CARATLANE
A TANISHQ Partnership

E-COMMERCE & RETAIL | **ASIA PACIFIC**

CaratLane increases sales by 90% thanks to all-in-one observability

80

millisecond API response time

90%

increase in year-on-year sales

50%

reduction in virtual servers

Jewellery retailer CaratLane was founded in India in 2008, offering modern, fine jewellery that is wearable every day. In July 2016, CaratLane joined forces with Tanishq, India's largest jewellery brand, through a strategic investment by Titan Company. Today CaratLane is India's largest omni-commerce jeweller, with over 131 retail stores across 40+ Indian cities. It's also one of India's top 20 e-commerce portals.

Challenge: Scaling for explosive growth

India is the world's biggest market for gold jewellery, and COVID-19 lockdowns saw jewellery purchases soar. With hospitality and leisure services shut down, jewellery was the one thing that consumers were able to splurge on. The online jewellery market has been tipped for huge growth, with the pandemic only intensifying competition among online jewellery brands.

For CaratLane, India's largest online jeweller, maintaining a competitive edge is vital. Jewellery brands throughout India are rapidly building digital infrastructure to cope with increased demand and scale for future capacity.

"CaratLane has focused on this while also investing in customer security and experience. Now that lockdowns are over, CaratLane is also planning on opening more physical stores, which means we will need to ensure uptime is maintained to curb the growth in demand," explains Muthukumar Kandasamy, Director of Engineering at CaratLane. The organisation has mapped out an aggressive 2022 with expansion plans for North America and the Asia Pacific region.

In addition to driving a sharp increase in demand, the pandemic also changed the way that the CaratLane team worked. Before, staff only worked remotely once a month. Due to COVID-19, most people were working from home full time, changing the dynamics of how the team rolled out new features into production.

CaratLane required a more efficient way for teams to collaborate and improve system performance. The core backend services which manage most of CaratLane's APIs were taking around 450 to 500 milliseconds. And when load increased, CaratLane could only scale horizontally.

Solution: All-in-one observability

CaratLane has been a New Relic customer for the past 3-4 years, and views the relationship as a partnership. The company already had a high use of New Relic Application Performance Monitoring (APM) and New Relic mobile monitoring before the pandemic, with distributed tracing everywhere.

"We needed to improve performance and get better visibility. How could we bring productivity as well as operational improvements in? We made it a priority to have observability constantly measure the system, and improve responsiveness and infrastructure," Muthukumar says.

To meet escalating demand and prepare for major shopping festivals which cause traffic spikes, CaratLane transitioned to using the full New Relic offering with a plan to focus on New Relic browser monitoring, New Relic log management and New Relic alerts. New Relic dashboards were created and during a release moratorium,

engineers started fully observing what was going on in the multiple layers of the CaratLane technology platform.

"New Relic helped us measure chokepoints in our database and create optimisation thanks to dashboards. We were able to reduce our virtual servers from eight to four, and bring down one of the core API response times from 450 milliseconds to under 80 milliseconds. One critical rewards point repository was reduced from 500 milliseconds to 10 milliseconds. We were also able to manage a 25% increase in traffic," Muthukumar says.

By using New Relic as an all-in-one observability platform, CaratLane has been able to ensure uptime, performance and reliability via proactive alerts, and manage incident orchestration and log management. Devs "start the day with New Relic" and have a "single pane of glass" view of what's going on at any time. They can resolve issues rapidly before they escalate and impact user experience.

Impact: Revenue growth; expansion plans

Despite only 41% of store operational days in Q1 2021, CaratLane saw revenues increase by 272% to $21.1 million, with online sales contributing 50% to the increase. Overall, the online business enjoyed 90% year-on-year growth in Q2.

"New Relic has been instrumental in the growth of CaratLane and continues to form a strong part of our success. We look forward to continuing to use New Relic in the years ahead," Gurukeerthi Gurunathan, Co-founder & CTO at CaratLane said.

Thanks to New Relic, the robustness of the CaratLane omni-commerce platform has helped drive further international market growth, servicing large non-resident Indian (NRI) demand in the USA, UK, Canada, Australia, and Singapore. It also has plans to expand into other markets.

"At CaratLane we're an early adopter of new technologies and hope to expand our use of New Relic to other areas. We're currently looking at CodeStream and new

features in mobile," Muthukumar says.

The company expects the CaratLane app to be the biggest platform channel in the future. New Relic is used to analyse and understand app crashes and improve responsiveness and stability.

"Ultimately New Relic has helped CaratLane create the best possible customer experiences through team dashboards and tracking experience. And for an online retail business, providing a seamless customer experience is absolutely critical," he says.