LTIMindtree

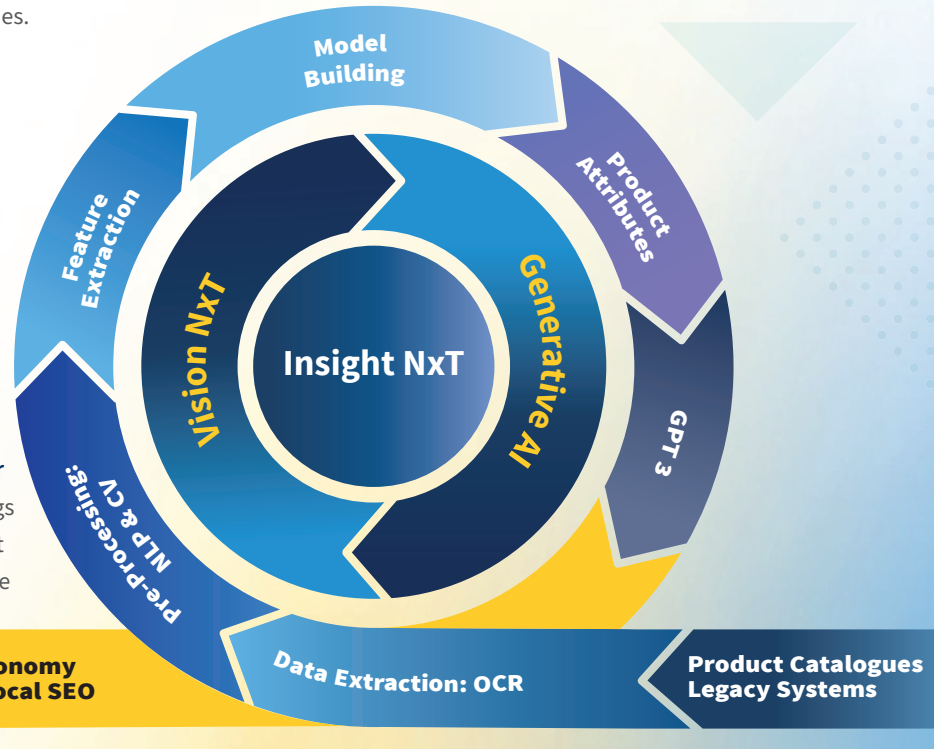# 80% time reduction by AI-driven Product Taxonomy

A global leader in the design and manufacturing of engineering products is transforming the e-commerce business for their irrigation unit using intelligent product taxonomy.

The customer currently has their product details in multiple formats in siloed legacy systems and catalogues. **Developing taxonomy from these unstructured data manually requires humungous efforts and leads to a high turnaround time.**

LTIMindtree developed an AI Engine-driven taxonomy solution leveraging the pre-built foundational capabilities of our Insight NxT platform, including computer vision, Generative AI, etc. Our platform eventually reduced time-to-market and the cost of maintenance for the customer.

Our custom generative AI-based model makes automated decisions and intelligently organizes their E-Commerce products into appropriate categories, tags and attributes, thus helping potential buyers find exact or related products with fewer clicks and enhancing the overall customer experience.
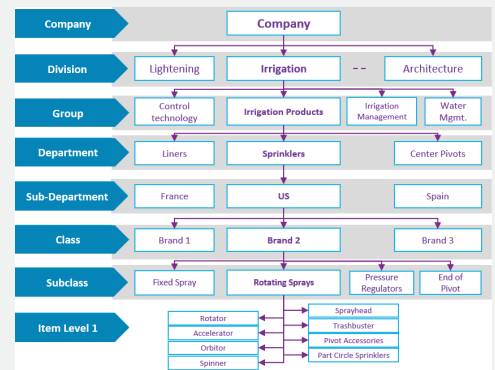

Insight NxT — Model Building, Product Attributes, Generative AI, GPT 3, Data Extraction: OCR, Product Catalogues Legacy Systems, Pre-Processing: NLP & CV, Vision NxT, Feature Extraction, Final Taxonomy used by local SEO

Complexity

- **13000+** SKUs
- **100+** Catalogues per SKU
- **30-50+** attributes per product
- **8 levels** of hierarchical structure
- Geo and business-level classification
- Multilingual capability
- Multi-region deployment

Solution Features

- **Generative AI-based** taxonomy creation
- Dynamic remodeling
- Statistical clustering
- Enterprise integration
- Omnichannel Hierarchy mapping with supply chain

Company			
Division	Lightening	Irrigation	Architecture
Group	Control technology	Irrigation Products	Irrigation Management / Water Mgmt.
Department	Liners	Sprinklers	Center Pivots
Sub-Department	France	US	Spain
Class	Brand 1	Brand 2	Brand 3
Subclass	Fixed Spray	Rotating Sprays	Pressure Regulators / End of Pivot
Item Level 1	Rotator / Accelerator / Orbitor / Spinner	Sprayhead / Trashbuster / Pivot Accessories / Part Circle Sprinklers	

Business Benefits

Data extraction time got reduced from **60 hours to 6 minutes** per catalogue

Automated mapping reduced resource utilization by **80%**

Better sales conversion and reduced bounce rate