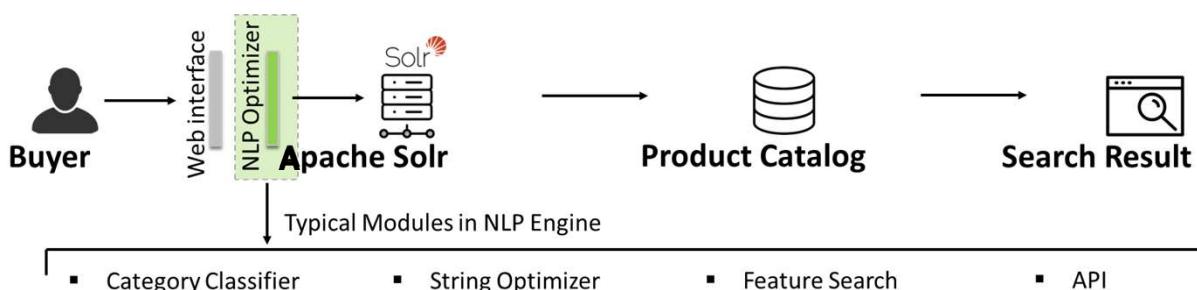


Website Search Optimization using NLP

Project Overview:

- There was a need to improve Search Experience by enhancing existing search functionality on Apache Solr using NLP capabilities
- Custom NLP modules in the form of '**Category Classifier**', '**String Correction**' was developed to drive Category specific search and Feature based search on Apache Solr
- NLP solution was deployed on top of existing Search systems and facilitated existing search functionality and not replaced it

Solution Overview:



Technical Outcome : Python Modules + APIs



Context Spell Check

- Search string given by user will be auto corrected not in isolation but keeping in mind context of the query
- Algorithms: **Bi-Gram, N-Gram**



Precision Panel Search

- Product classifier module will category search string and limit search within specific product category
- Algorithms: **TF-IDF, Support Vector Machine**

Business Outcome:



Superior Customer Experience:

- Improved customer experience by showcasing categories appropriate to customer search expectation

Customer Experience



Product Consideration

High Product Consideration:

- Customer will have better choice in terms of category selection based on more relevant categories displayed

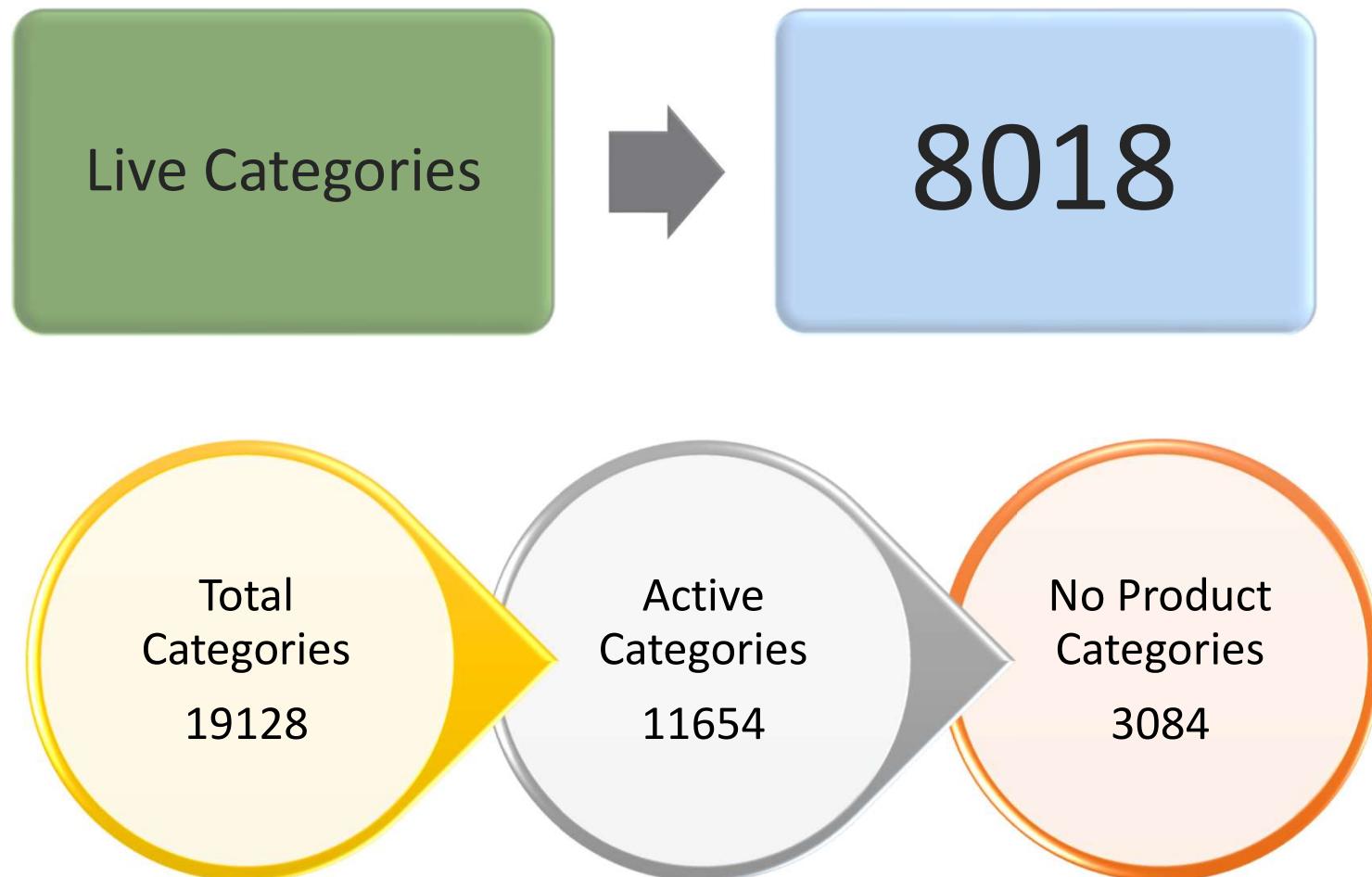


Product Sales

Greater Sales Conversion:

- Higher product sales on GeM platform since customer will be able to find relevant categories listed on platform

Product Categories



Service Categories

- **Development** – Solution is ready for 255 categories and presented it to the Service team.
- **Approval** – Got go-ahead to deploy the solution on UAT.
- **Deployment Nodes** – Home search, Service Search and GeMARPT's.

Current Update :

- Integration team is working on to create the pipeline.
- Service team/MSP will inform the NEC team to deploy the solution once the required changes has been incorporated.

GeM Portal changes

Showing 905 Results for acoustic stethoscope

Acoustic Wall Paneling Work And Acoustic ...
Seller: Resellers
Brand: NA
Min. Qty. Per Consignee: 1
₹ 8,651,421.00
Documents
SpecificationDocument

Acoustic Wall Panelling Work And Acoustic ...
Seller: Resellers
Brand: Soundworks
Min. Qty. Per Consignee: 1
₹ 8,354,800.00
Documents
SpecificationDocument

Acoustic Wall Paneling Work And Acoustic ...
Seller:
Brand: NA
Min. Qty. Per Consignee: 1
₹ 8,518,318.00
Documents
SpecificationDocument

Acoustic Wall Paneling work and Acoustic ...
Seller:

Acoustic Wall Paneling work and Acoustic ...
Seller: Resellers



CATEGORIES All Categories acoustic stethoscope

Keywords searched by you appear in following categories, please click on the category name to look at relevant products:

Uploading of wrong or misleading product in category not relevant for that product is strictly prohibited and such sellers are liable for strict Administrative action as per GeM GTC clause 3 (A) (xiii). Buyers are also warned not to place contracts against such items listed in wrong or irrelevant categories since all such contract shall be treated as null and void as per GeM GTC.

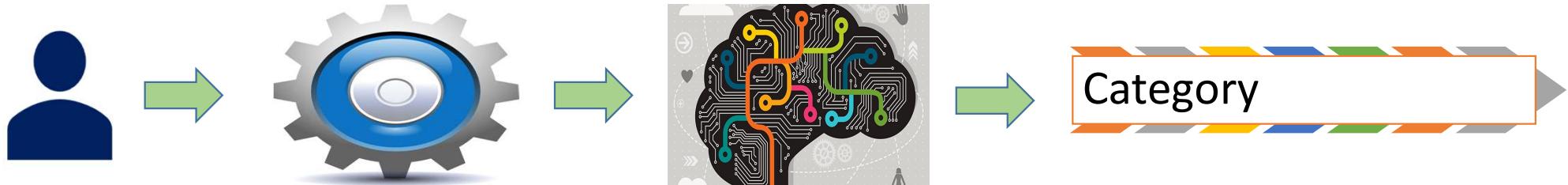
stethoscopes acoustic stethoscope (Q3)	Security and Control Equipment Electronic contactless stethoscope (Q3)	Specialty insulation Acoustical insulation (Q3)
Ducts Inlet Duct - Acoustic (Q3)	printed publications books (Q4)	Acoustical or noise control housings or enclosures Acoustic Enclosure System (Q3)
Hearing testing products Oto-Acoustic Emissions (OAE) Instrument for New Born Infant and Children-RBSK (Q2)	engine component and accessories Turbine - Acoustic Enclosure (BHEL) (Q3)	Integrated circuits Audio Digital Signal Processor (Q3)
Scuba and Snorkeling Gear Under Water Communication set (Diving Instruments or Accessories) (Q3)		

Products listed based on the NLP output Category till June,2022

Current GUI:
Categories list based on the input keywords

New Requirement – Business team

Current Process



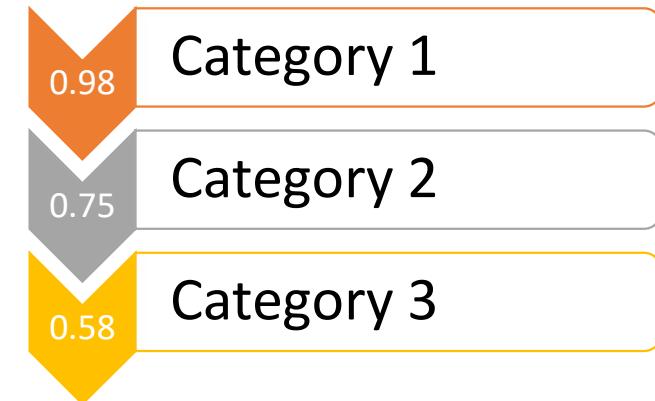
User Query

Preprocessing

NLP Model

Category

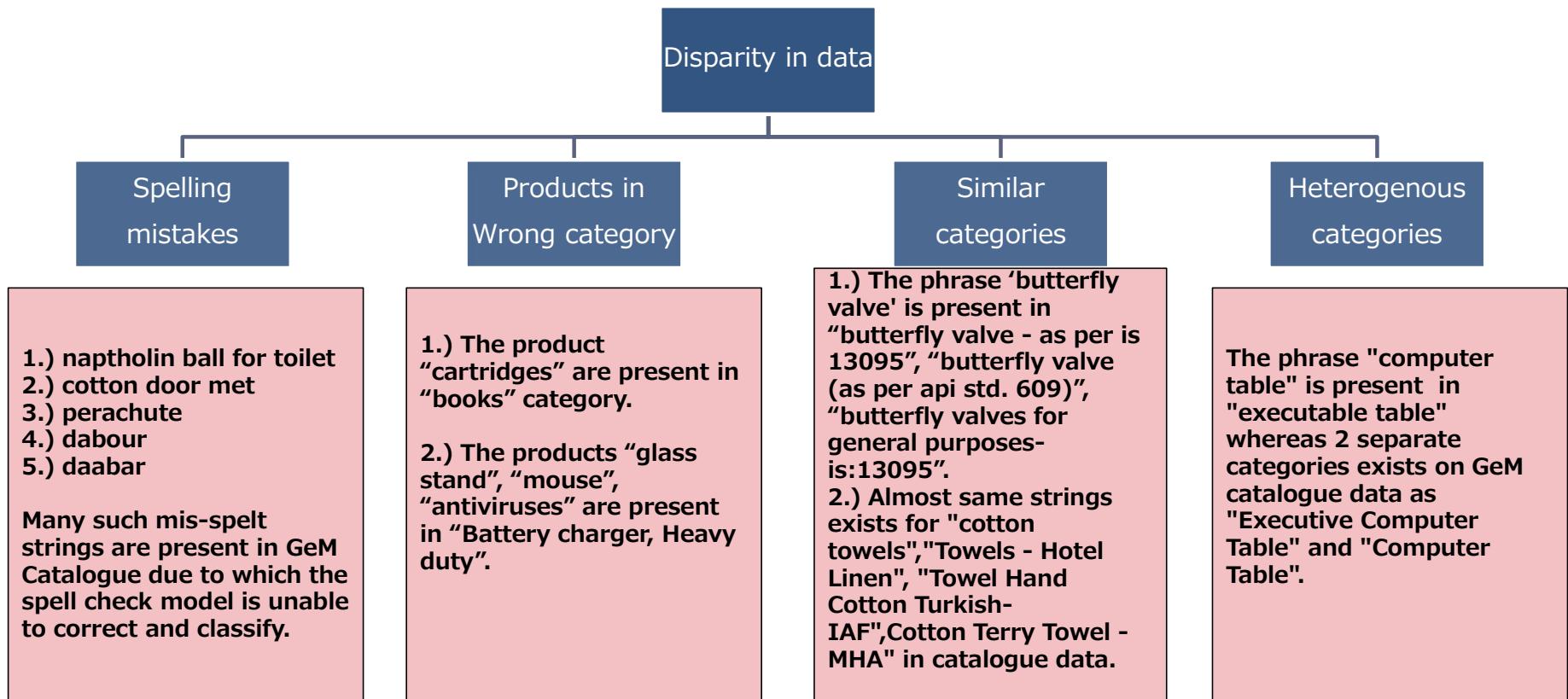
Output



New Process

Challenges in Catalogue Data

Inference – Accuracy is reducing with increasing granularity accentuated by disparity in data



Snapshots:

Language Localization Software Solution (Q2 Category) (Specifications)

SEARCH: Toner X

« PREVIOUS 1 2 3 4 NEXT »

Sort by: Price:Low to High

Showing 43 Results for toner in Language Localization Software Solution



Compatible 88A toner cartridges

Seller: Resellers



HP 12A COMPATIBLE TONER CARTRIDGE

Seller: Resellers



HP 88a toner



BT 925 TONER

Seller: Resellers

★★★★★ 4.61

Category name

Computer Table

Executive Computer Table

Cartridge Check Valve (Q3 Category) (Specifications)

SEARCH: Keyboard X

« PREVIOUS 1 2 3 4 5 ... 13 NEXT »

Sort by: Price:Low to High

Showing 149 Results for keyboard in Cartridge Check Valve



HP WIRED KEYBOARD HP WIRED KEYBOARD



HP WIRED KEYBOARD HP WIRED KEYBOARD



HP WIRED KEYBOARD HP WIRED KEYBOARD



HP WIRED KEYBOARD HP WIRED KEYBOARD

Category name

Limestone Powder - ONGC

LIMESTONE POWDER for ONGC