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Intelligence analysis

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Words of estimative probability

Today's information is often littered with vague, ambiguous phrases that may be interpreted in multiple ways, quite often the wrong way. This may lead to wrong conclusions and thus to wrong decisions.

Reasons for using these vague weazel like phrases can be many, such as hiding lack of knowledge, trying to hide the truth, political reasons, legal reasons etc.

Below are some famous examples:

Darling, during my stay over here in London, I have not had a single beer and I have eaten vegetarian only Arno R.

Weasel words examples

1. Some, many, important, "this article", "well known"

2. References: "the minister of finance and the secretary for defence where there. He decided to ..."

3. Probably, almost, up to ("up to 50% reduction"), from ("from 50 persons up to 200")

4. Somewhere, between ("the group of hooligans is estimated to be somewhere between 50 and 500 people")

Weasel phrases

1. "There is an increased chance of new Facebook riots in Quadronia"

2. "Evidence suggests that police cannot handle..."

3. An airfield, or not, or maybe?

    (a) "This is almost certainly an airfield"

    (b) "This is most probably an airfield"

    (c) "This looks like an airfield"

4. "It is possible that terrorist will try something in Quadronia and sooner or later they will".

5. "It is clear that this situation can no longer be tolerated".

The Presidents brief

Although it is impossible to determine which course the Kremlin is likely to adopt, we believe that the extent of Satellite military and propaganda preparations indicates that an attack on Yugoslavia in 1951 should be considered a serious possibility National Intelligence Estimate 29-51, March 1951

General Intelligence and Security Service

Het Nanotechnology Center van IBM in het Zwitserse Rschlikon ontsnapte in 2010 aan een grote aanslag, toen anarchisten op weg daarheen in een politiefuik reden en hun bus vol met gasflessen werd tegengehouden. In de afgelopen jaren is met name Mexico opgeschrikt door een groot aantal aanslagen van de schimmige organisatie 8216;Individualists Tending toward the Wild8217; tegen onderzoekers op dit terrein. Dit heeft geleid tot een dode en een aantal zwaargewonden. Op dit moment ziet de AIVD geen aanwijzingen dat Nederlandse actievoerders zich het onderwerp al hebben toegeigend, maar er is wel belangstelling voor.

Op het gebied van het verzet tegen kern energie in de brede zin van het woord verwacht de AIVD een opleving in de aanloop naar de Nuclear Security Summit 2014 (NSS 2014), omdat dit voor met name de activisten een goede gelegenheid is om de standpunten voor het brede publiek te verhelderen.

NLGeneral Intelligence and Security Service, 2013

Source: Links activisme en extremisme in Nederland [left wing activism and extremism in The Netherlands]. - Den Haag : Algemene Inlichtingen- en Veiligheidsdienst, sep 2013

1.3   Principles for intelligence analysis

Introduction

Analysis of information is needed to produce intelligence reports that will unambiguously explain what is going on, that will unambigously report on events, without any misunderstanding, and predict the future.

Sherman Kent

From the CIA Career Analyst Programme (CAP), Sherman Kent School for Intelligence Analysis

(See figure ˜1)

1. Intellectual rigor

   (a) Judgments are supported by facts or credible reporting
   (b) All sources are reviewed and evaluate for consistency, credibility
   (c) Uncertainties or gaps in information are made explicit

2. Conscious effort to avoid analytical biases

   (a) State working assumptions and conclusions drawn from them explicitly
   (b) Subject assumptions and conclusions to structured chanllenge: what developments would indicate they would be wrong

Figure 1: Sherman Kent

    (c) If uncertainties or the stakes of being wrong are high, identify alternative outcomes and what it would take for each to ocurr

3. Willingness to consider other judgments

    (a) Recognize the limits to your own expertise and avoid treating your account as yours alone

    (b) Seek out expertise that will complement your own as a product is being prepared.

    (c) Strong differences of view should be made explicit.

4. Collective responsibility for judgment

    (a) Seek out and allow time for formal coordination of your product

    (b) Represent and defend all Agency and DI views

    (c) Make it clear when your express individual views; do so only when asked

5. Precision of Language

    (a) Provide your most unique or new insight or fact quickly

    (b) Use active voice and short sentences; avoid excessive detail; minimize the use of technical terms. Follow DI writing guidelines

    (c) Shorted is allways better.

6. Systematic use of outside experts as a check on in-house blinders

    (a) Seek out new external studies and experts relevant to your account and discipline on a continuing basis

    (b) Keep up with news media treatment of your account and consider whether their perspective offers unique insight

    (c) On key issues, indicate where outsiders agree or disagree with your judgments

7. Candid admission of shortcomings and learning from mistakes

   (a) Recognize that intelligence analysis will sometimes be wrong because it must focus on the tough questions or uncertainties

   (b) Review periodically past judgments or interpretations; what made them right or wrong; how could they have been better

   (c) Alert the policymaker if you determine that a previous line of analysis was wrong. Explain why and what it means

8. Attentiveness to and focus on policymaker concerns

   (a) Deliver intelligence that is focused on and timed to the policymakers current agenda

   (b) Make clear the implications of your analysis

   (c) Provide 8220;actionable8221; intelligence that can help the policymaker handle a threat, make a decision or achieve an objective

9. Never pursue a policy agenda

   (a) Personal policy preferences must not shape the information presented or the conclusions of intelligence analysis

   (b) Politely but clearly deflect policymaker request for recommendations on policy

   (c) Intelligence helps the policymaker by reducing the range of uncentainty and risk, and by identifying opportunities for action. It does not make the choice for him.

1.4   Intelligence failures

Predictions by industry leaders

Intelligence reports sometimes go wrong when trying to explain events, or, predicting the future. Some famous examples are:

(See table~1)

Table 1: Predicting future events

”Next Christmas, the iPod will be dead, finished, gone, kaput”	Sir Alan Sugar, founder and owner Amstrad, 2005
”Television won't be able to hold onto any market it captures after the first six months. People will soon get tired of staring at a plywood box every night	Daryl Zanuck, co-founder 20th Century Fox, 1946
”There is no reason for anyone to want a computer in their home”	Ken Olsen, president chairman and founder of Digital Equipment Corp, 1977

(next page . . .)

Table 1 ... Contd.

"Nobody would ever need more than 637KB of memory on their personal computer"	Bill Gates, founder and owner Microsoft Corp., 1981
"I predict the Internet will soon go spectecularly supernova and in 1996 catastrophically collapse"	Robert Metcalfe, founder of 3Com, inventor Ethernet., 1990
"Everyone's always asking me when Apple will come out with a cell phone. My answer is: probably never"	David Pogue, technology columnist, The New York Times, 2006

India

In 1998, India conducted three underground nuclear tests. The CIA was not aware.

Sir, we didn't have a clue George Tenet (CIA Director)

Iraq WMD

It [the intelligence service] concludes that Iraq has chemical and biological weapons, that Saddam has continued to produce them, that he has existing and active military plans for the use of chemical and biological weapons, which could be activated within 45 minutes, including against his own Shia population; and that he is actively trying to acquire nuclear weapons capability... Tony Blair, House of Commons, 10apr2002

I have absolutely no doubt in my mind that the intelligence was genuine Tony Blair, The Observer, 25jan2004

Review of Intelligence on Weapons of Mass Desctruction / Lord Butler. - London : Stationery Office, July 1004

The 45 minute claim was withdrawn by the Blair government on 14 October 2004.

The evidence about Saddam having actual biological and chemical weapons, as opposed to the capability to develop them, has turned out to be wrong. Tony Blair, Labour conference speech 28sep2004

1.5 Analysis techniques

Introduction

Analysis techniques are used to help in analysing unvalidated information and make valid and reliable judgement. Analysis techniques help overcome bias, prejudice, unbalanced viewpoints, or overlooking the obvious

Examples

1. Critical thinking

2. Inductive reasoning

3. Deductive reasoning

4. Abductive reasoning

5. The Devil's advocate

6. Multiple advocacy

7. Analysis of competing hypothesis

Training

Analysis techniques is being trained by many companies, such as IHS Jane's [1] .

1.6   Critical Thinking

Goal

1. Use structured judgement of information to reach reasoned conclusions

2. Describe the understanding analysts have of the reasoning process

Define

Critical Thinking is a deliberate meta-cognitive (thinking about thinking) and cognitive (thinking) act whereby a person reflects on the quality of the reasoning process simultaneously while reasoning to a conclusion. The thinker has two equally important goals: coming to a solution and improving the way she or he reasons. [2]

Critical is, to think about the PROCESS, i.e., how did you do it.

1.7   Inductive reasoning

Define

1. Evidence based

2. From specific to more general

3. Drawing general conclusions based on past experience and current observations

Disadvantage: there is no way to distinguish between different hypothesis. They are all possible

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[1] IHS Jane's: http://www.ihs.com

[2] Moore 2007 – Critical Thinking and intelligence analysis / David T. Moore. - Washington D.C. : National Defense Intelligence College, 2007

1.8 Deductive reasoning

Define

1. Hypothesis based

2. From general to more specific, to address behaviour, intentions and such

3. Drawing general conclusions based on past experience and current observations

Disadvantage: there is no way to distinguish between different hypothesis. They are all possible

1.9 Abductive reasoning

Define

Alternative explanations

1. Abductive reasoning generates novel means of explanation.

2. Produces an "assessment" of probabilities (in case of intelligence warning)

3. Used when certain events or actions cannot be accurately interpreted through existing paradigms

1.10 The Devil's Advocate

Definition

1. Individual (usually) arguing against, just for the sake of argument

2. Goal: to be deliberately provocative to challenge prevailling assumptions, strategies, plans ideas, concepts etc.

3. Used to overcome Cognitive Bias and Groupthink.

The devil's advocate must be independent, responsible to the highest commander/director only, and authorative (otherwise nobody listens).

Drawbacks

1. Can easily fall in the trap of groupthink By generating the impression that all options have been considered)

2. The synthesis must be done by someone else to ensure a healthy balance between the devil's advocate and the original analysis

1.11   Mulitple Advocay

Alexander L. George

Political scientist, Stanford University. First coined the phrase Multiple Advocacy in 1972.

Definition

Analysis technique intended to assist clients in making rational decisions by:

1. Structured debate of opposing viewpoints

2. Presenting alternative views by different member of the group or even by separate subgroups

3. Taking an issue, cooperatively identifying the problems, weighing alternative solutions

4. Encouraging differing opinions among a group to help consider viewpoints.

Major drawback: to strong opinions, group members getting too opinionated, can lead to conflict wihtin a group when group members disagree with eachother too strongly.

1.12   Analysis of Competing Hypotheses (ACH)

Define

"...is a tool to aid judgment on important issues requiring careful weighing of alternative explanations or conclusions. It helps an analyst overcome, or at least minimize, some of the cognitive limitations that make prescient intelligence analysis so difficult to achieve"[3].

Figure 2: Analysis of competing hypothesis

(See figure ~2)

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[3]heuer – Psychology of Intelligence Analysis / Richards J. Heuer. - Center for the Study of Intelligence, 1999

1.13   In conclusion

But

Proper intelligence analysis cannot be done without....

Proper analysis can only be done when the analysis process gets reliable and validated information that is representative for what is available and that gives a balanced view regarding the issue.

In come librarians! For they are trained and experienced in exactly the above. Librarians should start doing what they are really good at and what is really in high demand: to be the central pivot point between the supply side of information and the demand side of information.

Because

Librarians should start doing their work properly! Forget books, forget "promoting the reading of books", forget your physical library.

Librarians are ..

1. The BEST in discriminating the good from the bad

2. The BEST is selecting reliable sources

3. The BEST is validating open source information

4. The BEST in matching user requirements with the global supply side of information

5. The BEST in selecting representative information

6. The BEST in composing balanced reports based on findings

2 About

Contact information and biographical information on the owner of Reuser's Information Services

Who:

- Arno H.P. Reuser ; OSINTian ; information professional ; librarian ; information freak ;

Work:

- CEO, owner and founder *Reuser's Information Services* ;
- Senior policy advisor OSINT at NL ministry of Defence ;

Activities:

- Founder: Reuser's Information Services ; Dutch Open Source Intelligence Branch ;
- Writer: OSINT in *Inlichtingen- en Veiligheidsdiensten (Kluwer)* ; co-editor *Advances in Social Network Analysis and Mining* (Springer) ; journal articles ; book reviews ;
- Interviews: in several magazines (GO magazine, IK Kapital) ; PODcast (International Spy Museum Washington D.C.) ;
- Teacher/speaker; Uni.Amsterdam, Uni.Utrecht, NLDA Breda, DIVI, GOBI The Hague, Uni. South Denmark, Uni.Kaohsiung Taiwan, Clingendael, United Nations IAEA, EU (EUlex, EUMM Georgia, Eurojust, Europol, Consilium), Interpol, Folke Bernadotte Academy Sando SE ;
- OSINT Trainer: training programmes, courses and workshops in Austria, Australia, Belgium, Denmark, France, Netherlands, Sweden, Switzerland, Ukraine, United Kingdom, Unites States ;
- Awards: Life time award OSS 2007 ; Golden Candle Award 2003 ; Nomination for Information Professional of 2010 ; Winner National Information Retrieval Contest ;
- Websites: Reuser's New Repertorium (Internet Resource Discovery Toolkit) http://rr.reuser.biz ; home page http://www.opensourceintelligence.eu ; NEDBIB discussion list http://nedbib.reuser.biz ;
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