

## Fashion AI for Everyone

Creating the Optimal Online  
Customer Journey for the Largest  
Department Store in Seoul

OMNIOUS.AI

**How The Hyundai increased CTR by 75% with OMNIOUS.AI to automate product tagging and visual recommendations for 230k SKUs in 6 months.**

## Executive Summary

While the largest department store in Seoul, The Hyundai, was launching their e-commerce platform, the company struggled with error-ridden, manual SKU data processes. The Hyundai's new website also featured inaccurate product recommendations and attribute information. To encourage in-store shoppers to expand their customer journey online and effectively compete with the online-native shopping destinations, The Hyundai wanted to implement an AI-based e-commerce solution that accurately presented and recommended products for prospective buyers.



Both OMNIOUS TAGGER and OMNIOUS LENS resulted in an increase in The Hyundai's catalog tagging efficiency and an improvement of their online customer journey.

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The Hyundai's website CTR (click-through rate) has increased by 75% since partnering with OMNIOUS.AI.

## Shopper and Employee Challenges

THE  
HYUNDAI

Amidst the fashion e-commerce boom, one of the three largest department store chains in South Korea, The Hyundai, needed a competitive edge as they looked to transition to the digital space. The brand was attempting to digitally transform their in-person department stores by bringing all of their retail shops online. However, the catalog creation and update process itself soon became a major hurdle.

While transitioning, The Hyundai encountered issues due to the lack of professional data entry skills among their store employees. Managers without inventory tagging experience were placed in charge of registering products online. These employees were not sufficiently technologically proficient, resulting in many cases of inaccurate or insufficient product information. Lack of sufficient product descriptions and tags resulted in items misclassification and poor search accuracy.

Furthermore, when MDs (merchandising directors) sought to open a special exhibition for promotion, it took a lot of time to manually select promotional products that fit the theme of the event. The missing and/or inaccurate catalog metadata contributed to the higher complexity and longer preparations.

The Hyundai wanted to expand their customer journey to their newly created online shopping platform with the goal of lessening the customer churn rate.

**In early 2018, The Hyundai had already implemented a “similar product recommendation” solution from a fashion technology company to help meet this goal and solve their problems. The quality of the solution and the accuracy of the corresponding recommendations were too low to meet their expectations.**

**As a result, The Hyundai was left with an unoptimized online buyer process fueled by inaccurate SKU metadata.**

## Solution

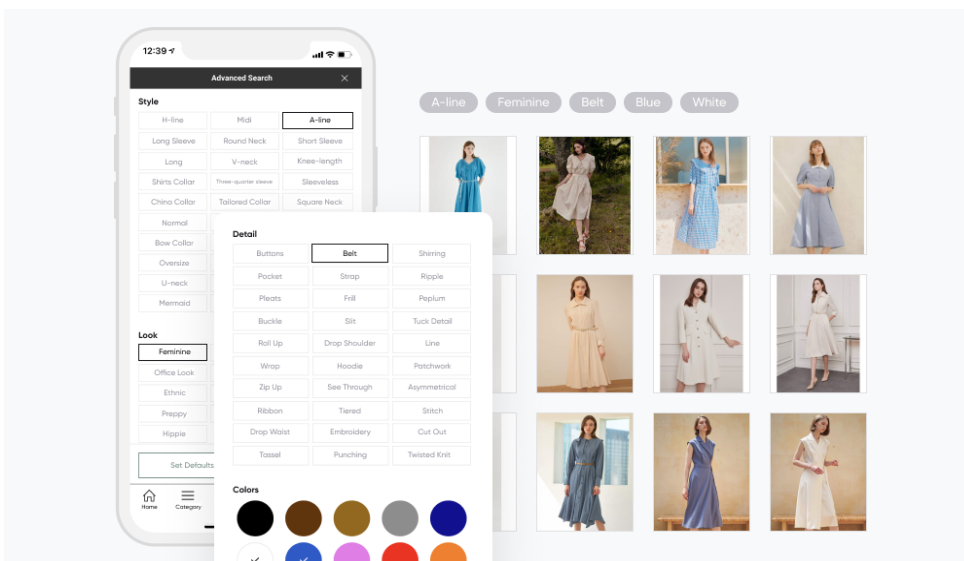
**The Hyundai looked into additional fashion-technology solutions and decided to improve their e-commerce experience and results by working with OMNIOUS.AI.**

The first action that OMNIOUS.AI took was to analyze the scope of the situation at hand. The Hyundai was having significant problems with the solution that they had been using. OMNIOUS.AI discovered that more than 50% of product recommendations were

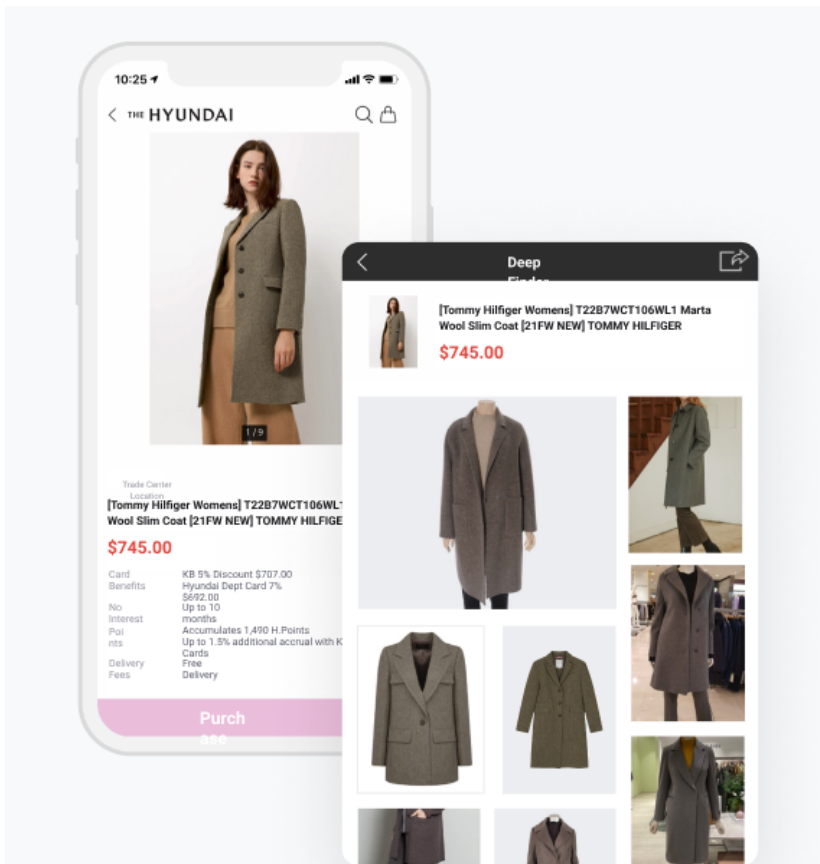
inaccurate matches.

The attribute data associated with each product was also in poor condition.

To solve these issues, OMNIOUS.AI integrated the OMNIOUS TAGGER to improve The Hyundai’s attribute classification structure.



During the PoC (Proof of Concept) stage, OMNIOUS.AI also implemented the OMNIOUS LENS. It sought to solve The Hyundai's product recommendations errors.



The OMNIOUS LENS had shown an accuracy rate of 95% in terms of recognizing the similarities between categories and attributes, unlike their formerly used solution's accuracy of 50%. The entire PoC stage took 3 weeks to complete.

The Hyundai was, therefore, able to rebuild their "recommended products" section with OMNIOUS LENS and improve their customer journey with accurate and relevant results.

## Result

OMNIOUS TAGGER allowed The Hyundai to automatically and accurately tag product attributes with certainty in multiple languages. OMNIOUS.AI's developer team migrated a total of 230k SKUs in 3 days, cleaning all mislabeled attributes and providing API integration for The Hyundai's managers' usage. Managers of each store could now upload products on The Hyundai.com without any product tagging labor burdens.

Both OMNIOUS TAGGER and OMNIOUS LENS resulted in an increase in The Hyundai's catalog tagging efficiency and an improvement of their online customer journey.

OMNIOUS TAGGER's automated SKU registration processes virtually eliminated manual processes by store managers. By applying rich product information extracted through the OMNIOUS TAGGER to search and filters, search accuracy was improved. Filters were

subdivided into “fabric,” “pattern,” “style,” “detail,” etc. to provide shoppers with more nuanced accurate search criteria.

Now when an MD holds a special exhibition, The Hyundai can automate the extraction of items suitable for the special exhibition based on the item metadata classified in accordance with a consistent standard.

**Exchanging The Hyundai’s similar product recommendation engine for OMNIOUS LENS has extremely improved its accuracy. In addition, The Hyundai’s website CTR (click-through rate) has increased by 75% since partnering with OMNIOUS.AI.**

## About The Hyundai

The Hyundai.com is an online mall that exclusively sells department store products. The e-commerce platform was launched as brick and mortar stores began to competitively strengthen their online shops. [Hyundai.com](https://www.hyundai.com) aims to maximize synergy by utilizing touchpoints between their 'high-end online mall' and customers both online and offline.

The Hyundai Department Store Group has grown to become a comprehensive life culture enterprise into conglomerate ranking 22nd in terms of assets and 20th, net profit (according to the announcement made in 2020, public enterprises excluded in counting) by expanding business sectors from distribution to fashion, food, total living, media, rental, B2B, and construction equipment, beauty/health. In 2021, The Hyundai officially opened the [largest department store in Seoul](#).



## About OMNIOUS.AI

OMNIOUS.AI is a visual AI solution for established enterprises and growing e-commerce businesses alike. Founded in Korea in 2015, OMNIOUS.AI aims to achieve complete automation for retail businesses by developing never-before-seen AI solutions. OMNIOUS.AI’s contributions to online fashion businesses, E-Commerce companies, and retailers were awarded in 2020 when they were selected as the grand prize winner in the startup sector at the 30th Korea Textile and Fashion Awards. The growing company strives to hyper-automate retail through AI. For more information on OMNIOUS.AI’s solutions please visit [OMNIOUS.AI](https://www.omnious.ai).

## About the OMNIOUS TAGGER

The OMNIOUS TAGGER automatically provides approximately 1,000 detailed product attributes with a maximum of 13 different attribution classifications like colors, styles, prints and etc. in clothing, shoes, bags, jewelry to fashion accessories by identifying specific products information in images. OMNIOUS TAGGER's deep AI image detecting technology tags fashion attributes allowing retailers to improve the product discovery process. Unlike other auto-tagging solutions, the OMNIOUS TAGGER detects images and tags within 0.5 seconds with a 95% accuracy rate. Combined with customer data, the OMNIOUS TAGGER utilizes augmented product attributes to make hyper-personalized product recommendations.

## About the OMNIOUS LENS

The OMNIOUS LENS is an intuitive visual discovery solution that increases customers' purchase rates by automatically scanning items of interest and recommending similar products to shoppers. Featuring smart camera search, the OMNIOUS LENS allows customers to upload photos and discover similar products on retailers' websites.

## Contact Information

To learn more about how your store can benefit from OMNIOUS.AI solutions, please email [business@OMNIOUS.AI](mailto:business@OMNIOUS.AI) to contact an OMNIOUS.AI representative directly.