
Lenskart: Envisioning a Brighter Future through Data Analytics

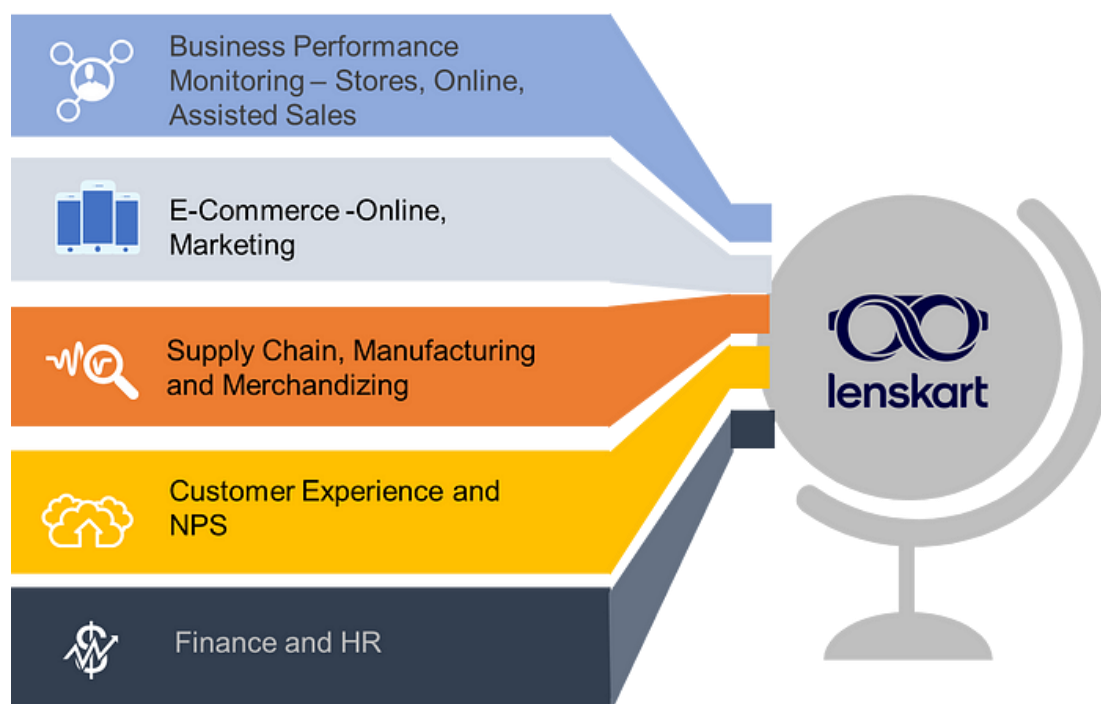
Overview of Lenskart

Lenskart is **India's fastest-growing eyewear business** with over **500 optical stores** around the country. The company's mission is to **provide vision to every Indian** at an affordable price. Lenskart's products range from **prescription eyeglasses**, branded **contact lenses**, and **sunglasses**, all equipped with the customers' eye power. The company operates over **1400+ physical stores** across more than **175 cities** in India.

A Revolutionary Disruption

The success story of Lenskart serves as an inspiring case study in the eyewear industry. Here are some key aspects that make Lenskart a case worth studying:

- ✿ **Digital Disruption:**
Lenskart disrupted the traditional eyewear retail model by leveraging the power of e-commerce and technology. The company introduced *virtual try-on*, *home eye tests*, and *seamless online purchasing*, setting new standards for the industry.
- ✿ **Focus on Affordability:**
Lenskart's commitment to *providing affordable eyewear* has resonated with customers. By *optimizing costs*, *streamlining operations*, and *eliminating intermediaries*, Lenskart offers *high-quality products* at prices *significantly lower* than traditional retailers.
- ✿ **Seamless Online-Offline Integration:**
Lenskart *pioneered the integration* of online and offline channels in the eyewear market. The combination of virtual try-on and physical stores allows customers to make informed choices, resulting in higher customer satisfaction and increased sales.
- ✿ **Customer-Centric Approach:**
Lenskart places great emphasis on customer satisfaction. The company's Gold Membership program, *personalized customer support*, and *hassle-free returns* have helped *build trust and loyalty* among its customer base.



Data Infrastructure Components

Lenskart has a **cloud-first solution approach** for tech. The analytics tech stack comprises technologies such as a **data lake** built out of AWS, Power BI for visualization, and Google Analytics for Digital Analytics. For data science, it uses R, Python, AWS ML stack, and a few other automation frameworks.

Data Collection and Utilization

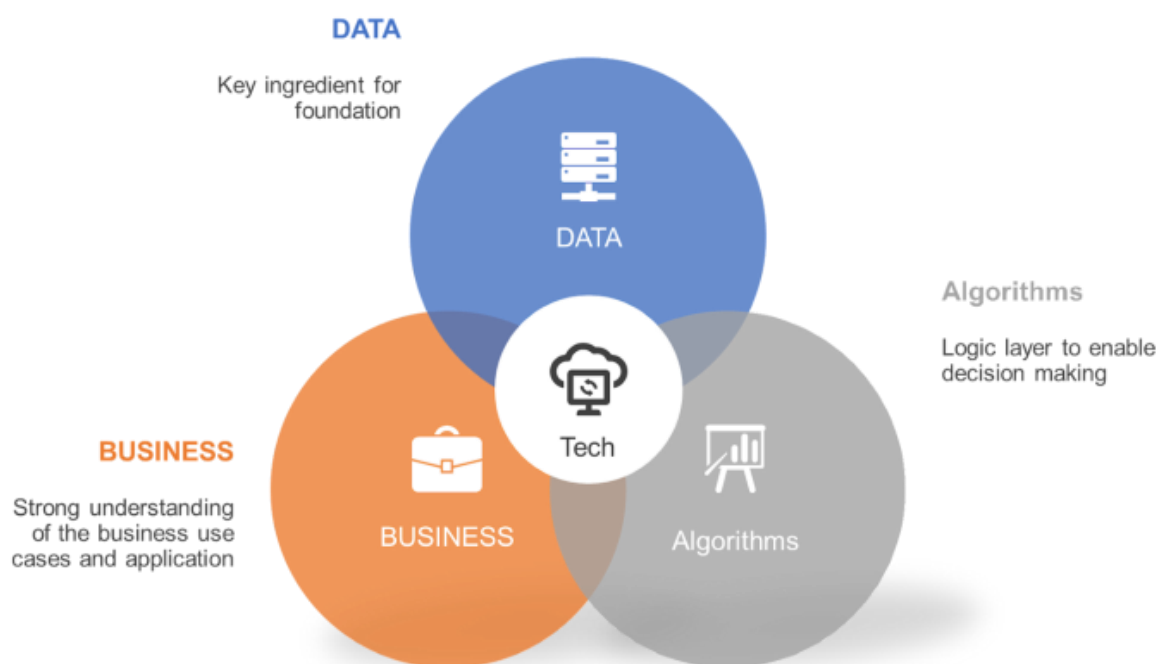
Lenskart collects permissible data at different touchpoints from its customers and tries to analyse and put this information to use for providing a **superior customer experience**. The company **observes customers' implicit behaviour** to know their preferences. This includes the **product which the user viewed**, added to **the wish list**, added to **the cart**, **purchased**, **browsing history**, and **previous buying patterns**.

Impact on Key Performance Metrics

Lenskart's revenue from operations amounted to **15billion Indian rupees** in the financial year 2022. This growth can be attributed to the company's **data-driven approach**. By harnessing AI, Lenskart can efficiently process **vast amounts of data** and provide **personalized recommendations to customers**. This AI-driven approach has significantly reduced **the time** customers need to **spend in finding the perfect pair of glasses**.

These sets of algorithms can be expanded to various applications:

- ⚙️ **Personalized Category Pages:** This will help *filter down the catalogue* by a certain criterion. For e.g: A customer who has been looking for rectangular frames in the past will be able to find them easily on the top of categories because of the filter process.
- ⚙️ **Trending Now:** The toll will look at the temporal trends such as current events that could *shape browsing habits* and will *provide outcomes* based on the same. Here it is simply explained: For a customer new to Lenskart, we will trace location, gender and other metrics as well and provide the options trending in those categories.
- ⚙️ **Item-Item Similarity:** This will identify the choices of a customer and recommend content similar to recent selections.



Challenges and Limitations

As a growing e-commerce company facing **nearly 5M visitors** every month, the technical team faced many architectural challenges. Growing infrastructural systems is never easy, but when you grow as fast as Lenskart has, the challenges tend to pile up faster than estimated. For any e-commerce company, **lowering COGS** (cost of goods sold) is always essential, but with a long list of challenges on their plate, CTO Pankaj Kankar and his engineering team just didn't have the capacity to focus on lowering their high cloud costs.

Lenskart's SWOT Analysis:

A SWOT analysis provides valuable insights into a company's internal strengths and weaknesses, as well as external opportunities and threats. Let's examine the SWOT analysis of Lenskart:

Strengths:

- Strong online presence and innovative virtual try-on technology.
- Wide range of affordable eyewear options for different customer segments.
- Growing network of offline stores for personalized customer experience.
- Lenskart Gold Membership program driving customer loyalty.
- Expansion into international markets, tapping into global opportunities.

Weaknesses:

- Reliance on third-party manufacturers for product sourcing.
- Limited brand recognition compared to established eyewear brands.
- Challenges in maintaining consistent quality across a vast product range.
- Some customers may prefer the in-person experience offered by traditional eyewear retailers.

Opportunities:

- Growing demand for online eyewear purchases, especially in emerging markets.
- Expansion of Lenskart Offline Studios to reach more customers.
- Partnership opportunities with fashion influencers and celebrities.
- Diversification into related areas like eye care products and services.

Threats:

- Intense competition from both online and offline eyewear retailers.
- Counterfeit products and unauthorized sellers impacting brand reputation.
- Economic factors affecting consumer spending on non-essential items.
- Potential disruption from new entrants and technological advancements.

Recommendations for Future Success

Lenskart can further leverage its data infrastructure by **investing in advanced machine learning algorithms** to improve its product recommendation engines. Additionally, the company can explore the **use of predictive analytics** to forecast **future trends and customer behaviour**, thereby enabling it to stay ahead of the competition. Lastly, Lenskart can consider investing in **real-time analytics** to provide instant insights and make quick decisions, which is crucial in the fast-paced e-commerce industry.

In conclusion, Lenskart's investment in a **strong data infrastructure** has played a pivotal role in its success. The company's ability to **collect, analyse, and utilize** data effectively has not only improved **its operational efficiency** but also **enhanced its customer experience**, thereby contributing to **its rapid growth**.

Reference:

- 🌐 <https://wafflebytes.com/blog/lenskart-business-model/>
- 🌐 <https://blog.lenskart.com/introducing-analytics-lenskart-f007bd3b9c02>
- 🌐 <https://spot.io/blog/how-lenskart-orchestrated-infrastructure-saved-80-ec2-costs/>
- 🌐 <https://blog.lenskart.com/data-science-a-promising-future-technology-at-lenskart-98f3cafc5af3>
- 🌐 <https://cio.economictimes.indiatimes.com/news/big-data/how-lenskart-is-trying-to-solve-the-omnichannel-conundrum/84366060>
- 🌐 <https://www.statista.com/statistics/1239374/lenskart-revenue-from-operations/>
- 🌐 <https://blog.lenskart.com/how-lenskart-is-utilizing-technology-to-scale-its-business-6030bd4633ee>
- 🌐 <https://startuptalky.com/lenskart-business-model/>
- 🌐 <https://thebusinessrule.com/lenskart-business-model-case-study-how-does-lenskart-work/>

Lokesh Patra

FET-BDS-2022-26-020

Baccalaureus Technologiae 2nd Year 4th Semester, Introduction to Data Analytics

Faculty Of Engineering & Technology

Sri Sri University, Cuttack