



## Customer Success Story

# Enabling India's leading multi-brand online beauty retailer to leverage technology to boost conversion & engagement rates



**Customer:** A leading online beauty retailer

**Country:** India

**Industry:** eCommerce

**Our Role:** Software Engineering



## About the Client

The client is India's leading online retailer for multi-brand cosmetic and wellness products. With an active user base crossing 20 million, the client processes more than 500k orders in a day. With 1200+ brands, and six warehouses across India that stock lakhs of cosmetic products, the client offers a comprehensive selection of makeup, skincare, haircare, fragrances, personal care, luxury, and wellness products for women and men.

**123%**

increase in average  
session duration

**42%**

reduction in  
bounce rate

**78%**

increase in page  
views per session

**36%**

increase in  
conversion rate



*"I wanted to thank each and every one of you for all the work that you have put in to make the forum live. I know it's been a complicated and challenging implement but the results speak for themselves. The Network is looking awesome.*

*We look forward to your support on many other projects going forward, including the next phase of the Network"*

## Chief Content Officer

# The Situation

The Internet has completely changed the way consumers behave and think. Customers are more informed than ever and carefully choose what brand to associate with and whenever they spot a problem, they speak their mind in reviews and comments. Companies are striving to swiftly incorporate innovative ways to attract user's attention by upgrading their existing technological infrastructure.

The client operates its e-retailing business through mobile and web-based eCommerce apps. As a part of its content marketing strategy, the company launched an interactive beauty forum that could help them in product promotion, lead generation, user engagement, as well as educate users about the products. The forum, which was a Q&A platform enabled the users to ask & answer beauty related questions, give & seek advice, discover trends, and join beauty-centric conversations on topics of their interest.

The platform, however, confronted challenges in delivering the expected output. There were performance and usability issues in the platform that was affecting the conversion rate. Thus, the client wanted to entirely revamp their Q&A forum and incorporate a latest technology stack and modern UI/UX.

They were on a lookout for a technology partner that could help them with their technology advancements. The client zeroed upon Daffodil Software considering our expertise in developing innovative eCommerce solutions as well as unparalleled experience in latest technologies.

Team Daffodil started by analyzing the shortcomings of the existing solution. Considering the client requirements for the current solution, the tech team, and business analysts suggested the following updations:

- The frontend of the solution, which was built using PHP, was recommended to move to ReactJS and NodeJS technology in order to improve the performance of the platform. By switching to ReactJS, the team ensured that the webpage components are rendered faster than before.
- The content on the platform was required to be presented properly. For this, thorough categorization of the content, such as posts, Q&As, live sessions were required to be done. This also required building a new database and migration of the old database into the newer one (with a different schema).
- There was no admin panel that could help the client's team to moderate content, check business metrics (KPIs), and constantly update data in the app.

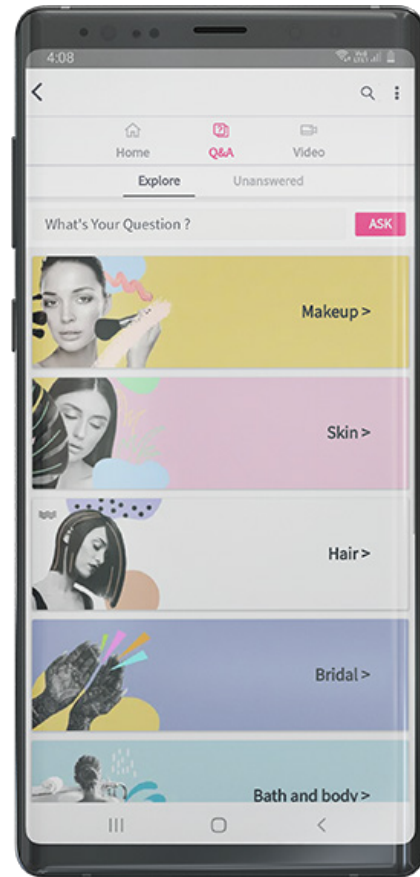
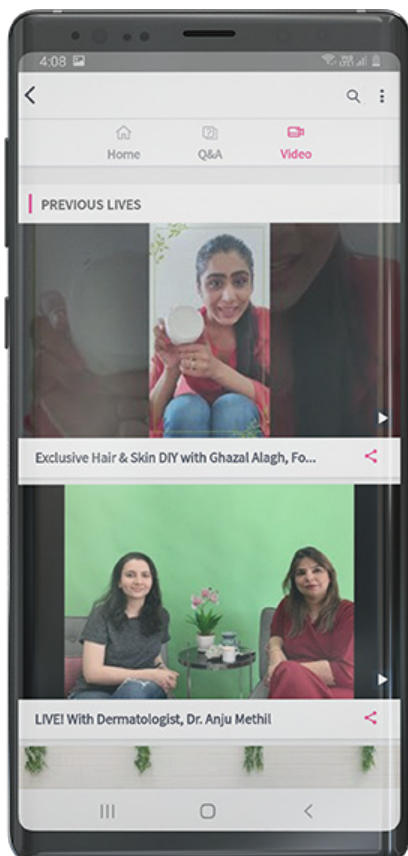
# The Solution

Since the requirement was to build a scalable solution that could seamlessly manage the rising user base, the entire application infrastructure was built on cloud. The team defined a strategic roadmap for development, ensuring cost optimization, business continuity, and minimum time to market in mind. Our team selected Amazon Web Services (AWS) as the most suitable cloud service provider. Some of the prime cloud services that were used during development include:

- Amazon Elastic Compute Cloud (EC2) for the deployment of the solution
- Amazon RDS for MYSQL with read replicas to manage the load on the database
- AWS Elastic Search to fetch the required search query in ms.

Moving the infrastructure on the cloud gives the benefits of scaling the resources on-the-fly, as the requirement strikes. This brought a striking difference in the CapEx and OpEx of setting up and maintaining the infrastructure of the application.

Daffodil software developed a Q&A platform that enabled the users to ask and answer beauty related questions.



It allows customers to share their advice and unbiased point of view on a certain topic, and create beauty centric conversations so that the people in the community can make informed product choices.

The Q&A platform was built using ReactJS and NodeJS as the core technologies. To make the solution SEO-friendly, server-side rendering of web components was done. This ensures that all HTML components are present in the source code so that the search engine can request, crawl, and index them immediately.

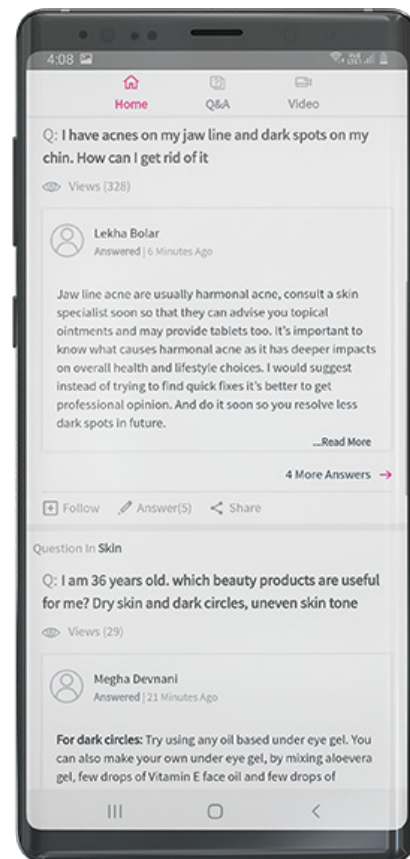
Along with this, users can view live video sessions shared by various beauty experts. These live videos are fetched directly from the client's YouTube channel and can be viewed live on the Q&A platform or on-demand as well.

In order to improve the user experience, the content in the application was properly categorized into various components such as Q&A, posts, live sessions, etc. Since the way of presenting data on the platform was different and had varying components, a new database (with different schema) was developed.

The data from the previous platform (users, questions, answers, comments, likes, etc.) was migrated to the new database. In this process, team Daffodil migrated data of over 1.5 million users that contained over 30,000 questions and 70,000 answers. A few highlights of the forum are

- Users can ask a question with text, images/videos, links, and by tagging a product
- Users can create a post, format the text, add photos/videos, tag products, etc.
- Users can like, comment, share posts, follow a question, etc.
- Users can apply filters to find Q&A and posts according to their interests
- Live videos by the client's team can be watched on the platform or can be accessed on-demand.

Daffodil also created a custom admin panel for the solution that enables the team at the client's end to manage the content, moderate it, keep a track of business KPIs, and update relevant content on the platform to engage users.



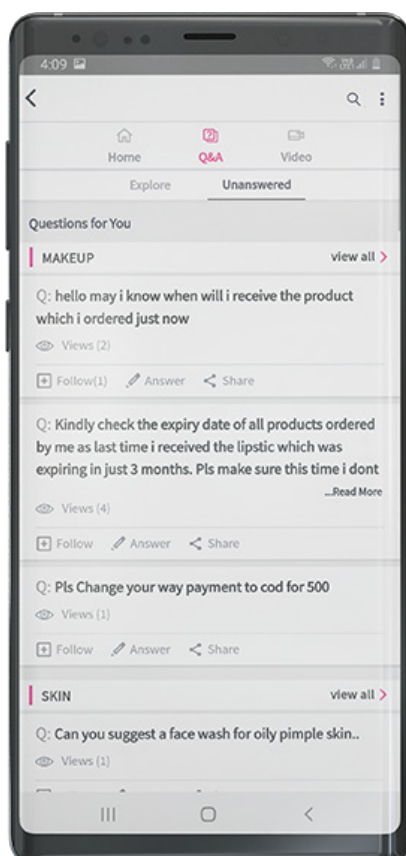
The dashboard of the panel gives a view of the total number of users on the platform, the number of new users, Q&A stats (number of questions, the average number of questions, number of answers, average number of answers), etc. Along with this, there are several modules that enable the team to:

**Schedule questions, answers, or posts:** The client's team can create new posts, questions, and answers and schedule them for publishing at a defined date and time.

**Manage Widgets on Home Page:** Featured posts, tip of the day, announcements that are displayed on the homepage of the solution is managed through the admin panel.

**Product Suggestion during Live Sessions:** The team at the backend can make product suggestions during live video sessions. The real-time conversation/chat during the live sessions is powered by PubNub that enables the team to suggest/tag products in the chat while the videos are live.

**Manage Users on Platform:** Depending upon the participation of users in Q&A, the admin team can mark answers as "accepted", bring that answer on the top of other answers, and can verify a user depending upon his continuous contribution on the platform.





# The Impact

Within three months of its launch, the user community network had 150K monthly visits, 250K subscribers, with 13K new members joining the forum every week. With an improvement in UI/UX and performance of the forum, the client experienced a whopping 123% improvement in average time spent on the application and a 42% reduction in bounce rate. The user community network was awarded the best launch of the year in the Content Marketing Summit & Awards 2018.



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# Technology Stack













- ReactJS
- NodeJS
- Laravel
- MYSQL
- AWS

# About Daffodil

Daffodil Software is a software engineering partner to 100+ organizations across the globe and has been helping them in making their software products more robust, teams more productive and processes more efficient. Our ability to look beyond technologies to deliver innovative solutions with scale and speed has been lauded by our clients as well as the tech community worldwide.

Since our inception, we have invested in organic growth; building on our engineering capabilities, organizational processes, and culture required to deliver a truly collaborative ecosystem for solving technology challenges. At the core of Daffodil lies a culture rooted in innovation, learning and a result-oriented mindset.

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