

# Enhancing Fashion Innovation with AI

Tech Solutions for Small Fashion Brands



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# Now, Product Planning Hinges on Rapid Trend

The **key to product planning and design** lies in quickly **identifying trends and inspirations**



Anna Sui



Forever 21



PRADA



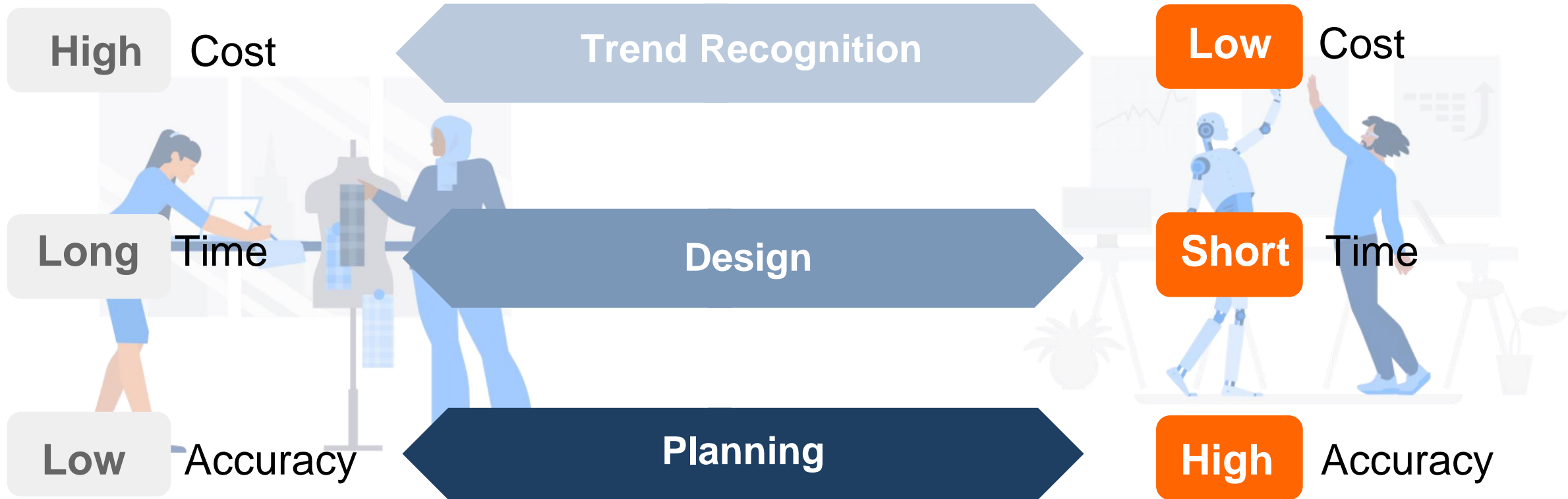
ZARA



## The Core of Every Fashion Industry's Woes



with AI



## DESIGNNOVEL AI Helps to Achieve Cheaper, Faster, and More Accurate Results

1 Person



Cost per ONE design sketch :  
**192.34 €**

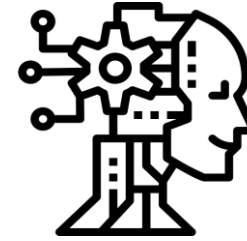
10,000 a **1** year

**60%**  
10-year career MD accuracy rate \*

Trend Recognition

Design

Planning



AI

Cost per ONE design sketch :  
**0.00003 €**

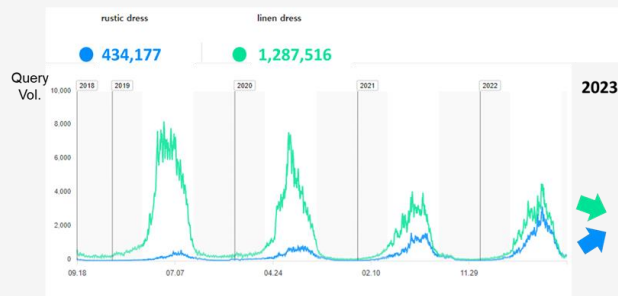
10,000 per **1** Second

**76.8%**  
72 hours career AI accuracy rate \*

## AI-Driven Insights on Optimal Timing, Products, and Quantities for Success

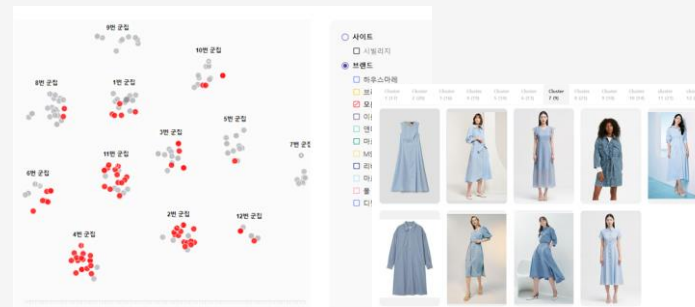
### When | Time

- Search the **'similar patterns'** from the **past** data
- **Estimate when it is the best time** to produce and sell the product



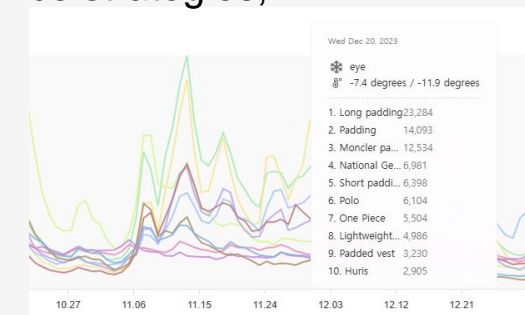
### What | Products

- **Analyze competitors** to find out what products we are missing
- **By using image or text**, search the products in the market **based on similarity**



### How Many | Amount

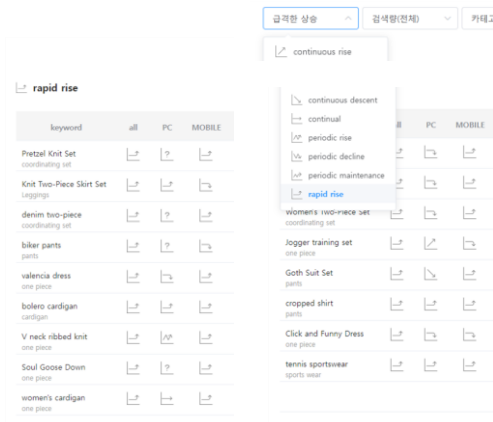
- Compare and **analyze factors** impacting sales (weather, etc.) with actual sales data
- It **supports inventory** management , price strategies,



# DESIGNOVEL AI Boost Revenue in Fashion and Retail

## 01. Trend

- **Gathering real-time market** to understand consumer preferences
- **Analyzing customer** reviews to **gain insight** into their needs
- Find products or trends based on **similarity (vector search)**



## 02. Design

- **By combining images and text**, allowing for more creative designs
- Arrange items **by relevance or priority**

AI-designed dinosaur-adorned hoodie hits the market



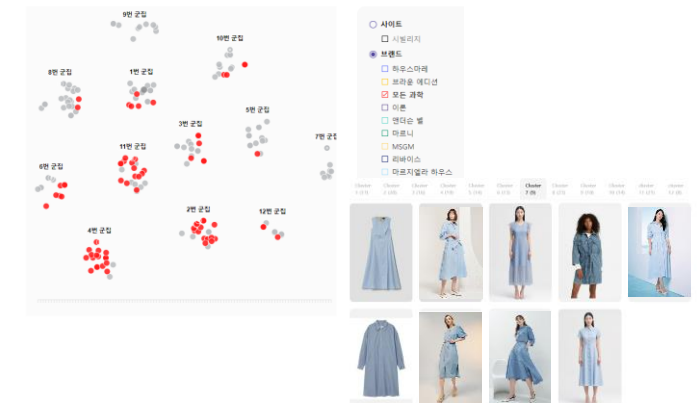
SVP's newest hoodie designed by artificial intelligence (DESIGNOVEL)

Domestic fashion brand SVP is now selling Korea's first AI-designed clothing in stores. Hyundai Department Store announced Wednesday.



## 03. Planning

- **Examining competitor's products** and strategies to figure out **market positions**
- **Identifying gaps or opportunities for improvement.**



# Unlocking Market Trends and Smart Decisions with AI-Powered Analysis

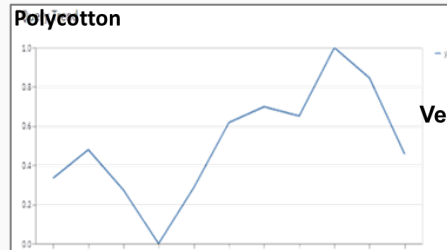
01. Trend

02. Design

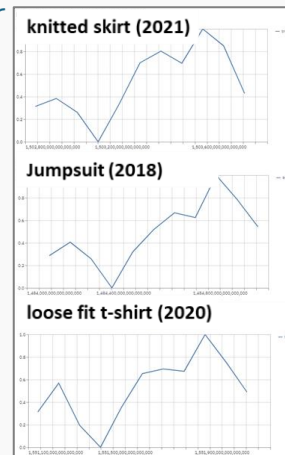
03. Planning

04. Production  
05. Distribution

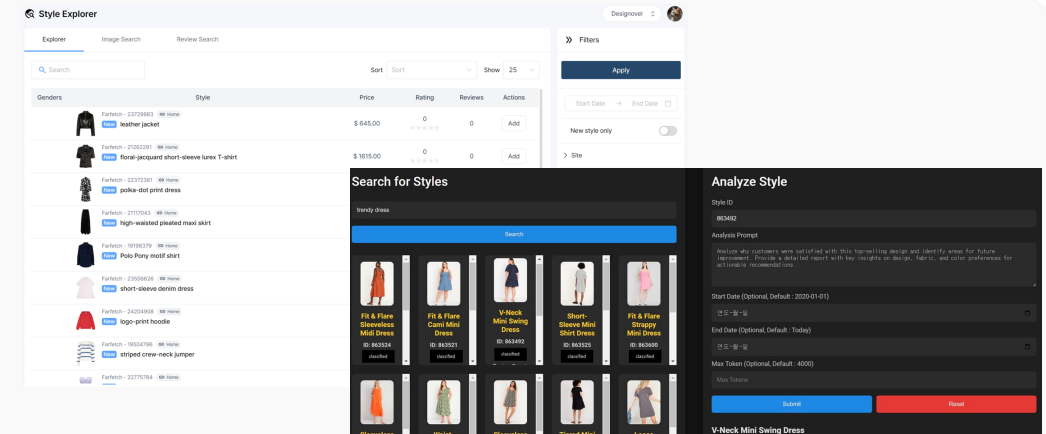
06. Sales



Vector Search



- **Predictive Insights with Vector Search**  
estimate future values based on past trends
- **Data-Driven Decisions**  
identify new trends and data-backed decisions through historical comparisons



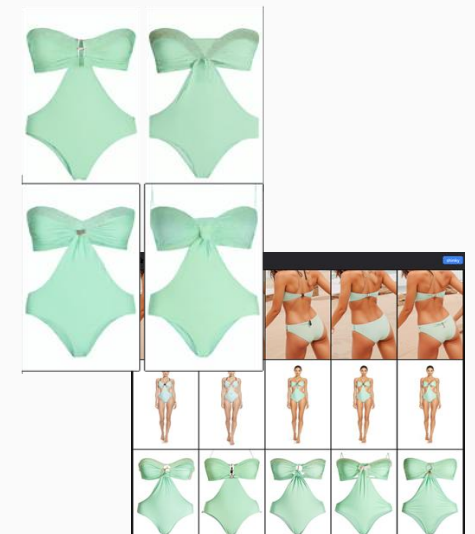
- **Demand & Price Analysis**  
track raw material prices and trends for better market positioning
- **Streamlined Market Exploration**  
discover competitor trends by style, time, image, and more



- *Confidentiality* -

## 06. Sales

#### D. Design Creation and Review





## Focusing on Today's Needs, Not Yesterday's Patterns

01. Trend

02. Design

03. Planning

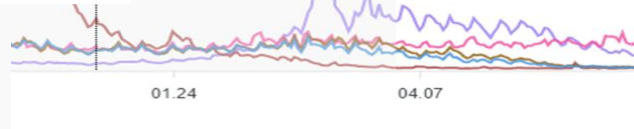
04. Production  
05. Distribution

06. Sales

2023.03.08 Number

☁ Rain.  
🌡 12.5 degrees / 7.4 degrees

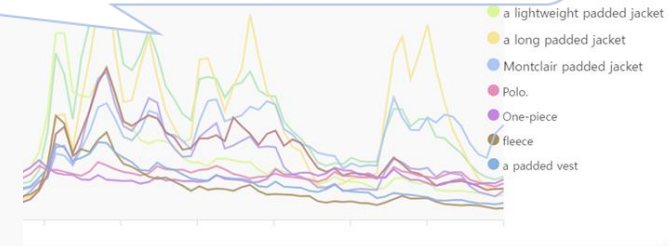
2. a tweed jac... 16,384  
4. a windbreak... 17,268  
6. Cardigan 6,876  
7. a sweatshirt 5,398  
8. a lightweigh... 5,164  
9. a hoodie 4,522  
10. Moncler W... 1,332



**Windbreakers** sell well even in spring, Plan SS windbreaker line in light green, the season's trendy color, from when temps rise above 0°C to before reaching 15°C (late February to early April).

- **Real-Time, Needs-Based Actions**  
prioritize today's market needs over past routines
- **Seasonal Flexibility with Data**  
tailor strategies using weather and market insights

We need to increase the marketing focus on **'lightweight padding'** starting from when this year's first **minimum temperature drops below 10 degrees**.



Thursday, October 05, 2023  
☀ Sunny  
🌡 14.2 degrees / 9.9 degrees

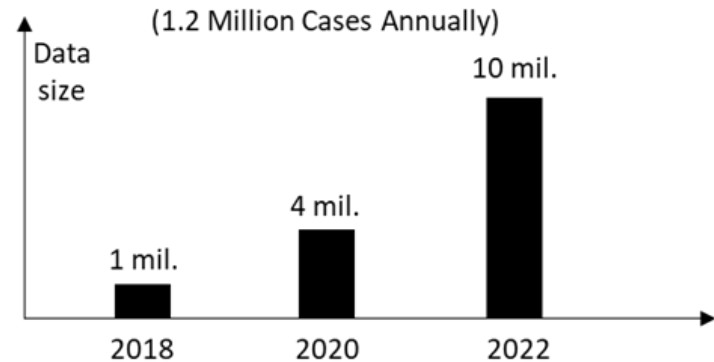
1. a lightweigh... 22,793  
2. fleece 9,741  
3. Polo. 8,199  
4. One-piece ... 7,977  
5. padded jack... 5,826  
6. Montclair p... 4,426  
7. a long padd... 4,059  
9. a padded v... 4,259  
10. a short pa... 2,249

- **Integrated Sales Analysis**  
Utilize detailed insights on pricing, inventory, and key sales factors to shape strategic decisions
- **Predictive Forecasting**  
identify patterns to estimate future trends

# Where does the data come from?

We **collect publicly** available data online, offering both essential data and AI technology for intelligent interaction between text and images, just like humans.

## Continuous collection of volatile data from online



Domestic and International Fashion Products Images (10+ Million)

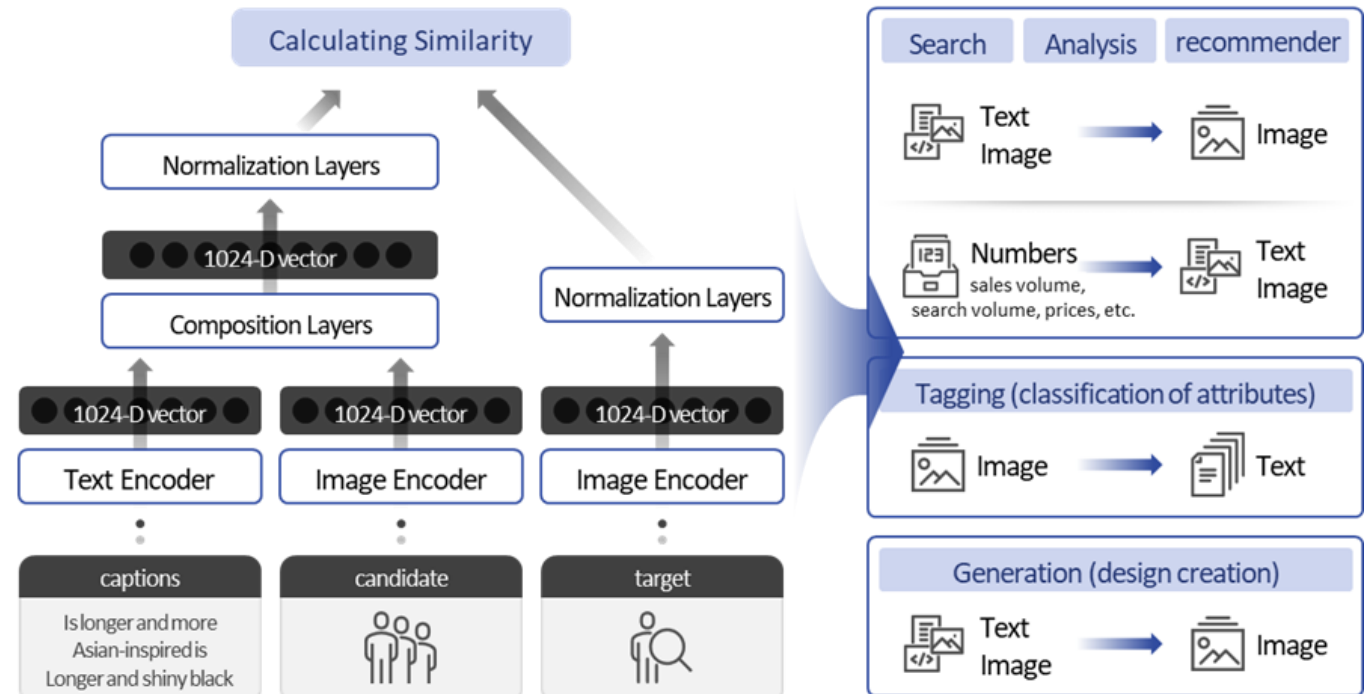


Korean, English Text (500+ Million Tokens)



Domestic and International Product Keywords Trends, Price, Etc.

## Multimodal (image/text, etc.) embedding and Generative AI models

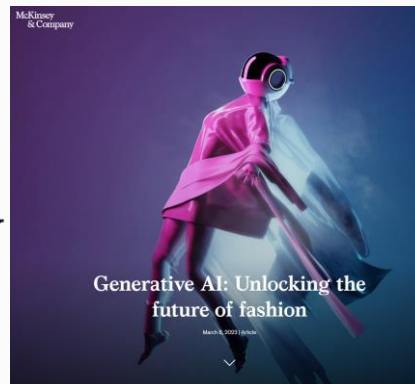


## Designovel AI : Rapidly Rising as a Global Game-Changer

Published in reports by global consulting firms like **McKinsey** as a leading design generation solution

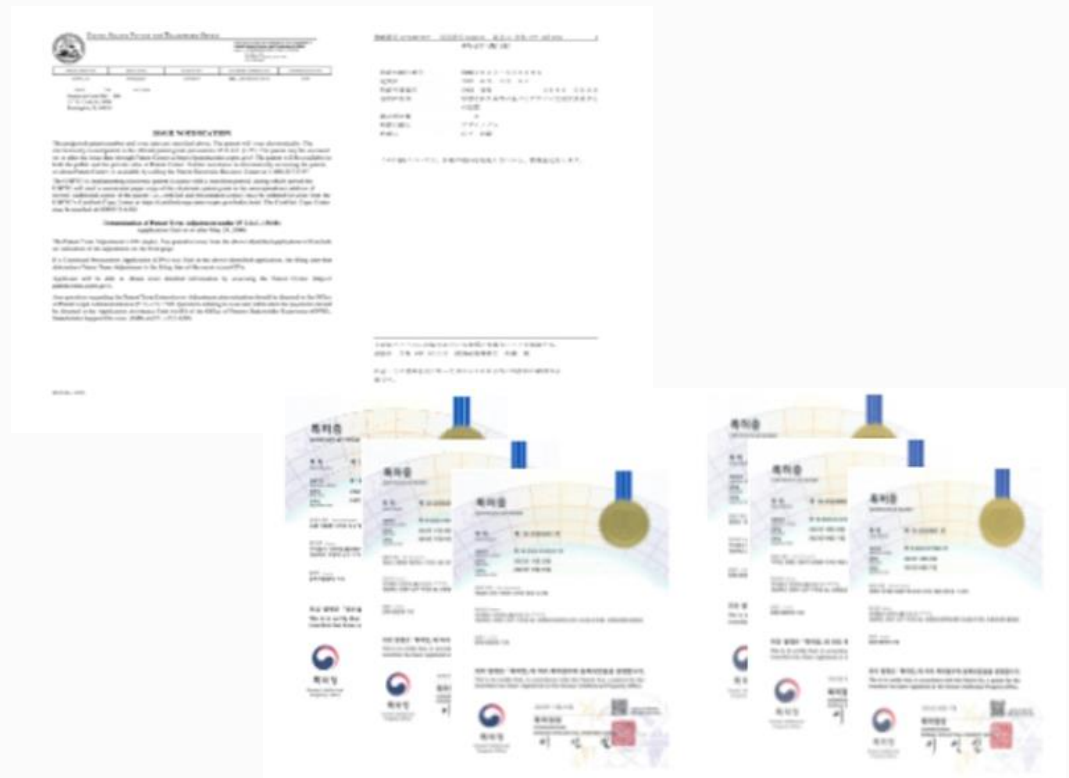
Holds **6 international (USA, Japan, China) patents**, and 16 domestic and more is coming.

# McKinsey & Company



Generative AI: Unlocking the future of fashion

This scenario became reality in December 2022, when a group of Hong Kong-based fashion designers from the Laboratory for Artificial Intelligence in Design (AiDLab) held a fashion show featuring generative-AI-supported designs.<sup>[3]</sup> Using tools from tech companies such as Cala, Designovel, and Fashable, fashion designers are already tapping into the power of generative AI to spark new ideas, try myriad design variations without having to produce expensive samples, and vastly accelerate their processes. (For beauty businesses, generative AI also provides an opportunity for brands to identify new product formulations, potentially helping to reduce lab testing costs.)



## Driving Rapid Business Innovation with a Powerful Team



**Woosang Song** Co-founder

**World No.1 in Information Retrieval Competition (TREC 2010)**

- Ph.D, Candidate in Convergence IT Engineering POSTECH
- Master of Computer Engineering in POSTECH
- Global Computer Vision Society 「ICCV」 Fashion IQ Challenge won 1st place in the world for single model, 3rd place for overall model



**Kiyoung Shin** Co-founder

**2016 ICT Creative HR Assessment Ministerial Award(Ministry of Science, ICT and Future Planning)**

- Adjunct professor in Graduate School of Technology management of Hanyang Univ.
- External Lecturer in KAIST AI Management Program
- Ph.D. in Convergence IT Engineering POSTECH
- IBM Global Business Service - Data Analytics Consultant
- Samsung Electronics Wireless Division Strategic Marketing Team (Samsung Value Creator Award)

*Composed of AI experts  
with master's and doctorate  
degrees ,  
  
the team is achieving rapid  
business  
commercialization.*

## Innovative AI Partnerships: Boosting Sales and Design Excellence in Fashion & Retail

- Step-by-step expansion in **providing AI for fashion and retails companies**
- Designovel AI solutions by companies **leading to increased sales performance** in customer (brand) product / design proposals

### | Designovel's Clients and Customers



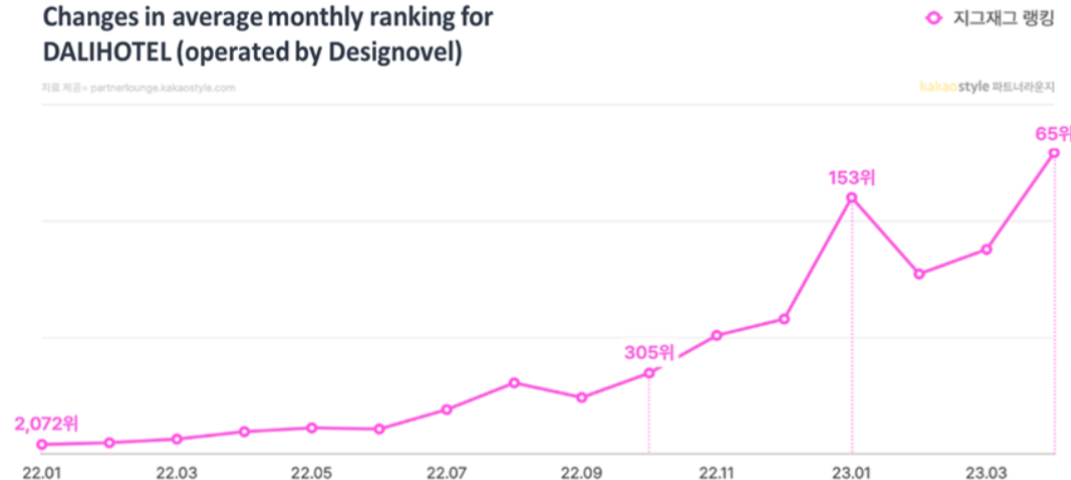
## Transforming Sales Growth: How AI Solutions Fueled a 5X Increase for ‘DaliHotel’

- Operating “**DaliHotel**” & **Brandén**”, and utilizing solutions internally
- “DaliHotel” experienced over a **five-fold increase in sales** within only two years
- Despite being **operated by a single customer service employee**, “Brandén” generated yearly **sales of over 0.4 million dollars** through solution adoption

**Total Investment**  
**5,870,340 €**

Changes in average monthly ranking for  
DALIHOTEL (operated by Designovel)

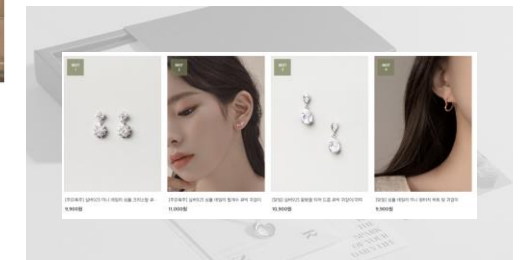
자료 제공 = partnerlounge.kakaostyle.com



DaliHotel



Brandén

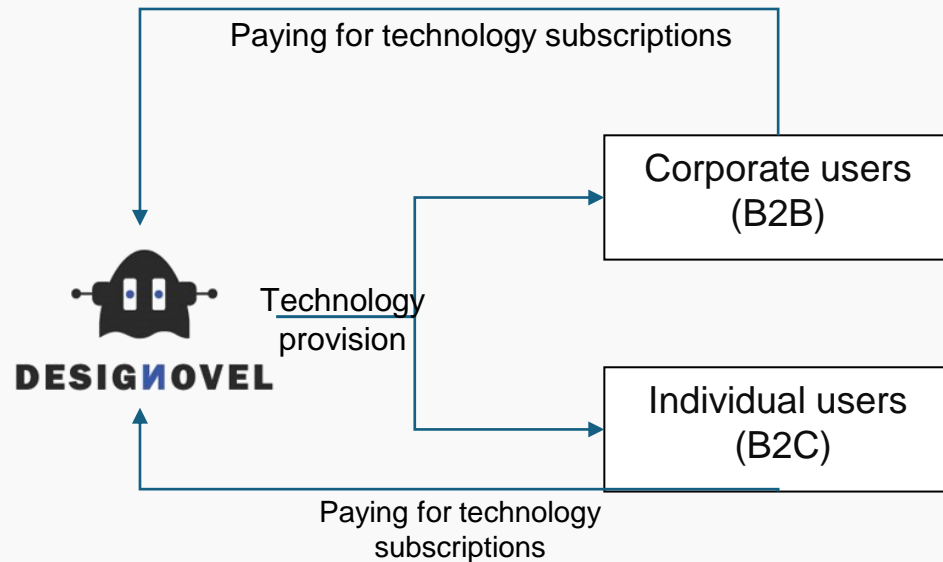




# We're here as your partner in growth!

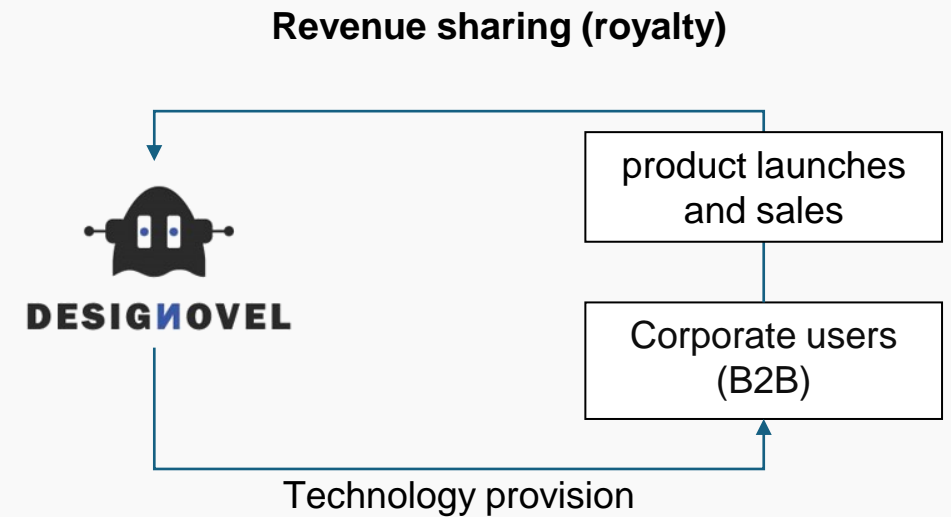
## Tech subscription fee model

**Companies pay** an average annual fee of **\$77 to \$23,000** while **individual users** are charged **\$7.70 to \$77** per year.



## Royalty (revenue-sharing) model

**A certain percentage** of the revenue from **products launched using the technology** is shared.

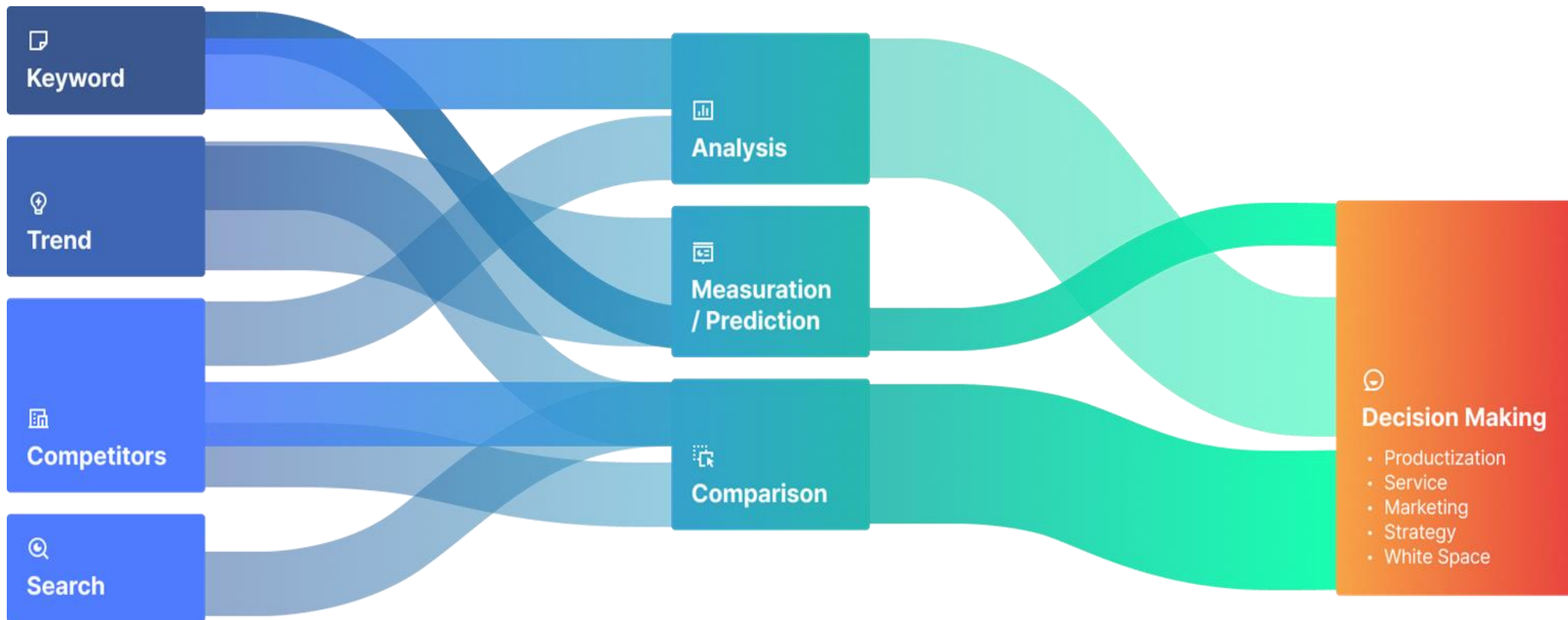


# Thank You

**Kiyoung Shin**

—  
**Co-Founder, CEO**  
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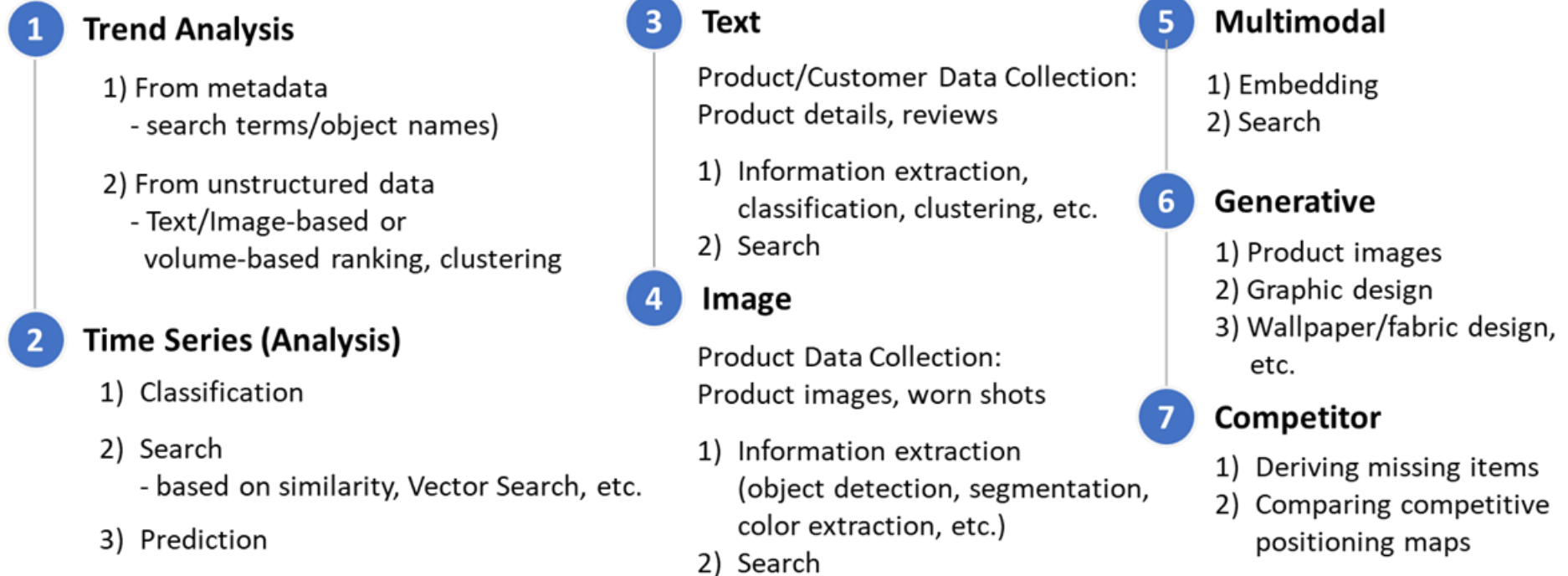
**[shinky@designovel.com](mailto:shinky@designovel.com)**



# We've been pondering how to create designs that sell exceptionally well, rather than just generating designs.

**Goal:**      When,      what,      and      how many      should we produce?  
time      product      amount

What products  
should we create to  
sell well?












## Trend analysis

Easily find and explore products in the market, track what competitors are selling, and quickly discover sources of inspiration by style, time, text, or image.

**Style Explorer**

Explorer | Image Search | Review Search

Search  Sort  Show 25

Genders	Style	Price	Rating	Reviews	Actions
	Farfetch - 23729883 <a href="#">Home</a> <b>New</b> leather jacket	\$ 645.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 21262291 <a href="#">Home</a> <b>New</b> floral-jacquard short-sleeve lurex T-shirt	\$ 1615.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 22372361 <a href="#">Home</a> <b>New</b> polka-dot print dress	\$ 4995.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 21117043 <a href="#">Home</a> <b>New</b> high-waisted pleated maxi skirt	\$ 421.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 19198379 <a href="#">Home</a> <b>New</b> Polo Pony motif shirt	\$ 125.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 23506626 <a href="#">Home</a> <b>New</b> short-sleeve denim dress	\$ 305.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 24204908 <a href="#">Home</a> <b>New</b> logo-print hoodie	\$ 279.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 19504796 <a href="#">Home</a> <b>New</b> striped crew-neck jumper	\$ 339.00	0 ★★★★★	0	<a href="#">Add</a>
	Farfetch - 22775784 <a href="#">Home</a>	-	0 -	-	<a href="#">Add</a>

**Filters**

Apply

Start Date → End Date

New style only ☐

> Site

> Brand

> Gender






> Category

> Price

> Rating

> Color

> Fabric


 Carhartt - K126 Loose Fit Heavyweight Long-Sleeve Pocket T-Shirt Gender ["men's"] Categories ["big & tall", "t-shirts & work shirts"] Colors ["brown", "grey", "red", "orange", "white", "green", "blue", "black"] Fabrics ["cotton"] isNew false Price \$24.98	 Carhartt - K231 Loose Fit Heavyweight Long-Sleeve Logo Sleeve Graphic T-Shirt Gender ["men's"] Categories ["t-shirts & work shirts", "big & tall"] Colors ["black", "brown", "grey", "blue", "green", "orange", "red"] Fabrics ["polyester", "cotton"] isNew false Price \$17.98	 Carhartt - 102788 Women's Relaxed Fit Midweight Full-Zip Sweatshirt Gender ["women's"] Categories ["hoodies & sweatshirts", "plus"] Colors ["grey", "black", "blue"] Fabrics ["cotton", "polyester"] isNew false Price \$54.99	 Carhartt - K187 Loose Fit Heavyweight Short-Sleeve Pocket T-Shirt Gender ["men's"] Categories ["t-shirts & work shirts", "big & tall"] Colors ["beige", "brown", "black", "grey", "blue", "green", "white", "orange", "red"] Fabrics ["cotton"] isNew false Price \$11.99	 Carhartt - 103296 Relaxed Fit Heavyweight Short-Sleeve Pocket T-Shirt Gender ["men's"] Categories ["t-shirts & work shirts", "big & tall"] Colors ["beige", "white", "blue", "grey", "black", "brown"] Fabrics ["cotton"] isNew false Price \$19.98
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## Trend analysis


Easily find and explore products in the market, track what competitors are selling, and quickly discover sources of inspiration by style, time, text, or image.

### Search for Styles


Search




Fit & Flare Sleeveless Midi Dress  
ID: 863524  
classified




Fit & Flare Cami Mini Dress  
ID: 863521  
classified




V-Neck Mini Swing Dress  
ID: 863492  
classified




Short-Sleeve Mini Shirt Dress  
ID: 863525  
classified




Fit & Flare Strappy Mini Dress  
ID: 863600  
classified




Sleeveless




Waist-



Sleeveless



Tiered Mini



Loose

### Analyze Style

Style ID  
863492

Analysis Prompt  
Analyze why customers were satisfied with this top-selling design and identify areas for future improvement. Provide a detailed report with key insights on design, fabric, and color preferences for actionable recommendations.

Start Date (Optional, Default : 2020-01-01)  
연도-월-일

End Date (Optional, Default : Today)  
연도-월-일

Max Token (Optional, Default : 4000)  
Max Tokens

SubmitReset

V-Neck Mini Swing Dress

**Overall Sentiment:**  
Customers overwhelmingly love the V-Neck Mini Swing Dress, praising its comfort, style, and versatility. The dress receives high marks for its lightweight fabric, flattering fit, and pockets. However, some areas require attention to address customer concerns.

**Key Insights:**

**Design:**

- **Flattering Fit:** Customers appreciate the loose, flowy fit, which is flattering on various body types.
- **Versatile Style:** The dress can be dressed up or down, making it suitable for various occasions.
- **Pockets:** The presence of pockets is a major selling point, adding practicality and functionality.
- **Shoulder Issues:** Some customers find the shoulder area to be oddly shaped or gathered, leading to an unflattering fit.
- **Neckline:** The V-neckline is often described as "low," which can be a concern for some customers.

**Fabric:**

- **Lightweight & Breathable:** The lightweight fabric is ideal for warm weather and receives praise for its comfort and breathability.
- **Wrinkles Easily:** A common complaint is that the fabric wrinkles easily, requiring ironing.
- **Thin & See-Through:** Some customers find the fabric to be too thin and see-through, requiring additional layers.



01. Trend

02. Design

03. Planning

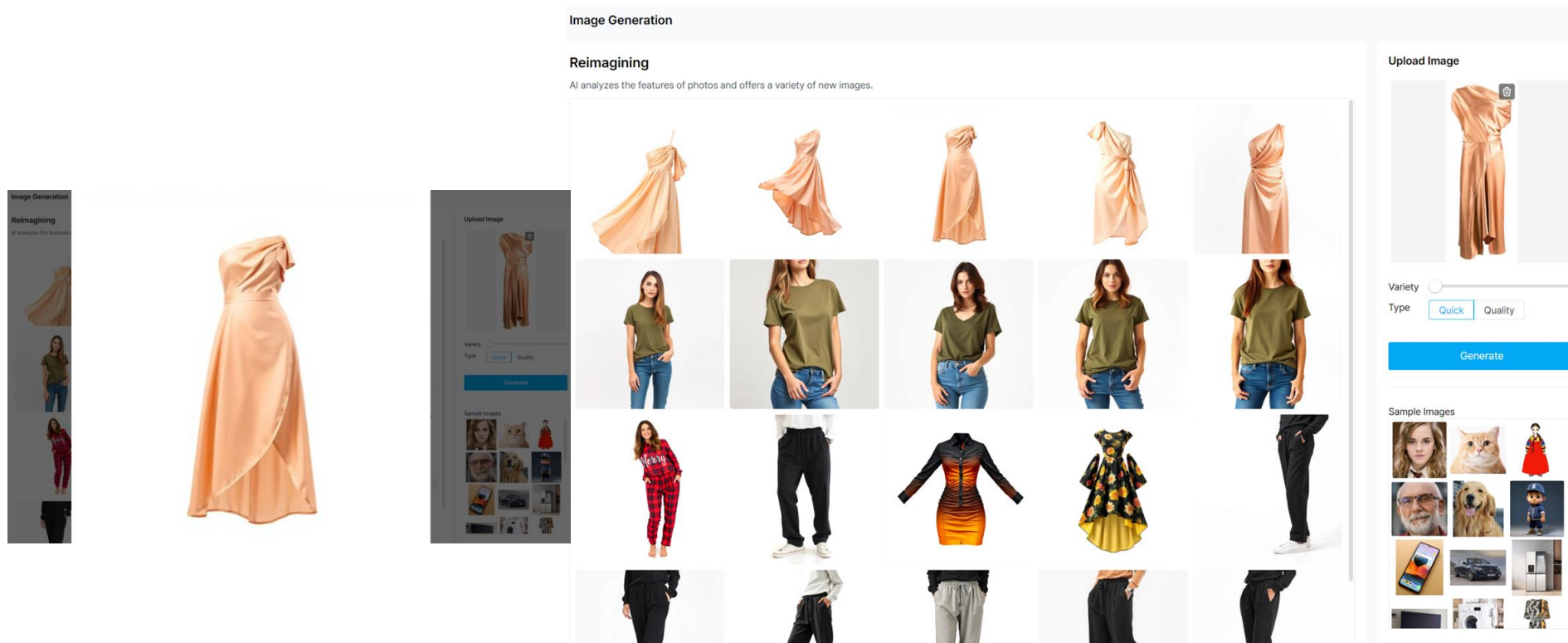
04. Production

05. Distribution

06. Sales

## Create a Design that is high in demand and sells!

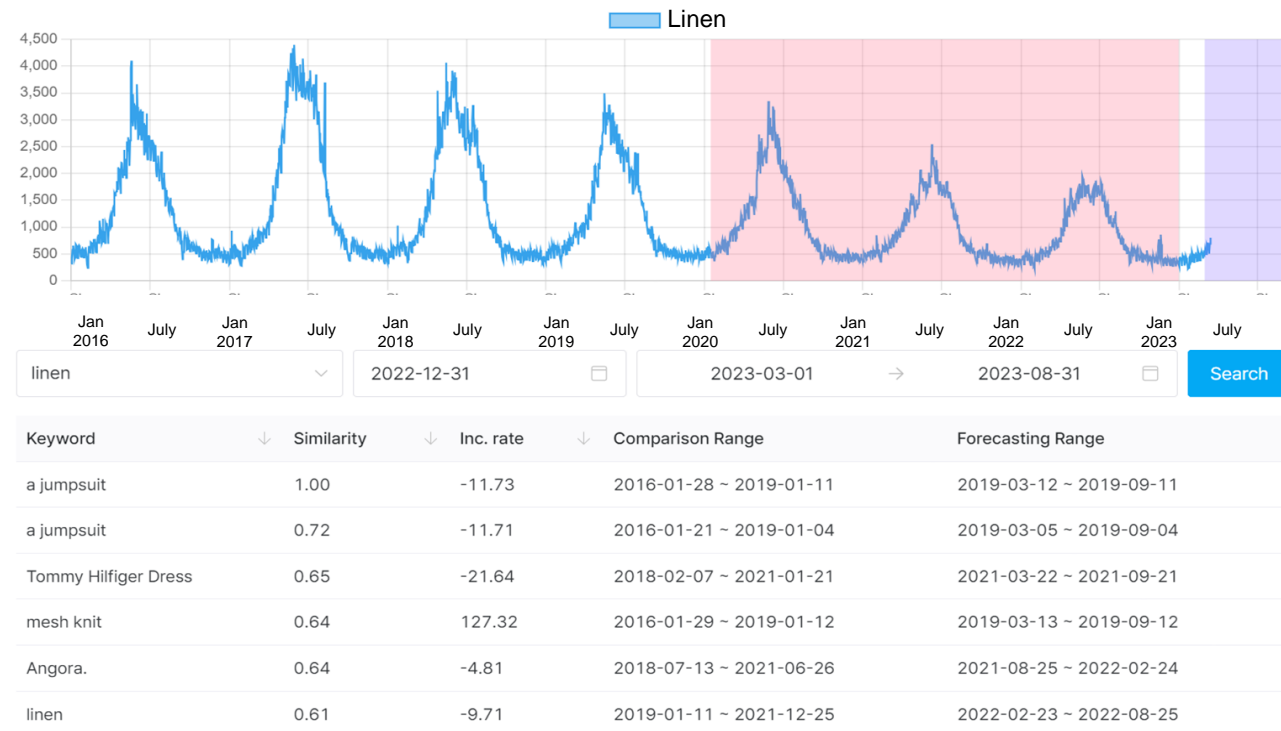
Set your design direction, and Gen AI generates limitless variations — cutting design development time by over 80% while delivering the perfect product.



## Technical analysis for predictions

Companies track raw material price shifts, while analyze keyword trends on pricing and demand using search AI

Quickly identify past patterns similar to the current situation through search, and anticipate future developments with precision.



## Our Achievement

Leading AI Competitions Globally with Certified, High- Performance Solutions

### Top-tier AI Competition Awards : Verified technical prowess



2021 「AI Online Competition」  
Winner of Grand Prize  
(Ministerial Award)



2021 「KOREA Textile Design  
Award」  
Awards of excellence & special  
recognition



2019 「Challenge K-Start Up」  
Winner of President Award



2019 'ICCV' - 「Fashion IQ  
Challenge」  
Single Model 1st,, Total Model 3rd

### Multiple Patents Secured Worldwide, Integrated into Top-Tier Big Tech Programs

Holds 22 patents, with 6 international (USA, Japan, China) and 16 domestic and more is coming.



Members of global support programs like  
Nvidia Inception and Microsoft ISV Partnership.

SUPPORTED/  
SPONSORED BY



Microsoft  
for Startups



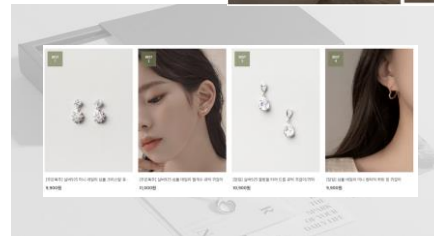
# Designovel is a company specializing in generative AI technology and fashion AI.



2017.08.

World 2<sup>nd</sup> commoditized AI Design  
(Fast and rapid AI utilization)

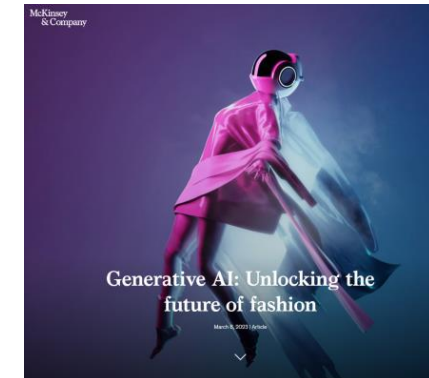
*Brandén*



2019.01.

AI-based in-house brand  
(AI roles as trend/competitor analysis)

DaliHotel



2023.03.

McKinsey-selected global Gen AI  
(Validated fashion AI solutions)

# *Confidential*

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Recipients of this document are duly aware of this protection.