

CASE STUDY:

Oil and Gas Industry Acquisition

Problem:

How can the third largest oil company in China acquire the twelfth largest oil company in Canada?

THE TIMELINE

2005 ---

China National Offshore Oil
Corporation (CNOOC) attempts to
purchase American oil company
Unocal Corporation for
an all cash deal of \$18.5 Billion. The
offer is later withdrawn citing "political
tensions" in the United States.

2006

Canadian Prime Minister Stephen Harper speaks out against the People's Republic of China, citing the country's human rights violation and it's love of the "almighty dollar."

2009

The University of Toronto's Munk
Center for International Studies
exposes a cyber espionage ring that
had penetrated more than 1,200
computer systems in 103 countries.
Targets included news media,
government ministries and
embassies, and nongovernmental and
international organizations. Dubbed
"Ghostnet" by the investigating team,
these computer network exploitations
(CNE) used Chinese malware and
three of the four control servers were
in Chinese provinces.

2006

China approves is eleventh "5-Year Plan" with key themes of "sustainable long-term growth" and reductions of energy consumption

2008

China intensifies its already concerted efforts to become the world's most active and persistent perpetrators of economic espionage.

Shanghai Jiaotong University and the Lanxiang Vocational School train

Lanxiang Vocational School train Chinese military personnel on sophisticated hacking and advanced persistent threat technologies.

2011

China approves its twelfth "5-Year Plan" with key themes of growth through investment and consumption and includes aggressive plans to modernize and greatly expand Chinese domestic oil refining capabilities.



2011 -

CNOOC purchases Opti Canada, a 35% partner with Nexen in Long Lake, a steam-driven oil sands project in Norther Alberta.

2012

CNOOC hires lobbyists in Canada, USA and Great Britain (Hill and Knowlton and Bell Pottinger) respectively.

2012

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2012

Nexen, Inc. agrees to be purchased by CNOOC in an all cash \$15.1 Billion deal.

2012-

An ongoing Canadian Security
Intelligence Services (CSIS) probe into
First Nations dealings with various
Chinese entities is disclosed.
Approval of the various native peoples
(including the Kaska Nation) was a
requirement for the approval of the
transaction.

2012

Nexen, Inc. a Canadian Oil and Gas company with global operations suddenly has CEO Marvin Romanow resign and he is immediately replaced by Interim CEO Kevin Reinhart.

2012

CNOOC hires the Law firms of Davis Polk & Wardwell LLP with offices in New York, Bejing and Hong Kong. Herbert Smith Freehills in Great Britain and Stikeman Elliott LLP in Canada.

2012

Canadian PM Stephen Harper, Foreign Affairs Minister John Baird, International Trade Minister Ed Fast, Agriculture Minister Gerry Ritz and Natural Resources Minister Joe Oliver travel to China. The agenda is topped by Oil and Gas Exports and Trade and Investment with brief mention of human rights and Panda bears.

2012

Canadian public opinion appears to be against authorizing the deal to be completed.





- 1. China will become such a powerful player in the global oil market that the country will be able to manipulate supply.
 - **2.** China will obtain sensitive technological information.
- 3. China will gain (a stronger) foothold in Western nations' information technology raising the specter of ever greater economic espionage and computer network infiltration.



New York Senator Charles Schumer urges Tim Geithner, chair of the U.S. Committee on Foreign Investment to allow the deal to go through.

- 2012

Alberta Premier Alison Redford travels to China and endorses the buyout deal.

- 2012

The Nexen, Inc. shareholders approve the acquisition.

Solution:

Defined Calculus of Concepts

Actor	[G]	Condition	[F]	Event	[J]	Outcome	[Y]
Action	[H]	Context	[C]	Ideation	[L]	Relation	[R]
Abstraction	[A]	Decision	[X]	Indicia	[1]	State	[S]
Attribute	[B]	Domain	[D]	Location	[Q]	Temporal	[T]
Assertion	[Z]	Environment	[E]	Object	[K]	Universe	[U]

Definition of Concept Relations:

For at least one Universe [**U**] there is at least one Environment [**E**] that contains one or more Domains [**D**] that contains one or more Contexts [**C**] that contains one or more Abstractions [**A**] all of which possess one or more Attributes [**B**] each with one or more States [**S**] all of which makes one or more Assertion [**Z**] regarding one or more Relation [**R**] which necessarily signals one or more Indicia [**I**] of and between said predicates over a Certain Temporal Window Δ (CTW).

The predicate classes may be recursive to n-levels in any relation to another member or set/subset of the Predicate Alpha {**PA**} or to/from/with any individual member or set/subset of the Predicate Delta {**PD**}.

Alpha
$$\{PA\} = \frac{([E] < -> [D] < -> [C] -> [A] -> [Z] -> [R]([B] AND [S]) -> [I])}{\Delta(CTW)}$$



For at least one Predicate Alpha $\{PA\}$ State $\{PA[S]\}$ there exists one or more Conditions [F] which necessarily affects one or more Actor [G] that effects one or more Actions [H] which necessarily effects one or more Events [J] AND/OR Objects [K] which necessarily effects one or more Locations [Q] which necessarily effects one or more Ideation [L] all of which possess one or more Attributes [B] each with one or more States [S] which implies one or more Relation [R] which necessarily signals one or more Indicia [I] of and between said predicates over a Certain Temporal Window $\Delta(CTW)$. The predicate classes may be recursive to n-levels in any relation to another member or set/subset of the Predicate Delta $\{PD\}$ or to/from/with any individual member or set/subset of the Predicate Alpha $\{PA\}$.

$$Delta \{PD\} = \frac{(\{PA[S]\} + [F] < ->[G] < ->[H] < ->[J] < ->[Q] < ->[L] < ->[R]([B] AND [S]) < ->[I])}{\Delta(CTW)}$$

U(Prime Concept Instance (PCI)) =
$$\frac{\{PA\} + \{PD\}}{\Delta(CTW)}$$

The abstract equations above describe the input concepts and logical relations utilized by our machine learning algorithms to build communication networks for our clients.

The sources and methods utilized to train our classifiers are our competitive advantage and fuel an incredibly compelling value proposition. The concepts enumerated above, either as nominal or ordinal values, as the particular instance may require, inform our methods of communication network generation to maximize our messages impact on influencing decision makers, public opinions, news headlines, individual behaviors and ultimately situational outcomes.

Contact Hubris Analytics (inquiries@hubrisanalytics.com) today to find out how our calculus of concepts can be customized to deliver meaningful results for your particular needs.

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