Netcore UNBXD

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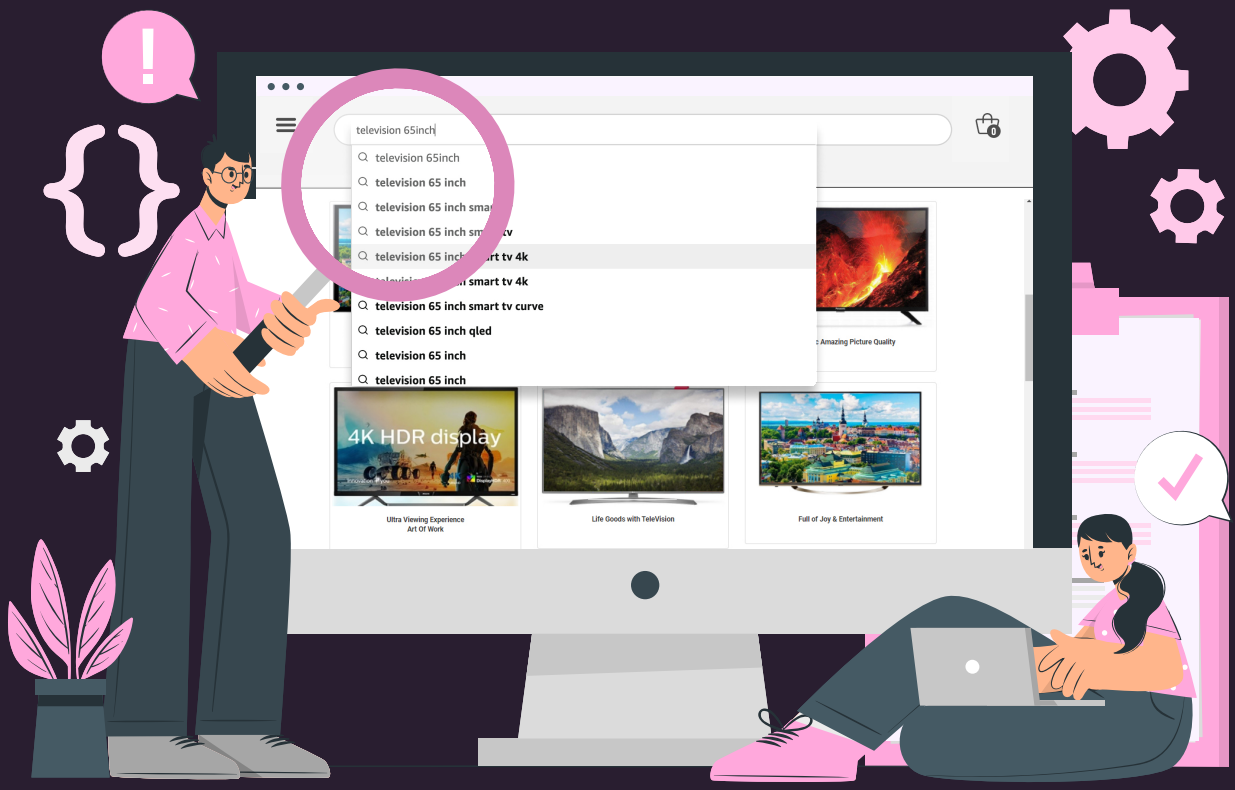
# Future-proof your ecommerce business with Measurement Search



# Introduction

Today's consumers expect a seamless and efficient search experience while shopping online, making it essential for ecommerce businesses to present products with the right dimensions at their fingertips. Unfortunately, traditional search methods are often inadequate for categories where precise measurements are crucial, such as furniture, clothing, and custom parts. According to a report, 69% of consumers go directly to the search bar when visiting an online retailer, but 80% of them leave due to a poor on-site search experience.

# What is measurement search?

For the uninitiated, measurement search allows shoppers to utilize alphanumeric inputs and refine their results based on specific product measurements and attributes. Unlike traditional keyword searches (e.g., basic keyword matching, basic autocomplete), users can filter and navigate results through various dimensions, including size, weight, volume, length, and other physical characteristics.

## For example:

1. Laptops below $500 or 500 USD
2. Coin case covers 30 mm or 300 cm
3. Television 45 inches or 45”
4. Mattress king size 78 inches in length
5. Mattress 72706 in or 72706 inches
6. Screen cover 300 mm or 11.8 inches
7. Refrigerator 400L or 400Lts

## Measurement search includes certain key components:

- Measurement facets (individual attributes or dimensions) enable users to narrow their search results. For example, measurement facets in an online furniture store include height, width, depth, and weight.
- Multiple filters can be applied to better match shoppers' specific criteria.
- As users select different measurement facets, the search results dynamically update to reflect the chosen criteria, ensuring that the displayed products are always relevant to the user's selections.

# Benefits of measurement search for ecommerce businesses

Implementing advanced measurement search across an ecommerce website's search bar is a crucial step in enhancing overall user satisfaction. The ability to quickly find products that meet specific measurement criteria can lead to higher conversion rates. Customers are more likely to complete a purchase when they can efficiently identify products that fit their spatial or physical requirements.

Measurement search is also crucial for effective inventory management. Retailers can leverage data from measurement search to gain insights into customer preferences and behavior. By analyzing which measurement facets are most frequently used, businesses can make informed decisions about inventory management, stocking products that are more likely to appeal to their customer base.

# Why do businesses struggle to implement measurement search?

While the benefits of implementing a robust measurement search solution are numerous, ecommerce businesses face certain challenges in the process. Shoppers might utilize various syntaxes during their search, leading to formatting issues in the record data. For instance, they may search for a TV using "115cm x 70cm x 12cm" or "45.3in x 27.6in x 4.7in." Additionally, they might or might not use spaces while typing (e.g., "115cmx70cmx12cm" or "115 cm x 70 cm x 12 cm").
Regardless of how they type, customers expect the ecommerce website (specifically the search bar) to understand their requirements and show results accordingly.

Two approaches can be taken to address this issue:

- Creating multiple synonyms for various dimension formats
- Indexing all possible variations In either case, businesses must list all expected matches.

# How does Netcore Unbxd advanced measurement search simplify this?

Netcore Unbxd is implementing measurement search for ecommerce businesses by utilizing AI and minimizing human intervention.

Netcore Unbxd leverages a natural language processing (NLP) technique, dubbed Named Entity Recognition (NER), which identifies and classifies entities within text to automatically extract structured information from unstructured text, allowing machines to understand and categorize entities meaningfully. This technique is used in applications such as text summarization, building knowledge graphs, and question answering.

NER models enhance user intent understanding by adding semantic knowledge to queries. Also known as entity extraction models, NER models tokenize each search query to map it to desired attributes, returning the most relevant products with high precision. They surpass simple text-pattern matching techniques.
NER identifies predefined attributes (entities) from a search query to decode shopper intent.

Netcore Unbxd's NER AI model employs advanced natural language processing (NLP) techniques to understand shopper intent by analyzing search queries. The model tokenizes each query and applies entity recognition algorithms to identify and classify key entities, including numerical inputs, as distinct attributes. By mapping these entities to relevant product attributes, the model ensures that search results are highly precise and relevant to the shopper's intent. This technical approach allows for more accurate matching and retrieval of products and services based on detailed query analysis.

# The differentiating factors of Netcore Unbxd measurement search:

Netcore Unbxd's advanced AI-powered Measurement Search feature enables ecommerce businesses to improve their business bottom line.

## Measurement Symbol Normalization:

This process standardizes and converts various representations of measurement symbols into a consistent format. For example, the symbol " is changed to inches, or "cms" is changed to "cm" or "centimeter."

## Measurement Unit Normalization:

This involves converting various units of measurement into a standard or unified unit to ensure consistency and comparability. This is essential in data processing, integration, and analysis to ensure that measurements from different sources can be accurately compared and combined.

**Example:**

**Input Measurements:** Length: 12 feet, 3 meters, 5 yards; Weight: 10 kilograms, 20 pounds

**Normalized Output:** Length: 3.6576 meters, 3 meters, 4.57 meters; Weight: 10 kilograms, 9.072 kilograms

- Netcore Unbxd also allows for **Range Search**, which lets users filter products based on specific criteria within a defined range. This helps shoppers quickly find items that match their preferences and budget. For example, if a shopper searches for a mattress less than 12 inches thick, the search bar will automatically show products ranging between 1-12 inches.

- **User-defined tolerance levels** are designed to enhance search queries by introducing a degree of flexibility, allowing for relevant results even if the exact match is unavailable. This approach helps users find products that are close to their search criteria, improving the chances of finding a suitable alternative. For example, if a shopper searches for a 45-inch television, but the retailer does not have it in stock, the result set will highlight the matches closest to the search query—let's say, 42-inch televisions in this case. Netcore Unbxd's recommended tolerance level is 10%.

- **Round-off in search** queries adjusts decimal values to the nearest whole number, improving numeric precision and simplifying filter-based searches. For example, if a user searches for a "10.2-inch firm mattress," the search system will round this to "10-inch firm mattress," thus streamlining the search process and ensuring more accurate results within the given filter parameters.
- **Multi-dimensional search** allows shoppers to search for 2D & 3D specifications.

  E.g., "54" W x 75" L x 10" Firm Mattress" or "54" W x 75" L dimensions with views as W, L and 10" as the third dimension."

### Dimension search offers two modes:

- **Boost Mode:** Products within the specified range are boosted to the top of the results.
- **Filter Mode:** Only products that exactly match the criteria are shown.

In practice, Boost Mode is preferred because it provides relevant results even if the exact criteria are not met, preventing zero-result scenarios.
Netcore Unbxd's solution also has the capability to handle various language inputs efficiently.

## Implementing Netcore Unbxd measurement search

Ecommerce businesses can get up and running with Netcore Unbxd Measurement Search functionality without breaking a sweat. They simply need to upload their catalog, and Netcore Unbxd's advanced AI will handle everything.

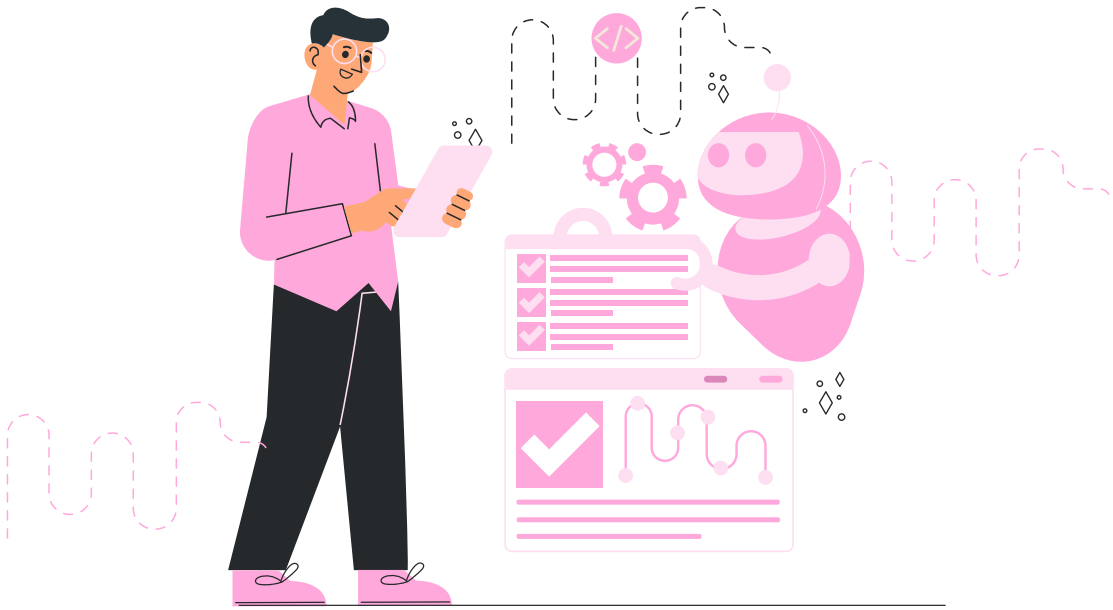
Every catalog of ecommerce retailers holds critical product information—structured, partially structured, or unstructured. This information can be present in various forms, including attributes like size, weight, and capacity. Different product categories and verticals have their own sets of attributes. While some attributes, such as product category, brand, and color, are commonly included, many are buried in lengthy product descriptions.

Netcore Unbxd has the capability to extract meaningful data from these descriptions and create virtual attributes. These virtual attributes function like regular attributes but are not visible in the catalog. This is what enables Netcore Unbxd to produce relevant results based on the shopper's query, resulting in improved user experience and reduced bounce rates.

Take an ecommerce retailer selling portable HDD, for instance. For this specific product, key dimensions can be storage size and price. In such case, Netcore Unbxd will enable dimension search for price, so the product price of $178 is normalized into USD.

As a result, regardless of the query, all prices are converted to USD for consistency. For example, if a user searches for “HDD under $200,” the system will return results matching this criterion.

Now, imagine this retailer has another product – cable – that does fit into the “storage size” dimension. In this case, the ecommerce business should include units like “inches” or “cm” in their catalog entries. For example, instead of just “18,” the entry should be “18 inches” or “18 cm.” This ensures that the Netcore Unbxd system can recognize and process the unit correctly.



## Conclusion

Netcore Unbxd’s AI-powered measurement search goes beyond basic search functionalities, offering advanced features such as measurement symbol and unit normalization, range search, and user-defined tolerance levels. These capabilities not only improve the accuracy and relevance of search results but also simplify the process for shoppers, making it easier for them to find exactly what they need.

As ecommerce continues to evolve, businesses that invest in cutting-edge technologies like measurement search will be better equipped to meet the growing expectations of their customers. With Netcore Unbxd’s innovative solutions, you can future-proof your business, ensuring that your search capabilities are not just meeting today’s demands but are also ready for tomorrow’s challenges.

Book a demo today!

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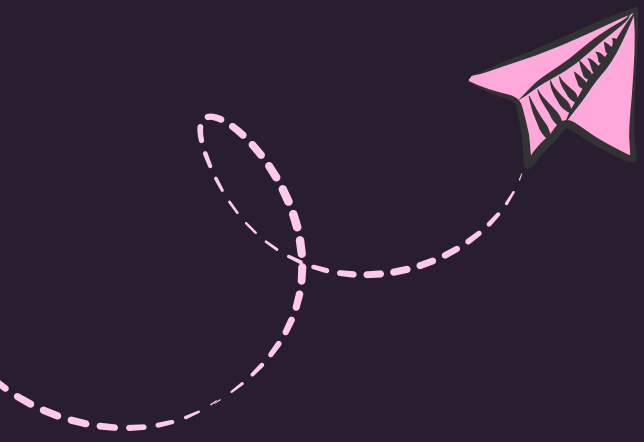
# About Unbxd

Netcore Unbxd is an AI-driven platform designed to empower brands with personalized customer experiences, driving exponential growth in online sales. Our dedication to transforming ecommerce has earned us prestigious accolades, establishing us as a leader in the Gartner® 2024 Magic Quadrant™ for Search and Discovery and the Forrester Wave™: Commerce Search and Product Discovery, Q3 2023 report.

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