

# Extended Linkage Insight (ELI)

# WE FREQUENTLY HEAR NEEDS LIKE THESE FROM OUR CUSTOMERS

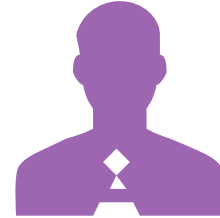
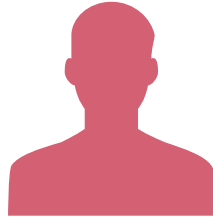
We need linkage insight beyond majority ownership to link multiple Global Ultimate with the same brand name together.

We want an automated linkage process to save manual review effort.

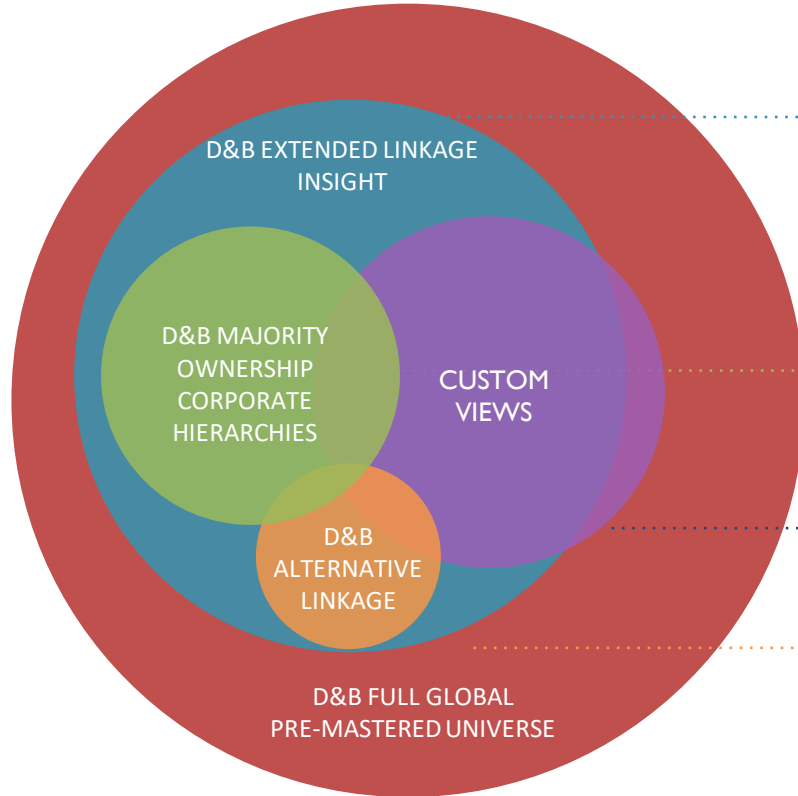
We would like a flexible linkage solution that allows different business divisions within my company to see different view of a business.

We want Dun & Bradstreet to leverage our feedback and insight to build a customized linkage solution for us.

We want out-of-business records to remain linked in the linkage database.



# ELI IS A PROBABILISTIC CAPABILITY VS. OTHER FORMS OF LINKAGE



## D&B Extended Linkage Insight

Utilizes Machine Learning to link businesses as a linkage expert would and capture a wide spectrum of potential relationship including majority ownership, minority ownership, franchise, dealership and much more.

## D&B Majority Ownership Corporate Hierarchies

Identifies business-to-business relationships where majority ownership (>50% shareholder) exists

## CUSTOM VIEWS

Customer created, often using Majority Ownership linkage as a foundation, customers select what to include.

## D&B Alternative Linkage

- Franchise, dealership, agency and much more.
- Joint Venture, minority ownership

# EXTENDED LINKAGE INSIGHT



**BRAND RECOGNITION MODEL** to extract brand name from business names and trade styles. E.g. “Caterpillar Logistics Services International Company” has “Caterpillar” extracted.



**LINKAGE RECOMMENDATION MODEL** to find best linkage candidates among D-U-N-S sharing same brand name, physical address, website address, phone number or CEO name.



**LINKAGE PREDICTION MODEL** to predict the confidence using name similarity, brand uniqueness, SIC relateness, company website, financial statement, Wikipedia data, customer feedback, etc.



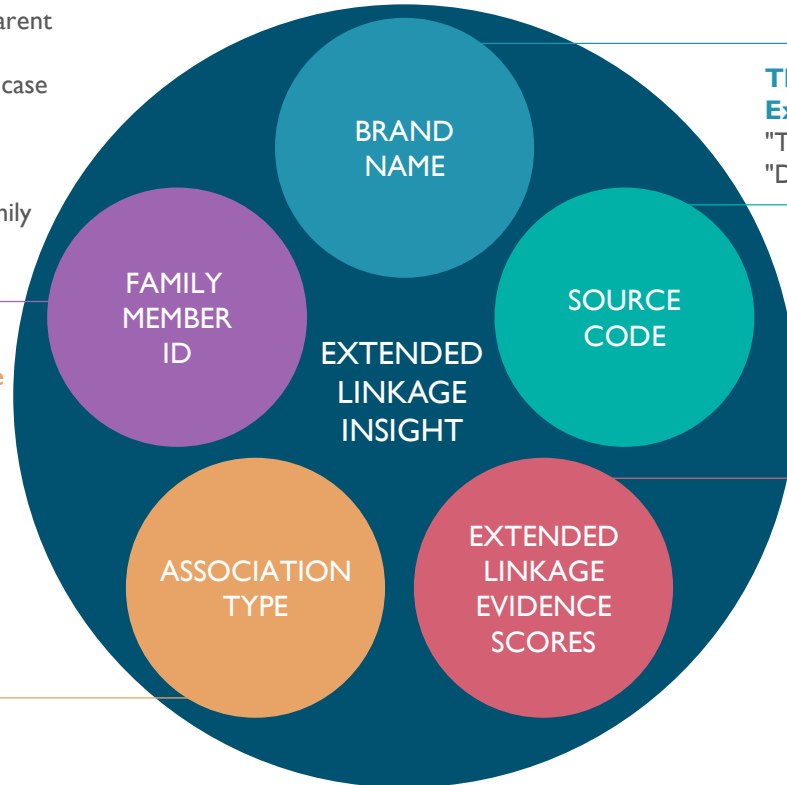
**CREATE ELI FAMILY TREE** with Majority ownership, Alternative Linkage and Extended Linkage.

# KEY COMPONENTS OF EXTENDED LINKAGE INSIGHT

- **ELI Global Ultimate:** The highest parent within the ELI family.
- **ELI Parent:** Immediate parent of the case D-U-N-S. When legal linkage exists, extended parent will be equal to legal parent.
- **ELI Domestic Ultimate:** the ELI family member with highest Parenting Score in the same country of case D-U-N-S.

## Provides insights (where appropriate) into the nature of the relationship between the entities

- "L" = Majority ownership (>50%)
- "M" = Minority ownership (≤50%)
- "A" = Agent
- "D" = Dealership
- "F" = Franchiser
- "P" = Partnership
- "C" = Co-op
- Etc.



## The brand name extracted by the Extended Linkage algorithm.

"The Dun & Bradstreet Corporation" = "DUN&BRADSTREET".

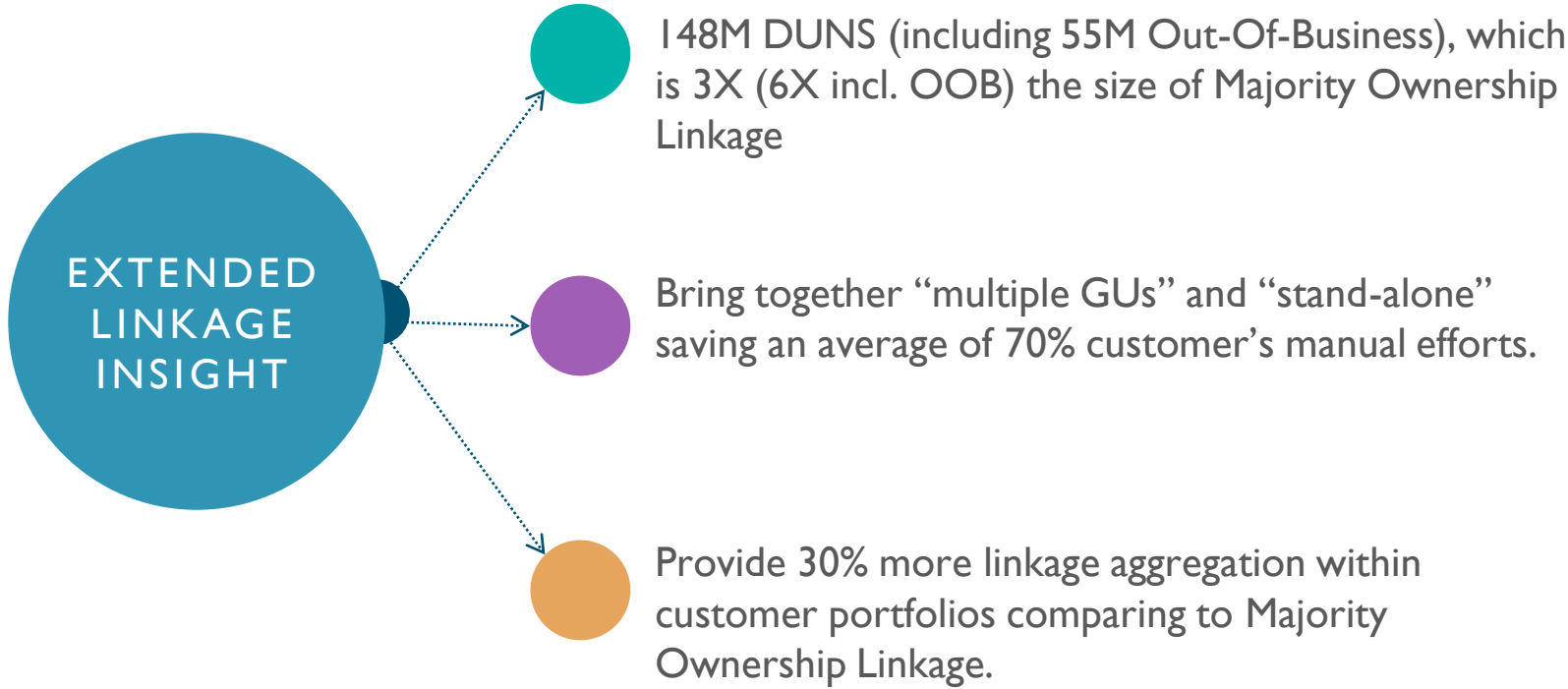
## Source of the linkage:

- 9 indicate Legal Linkage.
- 8 indicate Local Market Linkage.
- 7 indicate Alternative Linkage.
- 3-6 indicate a modeled linkage: 6=highest certainty, 3 = lowest certainty.

## Provide insight behind the certainty of the modeled linkage

- SIC Evidence
- Brand Evidence
- Location Evidence
- Domain Evidence
- CEO Evidence
- Name Evidence
- Phone Evidence
- Wikipedia Evidence
- Financial Report Evidence
- Website Evidence
- Feedback Evidence

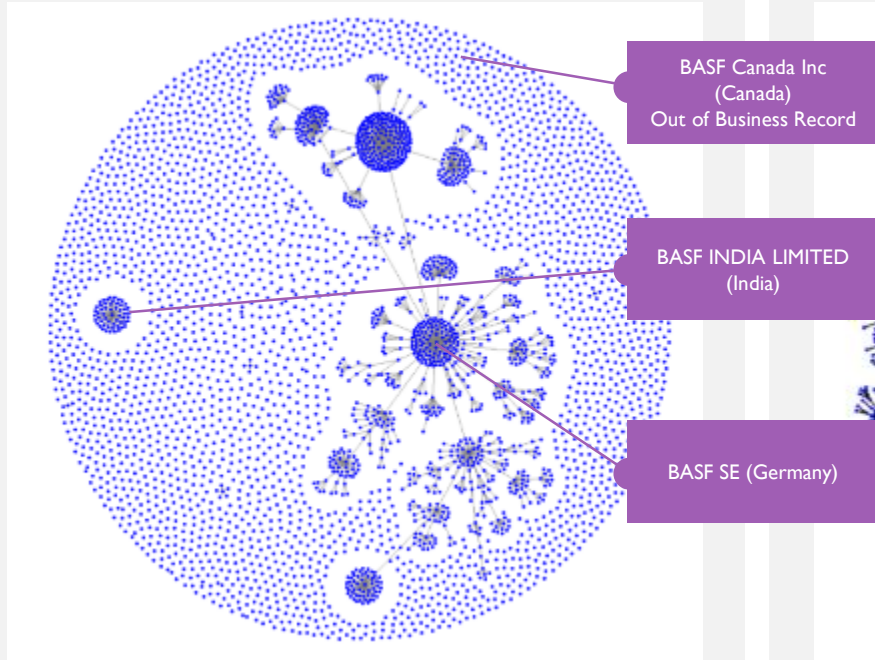
# EXTENDED LINKAGE INSIGHT (ELI): BENEFITS



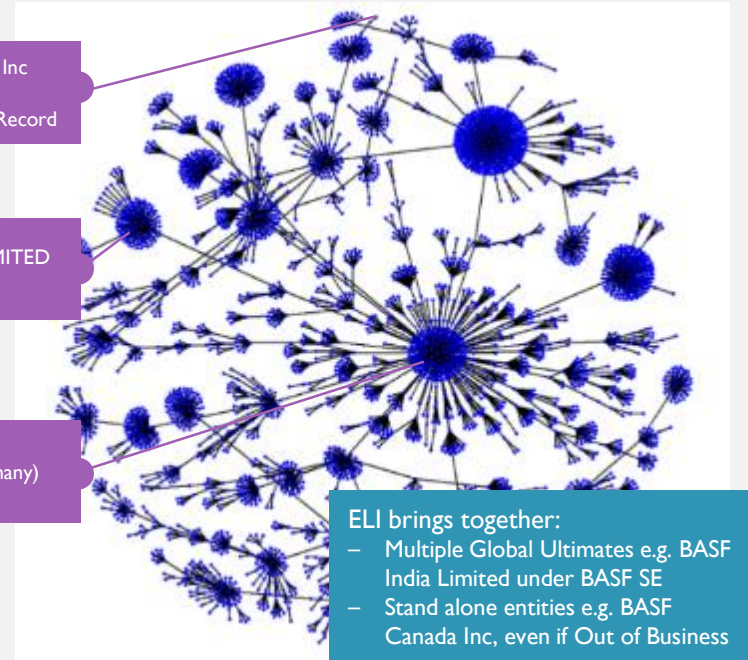
NOTE: based on human validation on a sample of 5,000 records

# TWO VIEWS OF THE ACTUAL DATA PULLED TOGETHER FOR BASF

## LEGAL LINKAGE HIERARCHY



## EXTENDED LINKAGE INSIGHT



# CUSTOMER USE CASES AND RECOMMENDATION

Master Data

Sales Territory Planning

Subscribe to ELI: Automatically accept records with source code  $\geq 5$  and manual review source code = 3 or 4 per request

White Space Analysis

Account-Based Marketing

Subscribe to ELI: Automatically accept all records with source code  $\geq 3$



**THANK YOU**