Relationship Extraction

Finch for Text is powerful Natural Language Processing (NLP) software that helps you turn your text into valuable, actionable insights. Among its many capabilities is Relationship Extraction, which has proven to be immensely valuable across a number of domains and use cases - from diligence, to competitive intelligence to supply chain risk management and more.

What is Relationship Extraction & Why Is It Important?

Relationship Extraction refers to the ability to discern how two entities are connected to one another. For companies, this can mean understanding supplier-customer, parent-subsidiary, or acquirer-acquired relationships. Understanding these connections can help organizations examine many types of risk or opportunity. Doing so in real-time and on huge volumes of text accelerates their ability to identify and assess these risks and opportunities, and then to make critical business decisions as a result.

How Does Finch for Text Perform Relationship Extraction?

Finch for Text, leveraging its superior and highly accurate entity extraction and disambiguation capabilities, goes beyond keyword search and deploys proprietary deep transfer learning and artificial intelligence to extract relationships. Additionally, with this approach we can discover the status of an extracted relationship - whether it is current, emerging or ending.

How is the Information Returned to a User?

Users receive information about the relationship as well as supporting "evidence." We provide the exact sentence from which the relationship was inferred and, via JSON, the subject, predicate and object.

As an example, in this sentence: *Apple purchased a record amount of inventory from touch film maker 3M in 2021.*

"Apple" would be the subject; "purchased" would be the predicate and "3M" would be the object. Finch for Text understands that "purchased" indicates a customer relationship and correctly identified the parties and roles in the relationship.

What Relationships Can Finch for Text Identify?

For companies, Finch for Text can extract and identify current, potential and past (ended) relationships including:

- Employee-of
- Employer-of
- Partner-of
- Customer-of
- Invested-in
- Owner-of
- Subsidiary-of
- Director-of
- Founder-of
- Acquired
- Co-Investor-with
- Competitor-with
- Educated-at
- Has-Member
- Organization-Location
- Person-Location
- Relative-of

From the news content below, Finch for Text was able to correctly extract and disambiguate seven companies, five places, 68 key phrases, five company relationships and more.

Apple supplier Unimicron Technology Corp (3037.TW) late on Sunday said three of its China subsidiaries stopped production from midday on Sept. 26 until midnight on Sept. 30 to 'comply with the local governments' electricity limiting policy'. Eson Precision Ind Co Ltd (5243.TW), an affiliate of Taiwan's Hon Hai Precision Industry Co Ltd (Foxconn) (2317.TW), in a statement said it suspended production from Sunday until Friday at facilities in the Chinese city of Kunshan. Concraft Holding Co Ltd (4943.TW), a supplier of speaker components for Apple's iPhone and which owns manufacturing plants in Suzhou city, said it would suspend production for five days until noon on Thursday and use inventory to meet demand. 'UMC's Hejian fab in Suzhou is currently running at full capacity utilization of 80,000 plus wafers per month,' said the Taiwanese firm, whose clients include Qualcomm Inc (QCOM.O). Foxconn, a major Apple supplier, declined to comment.

From there, Finch for Text correctly identified several relationships between the mentioned entities, as shown at right, which includes customer and subsidiary relationships even though these are not expressly mentioned in the passage.
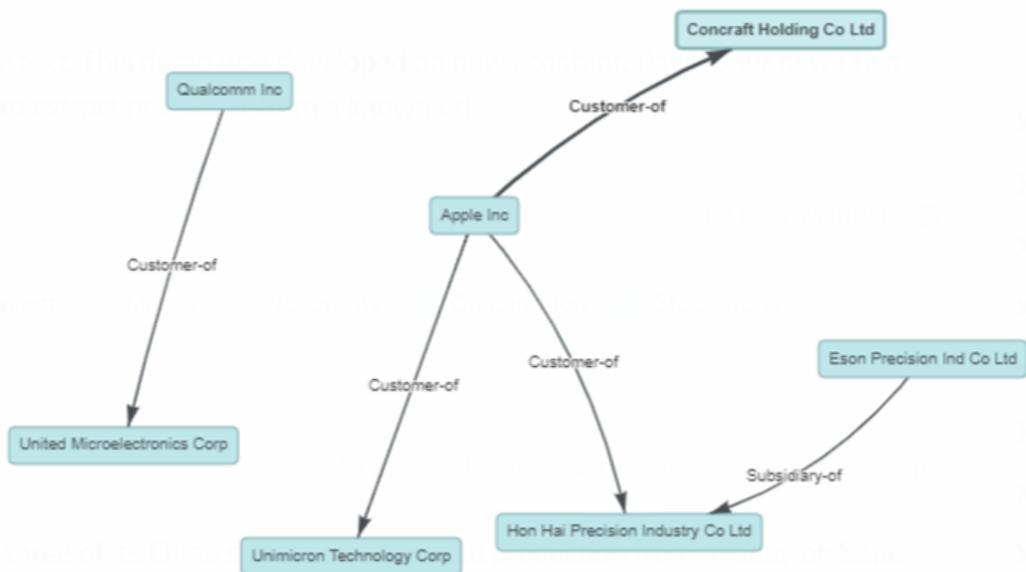
To learn more, contact: sales@finchcomputing.com