

What is LanguageWare?

jStart Explains the Business Value of this
Emerging Technology



solutions start here.

What is LanguageWare?

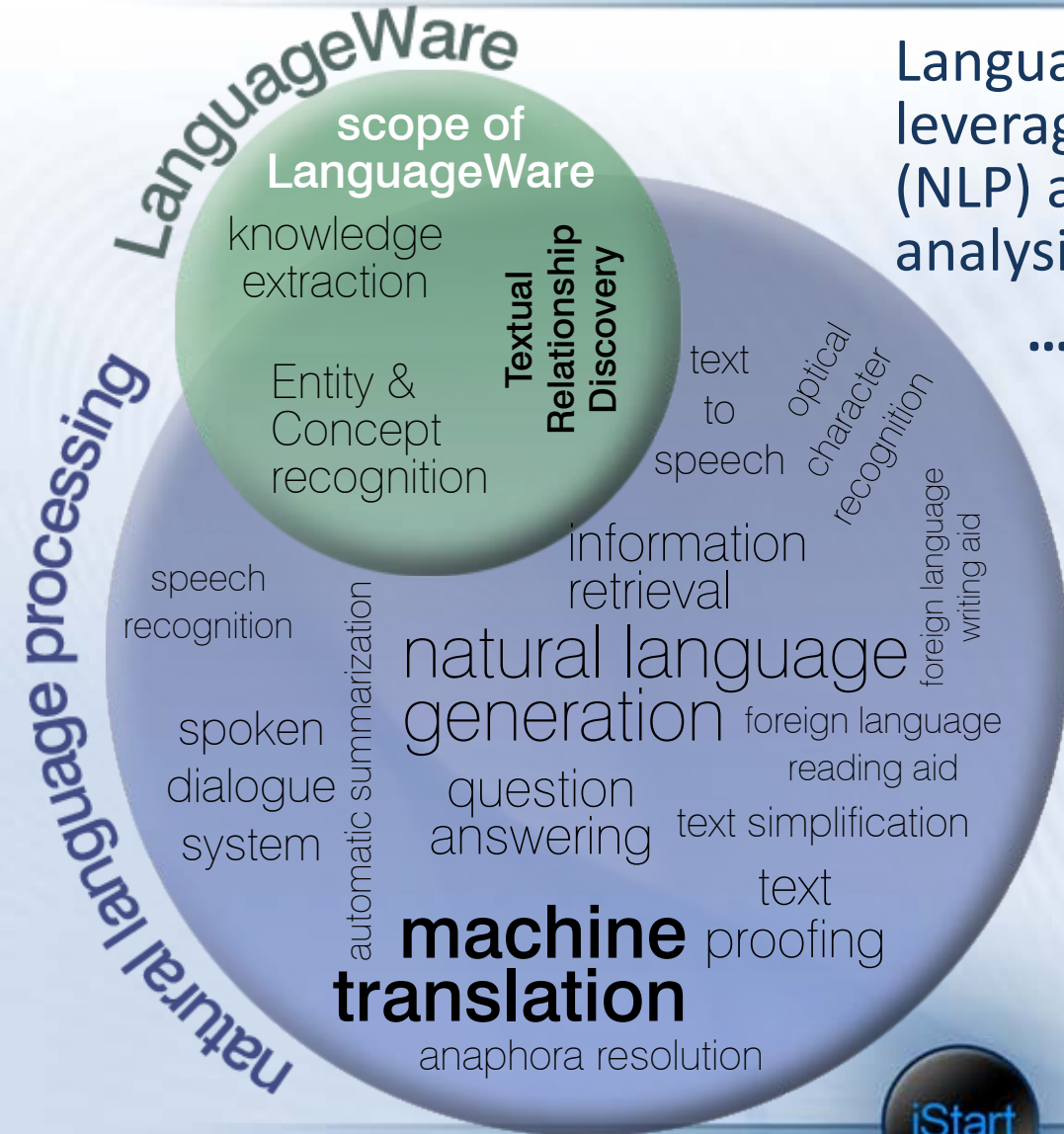


LanguageWare is a technology which leverages Natural Language Processing (NLP) at the document level for text analysis ...

...LanguageWare encompasses three of these NLP areas...

- Entity & Concept Recognition
- Knowledge / Information Extraction
- Textual Relationship Discovery

So the question is:
What can your business do with this technology?



**Our Answer:
A scenario to consider...**



solutions start here.

A Reimbursement Review/Risk Analysis Scenario



This is just one of 9,658 reimbursement claims to review for this week generated by *Secure Insure's* legacy digital reporting form system...

Secure Insure Digital Reimbursement System **Date:** 4/2/2009
Claims Adjuster: Shannon Heights
Site Administrator: Charles Newman
Estimated Request(\$): 9764.59
Product Plan TYPE: SPH Standard
Approval Status: (pending)

COMMENTS:

Shannon,

I have an additional Secure Policy Holders reimbursement request to complete from Signa Hospital by EOB Friday. They anticipate needed funds for Standard Wound Suture, Primary Call Surgeon labor, and Blepharoplasty to cover costs stemming from a last minute facial-area injury patient. To keep solid relations with them, we need SPH support for this by next week, especially since this client has a 12 year history with us. DJ and Alex mentioned that you were adding rare disease coverage to SPH and were merging Beth Davie's FamilyCare Plan with SPH Deluxe. When will this new plan be available? Also, could you overnight the approval forms for the SPH reimbursement to me?

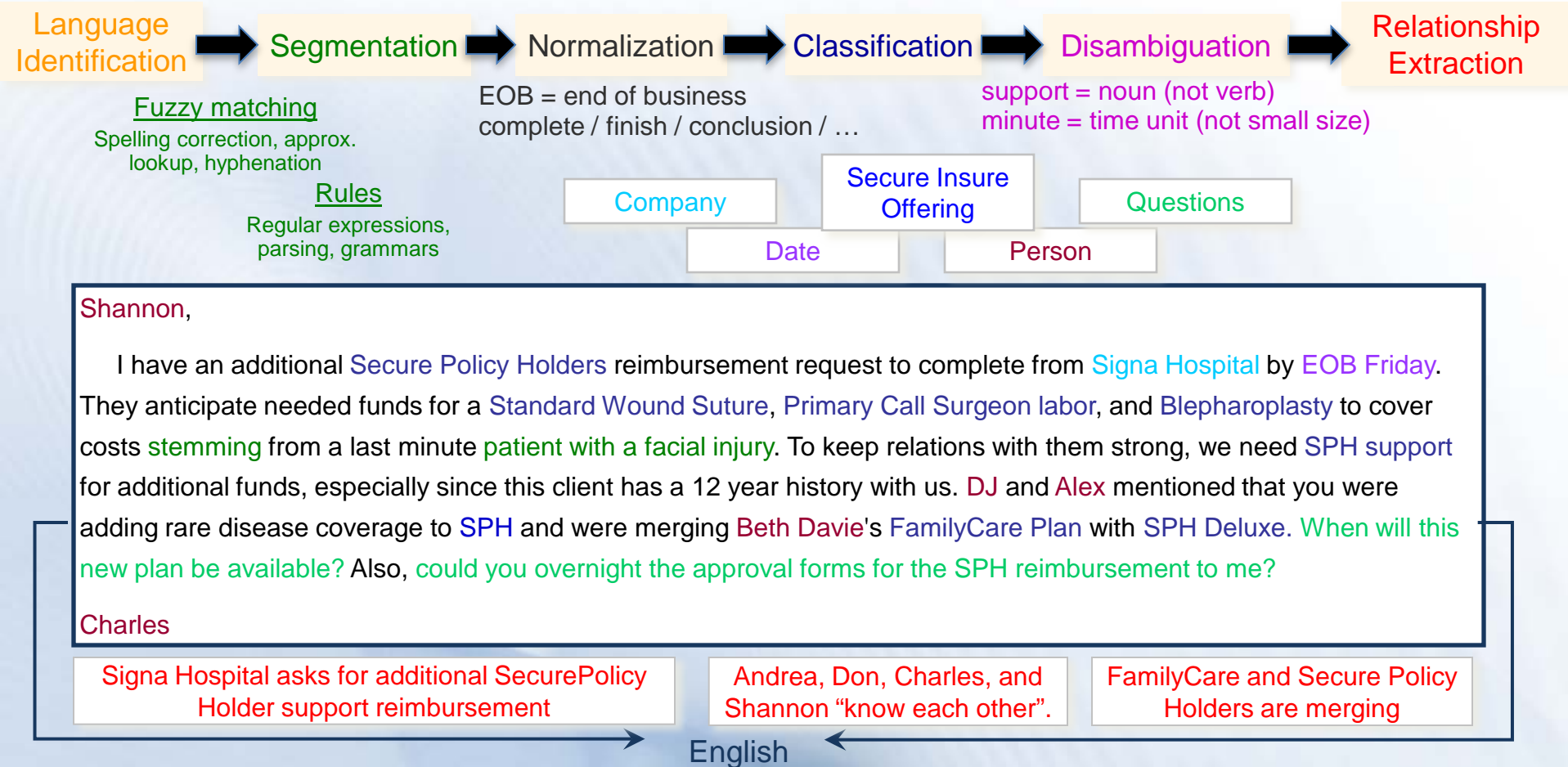
Charles



What does *LanguageWare* do here?



Applies multiple stages of NLP to the unstructured text in each claim...



Move from demanding complexity & uncertainty...



Reimbursement Requests
Pending Review
FY09 Q2 Wk3
#0001 - #9658



Classification

Company =
Signa Hospitals
Date = Friday 4/3/2009
Secure Insure Offering =
Secure Policy Holders (SPH)
Person = Andrea, Charles,
Don, Shannon, Beth Davie
Questions = When will this new
plan be available?

Disambiguation

support = noun
(not verb)
minute = time unit
(not small size)

Relationship Extraction

- Andrea Charles
Shannon & Don "know
each other"
- Signa Hospital asks for
additional SecurePolicy
Holders reimbursement
- FamilyCare and Secure
Policy Holders are
merging

Normalization

EOB =
end of business /
complete /
finish /
conclusion

Segmentation

steming > stemming
(spelling)
facial-injury-patient >
patient with a facial
injury (grammar)

Language
Identification
ENGLISH

SECURE INSURE, INC
Language Ware
Reimbursement Requests Summary
9658 files processed

132

High Risk Claims to review.

272

Probable Risk Claims to review.

9254

Claims ready for approval.

...to fluent simplicity and
security.



Reimbursement Review/Risk Analysis



The Insurance Company Perspective

Secure Insure seeks more control over highly *variable operational costs* due to *claims payouts*; effective reimbursement reviews/risk analyses become critical.

How can text analytics help?

- Companies attempt to **create some structure** on the information gathered through forms based systems – but most claims information is actually a form of **highly unstructured text**.
- Forms cannot possibly capture all the complex details that affect liability when the sources of this **real world information** is primarily **imperfect free form text**.
- Text Analytics is the only way that this free form text can be harnessed to **contribute effectively to the decision making process** and **render a complete picture for review and risk analysis**. Currently this information relies on human readers and frequently gets overlooked.
- Make this information **contribute to your bottom line** instead of lying hidden at the bottom of a content management database.

Secure Insure Digital Reimbursement System Date: 4/2/2009
Claims Adjuster: Shannon Heights
Site Administrator: Charles Newman
Estimated Request(\$): 9764.59
Product Plan TYPE: SPH Standard
Approval Status: (pending)

COMMENTS:

Shannon,

I have an additional Secure Policy Holders reimbursement request to complete from Signa Hospital by EOB Friday. They anticipate needed funds for Standard Wound Suture, Primary Call Surgeon labor, and Blepharoplasty to cover costs stemming from a last minute facial-area injury patient. To keep solid relations with them, we need SPH support for this by next week, especially since this client has a 12 year history with us. DJ and Alex mentioned that you were adding rare disease coverage to SPH and were merging Beth Davie's FamilyCare Plan with SPH Deluxe. When will this new plan be available? Also, could you overnight the approval forms for the SPH reimbursement to me?

Charles



High Risk Claims to review.

Standard Wound Suture – OK
Primary Call Surgeon labor – OK

Blepharoplasty – Flagged “Typically a **cosmetic** eyelid surgery procedure”



How does LW enhance my business processes?



Start by building *custom dictionaries and rules* to capture the knowledge or field expertise of your “*business domain experts*”. This knowledge evolves over time and learns from these users.



As LW captures their knowledge, it can be *integrated into your current applications* to extract and analyze streams of free form text— exposing new relationships, results, and insights relevant to your business.



Convert these results into any repository type (relational DB, XML, etc.) for increased accessibility and transparency. *Business processes can then benefit from new information and insights.*



Thanks!

Contact us to discover how LangaugWare
can make an impact on your bottom line.



solutions start here.