)

[Use of mixed reality for improved spatial understanding of liver anatomy](#)

[The Effect of Stereoscopic Augmented Reality Visualization on Learning Anatomy and the Modifying Effect of Visual-Spatial Abilities: A Double-Center Randomized Controlled Trial](#)  
[3D modeling: a future of cardiovascular medicine](#)

[Optical 3D surface digitizing in forensic medicine: 3D documentation of skin and bone injuries](#)

- Look at stuff for holographic projections onto people's bodies
  - Look to see how this could supplement / replace that
- Look up general 3D models for medical stuff
  - [The Importance of 3D Modeling in Healthcare](#)
  - [Application of 3D modeling and fusion technology of medical image data in image teaching](#)
- Look into the same for forensic uses
  - Forensic scientists don't have the body in front of them, so this can provide a model
  - Not time-sensitive like surgeries
- Look up psych studies to see how patients feel when they know the surgery
  - SRD can be shown to demonstrate surgery to them
  - Extra thing for nurse to do
    - [Current Social Perception of and Value Attached to Nursing Professionals' Competences: An Integrative Review](#)
    - [Patients' Experience and Needs During Perioperative Care: A Focus Group Study](#)
    - [Patients' Perspectives of Surgical Safety: Do They Feel Safe?](#)
    - [The use of 3D-printed models in patient communication: a scoping review](#)
- Look up size of SRD to see how practical it would be for pharmacies / surgical supply areas / medical supply companies to carry them in relative bulk
  - Would be good for places buying surgical supplies to know what they're doing with their products (appease bosses)

**SWOT ANALYSIS:**

# What's in a SWOT analysis?

The good

The not-so-good

What we've got

## Strengths

What resources can we deploy?  
What are our advantages?  
What's working well?



## Weaknesses

What abilities are we lacking?  
Where are we starting to struggle?  
How can we overcome these?



What's out there

## Opportunities

Who might most value our strengths?  
What trends work in our favour?  
What prizes are within reach?



## Threats

What headwinds do we face?  
Who might challenge us?  
What could go wrong?

