



ICCRTS 2003



War Room Team Based Analysis

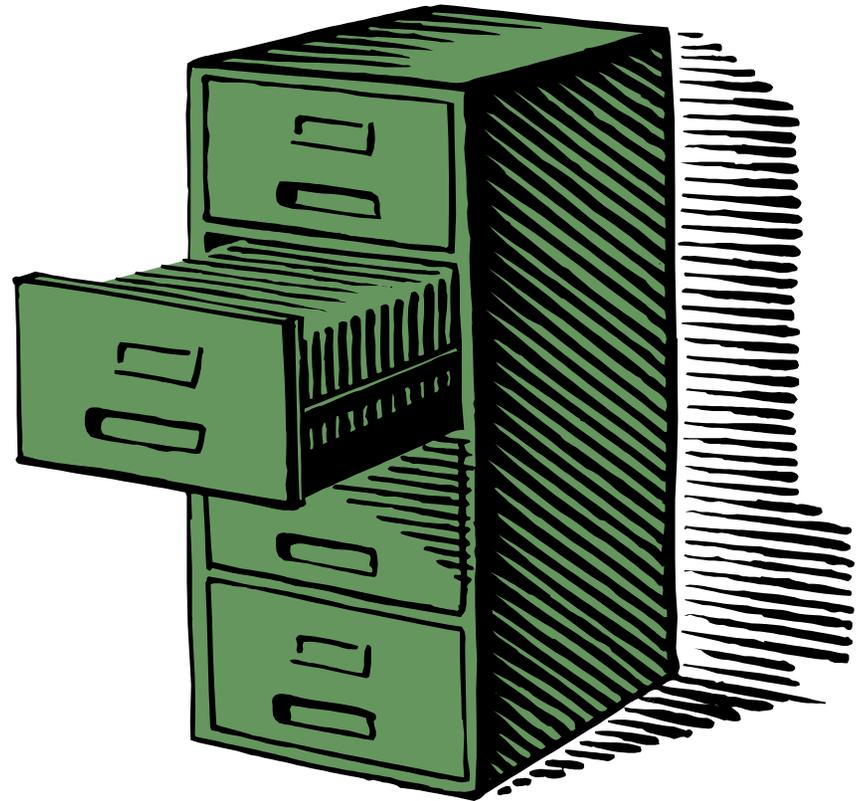
Analysis in our Changing Times

June 17, 2003



Intelligence for its Own Sake is Stupidity

- Many corporate and government organizations collect lots of data, information, and intelligence. Often sits there and gets filed away.
- What good is intelligence unless it feeds core decision making activity.
- War Room captures key decisionmaking and/or analytical processes.
- Data, information, and intelligence are collected to feed into these core processes.





War Room Description

- Maximizing Flow and Control of Information is Key to Competitiveness - In War, Business, and in Political Campaigns.



- War Rooms are Innovative Tool To Manage Information In Time-Sensitive Environment.
- Optimized Infrastructure Which Channel Collection, Analysis, and Dissemination of Information.



Connecting the Dots

New disclosures that Bush was warned last summer of al-Qaeda's interest in hijacking commercial airliners will likely direct a brighter spotlight on the CIA's and FBI's *failure to connect the dots* of terrorists' plans.



5/17/02



“When the government collects monumental amounts of information, it may not be able to find anything it needs,” Berman said. “The problem they had (before Sept. 11) wasn’t in *finding* information, it was in *analyzing* information, and if they have more information they’ll have more analytic problems.”



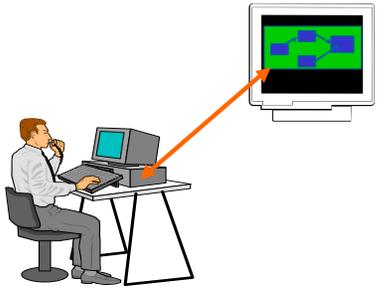
6/07/02



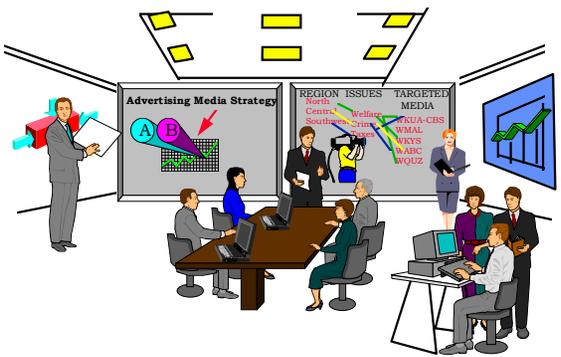
War Room Typology



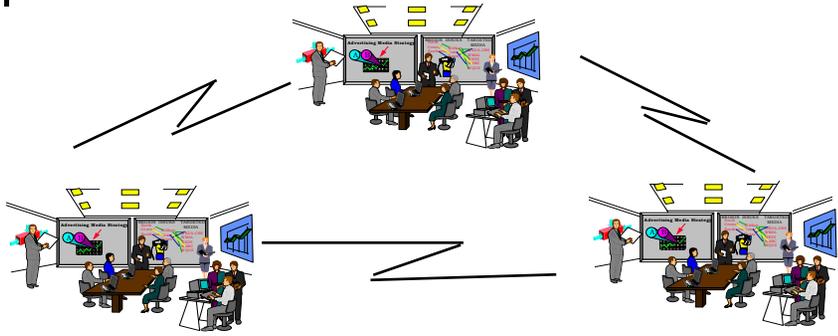
Analog



Virtual/Portal



Digital



Network Enabled War Rooms



Analog War Room

- Low-tech approach utilizing foam boards or magnetic white boards to capture and map process logic flow and to lay out the data.
- Conference table used to help stage information intended to go on the walls. Sufficient space must be provided to enable the manager or team members to



walk around room, explaining certain facets and gathering their input.

- Great value in making it portable, to quickly relocate briefing.



Digital War Room

- Evolve from static graphical displays and manual data collection to interactive computer-driven displays, automated data collection systems, and shared knowledge bases.



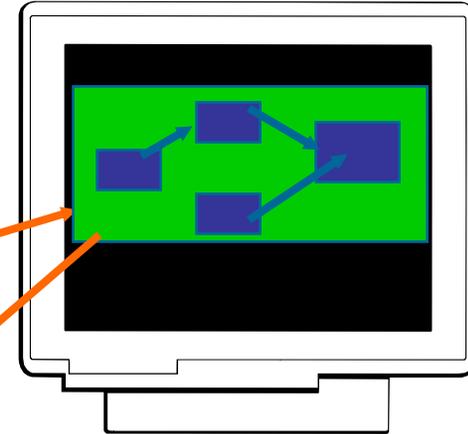
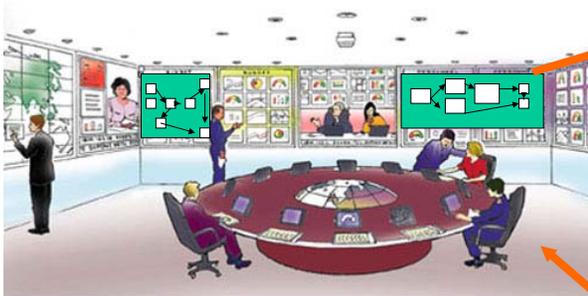
- All aspects of the decision-making process can be simultaneously viewed; multiple tools can be seen at the same time.



Virtual/Portal War Room

Strategy visualization is digitized into template with various decision support tools.

Strategy is mapped out in Physical war room facility



Strategy is provided to client via the portal. It is used as an implementation tool to monitor and track progress. Intelligence and supportive information are provided during critical decision junctures, as strategy is implemented. Thus producing on-going revenue source.

Periodic reviews are held with client in physical war room facility.





War Room Methodology

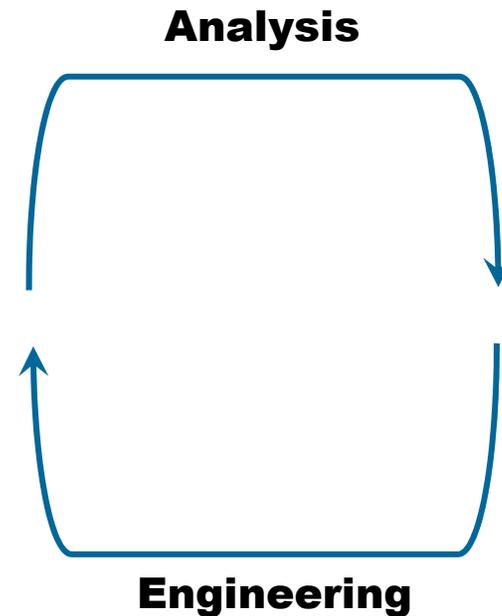
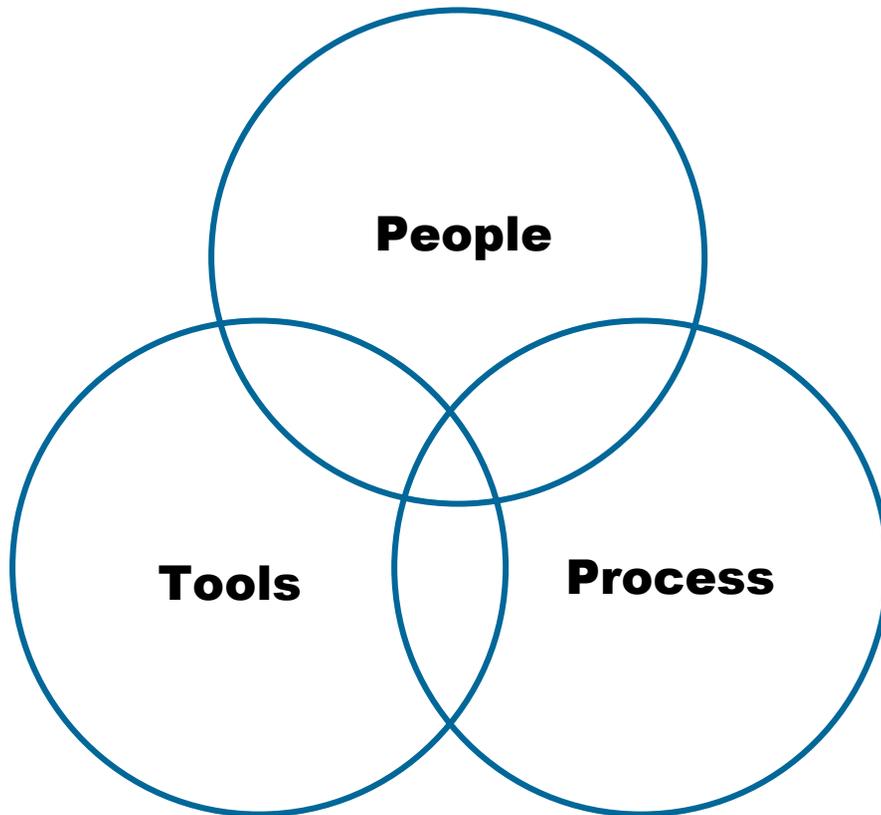
- Systematic top down analysis requirements drives tool selection
- Cognitive theories of situation understanding, decisionmaking, and collaboration inform tool selection and team processes
- ONR Collaboration Advisor Tool helps identify and fix teamwork issues



Philosophy for Team Based Analysis

Effective Collaboration Includes People, Tools, and Process:

- Iterative process between analysis and engineering

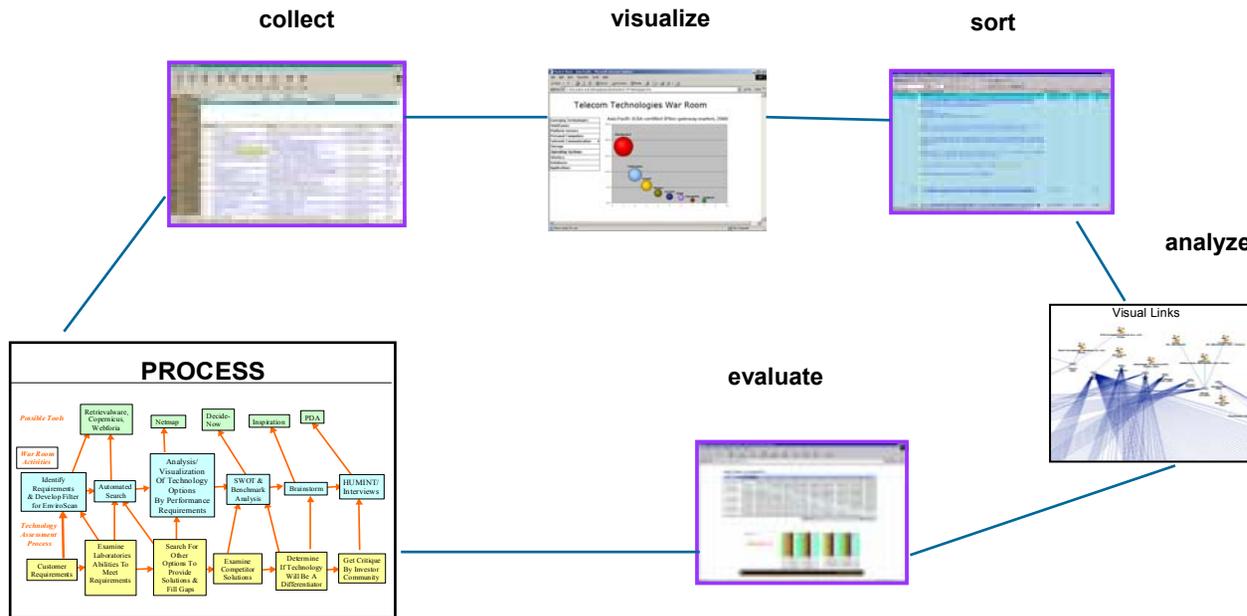




Philosophy on Systems Integration

Not One Tool or Technology Solution to Analyst's Needs:

- Complex processes or decisions require multiple tools to facilitate information flow.
- Requirements change and tools evolve, so modular off-the-shelf tools are selected rather than specially developing tools.
- Tool integrators rather than tool developers.





War Room Process

1. Articulate Goals & Objectives

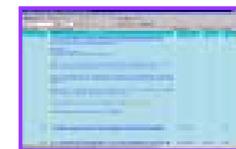
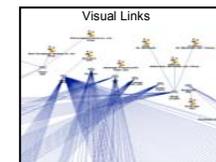
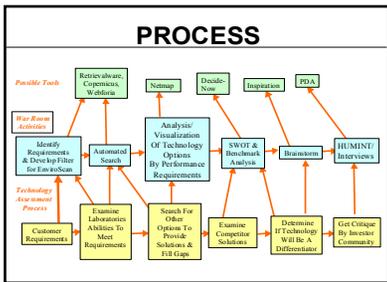
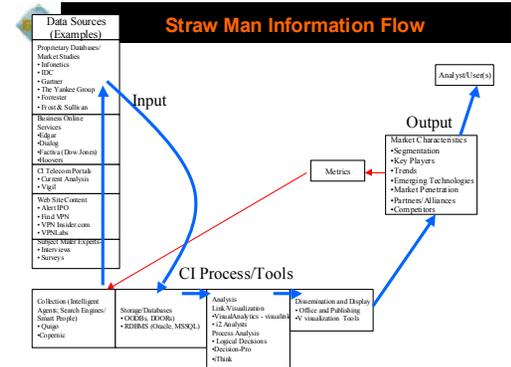
2. Map Decision Support Processes

3. Determine Information Flow

4. Select Best Software That Facilitates Flow

5. Select the Best Hardware & Displays

6. Optimize & Integrate System in Facility



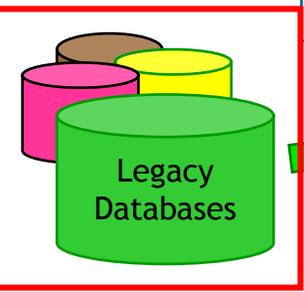


System Block Diagram

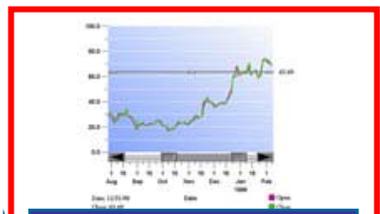
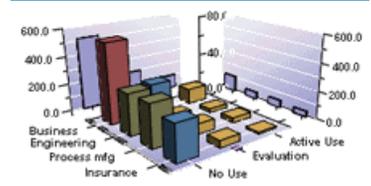
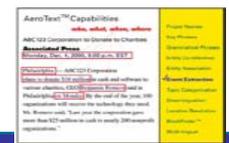
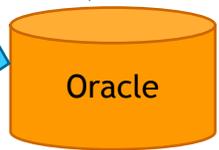
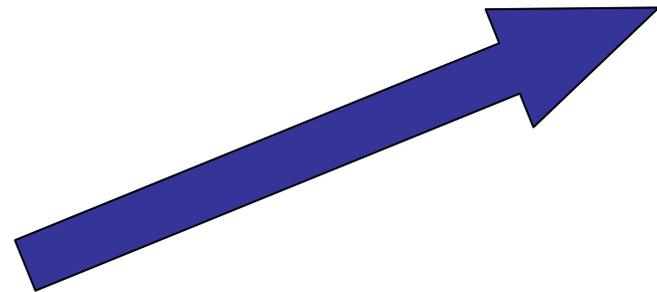
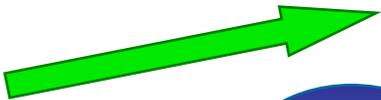
Sources

Collection / Storage

Analyses

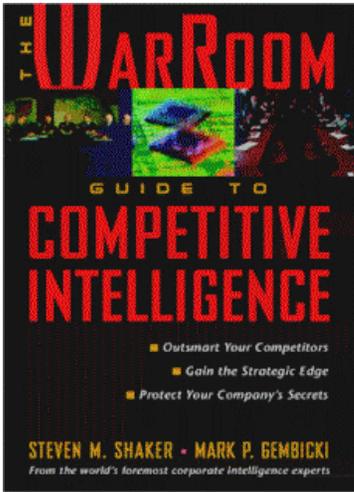


Primary Intelligence





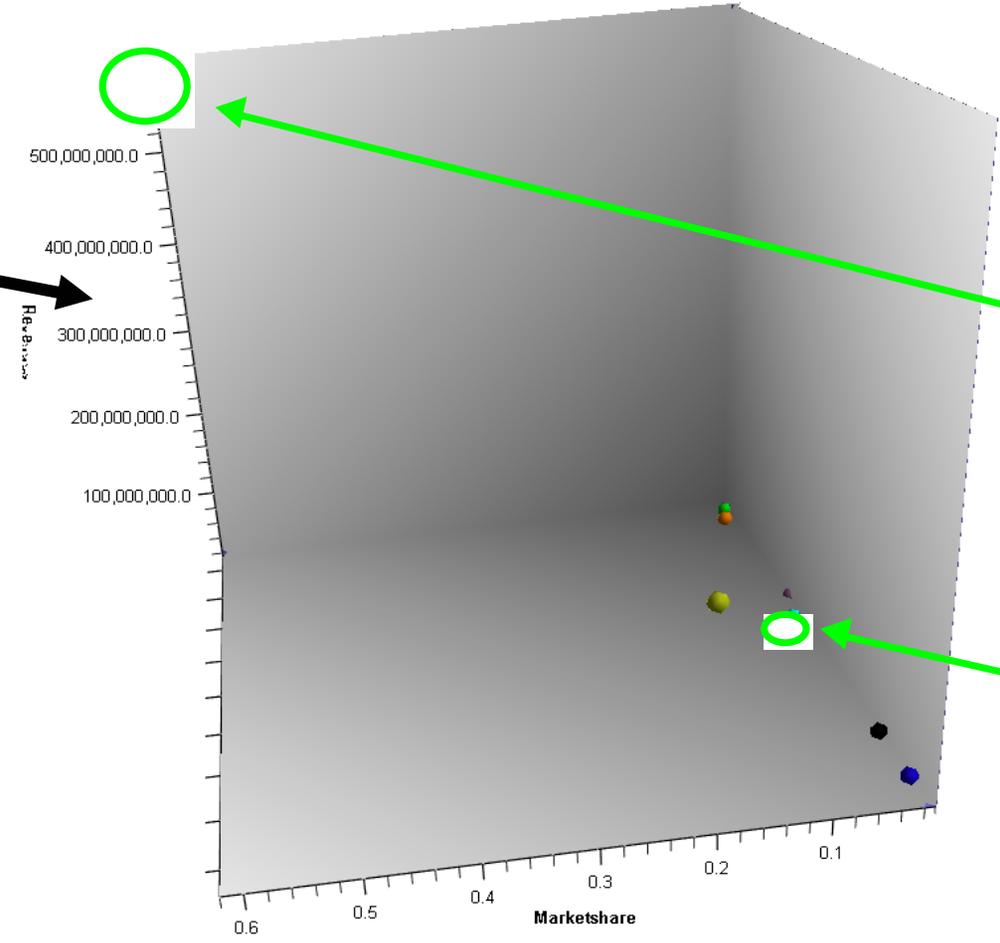
Case Studies and Lessons Learned





Case Study 1 - Knowledge Discovery

4	Units	CY2000	CY2001	1002	2002	3002	4002	Forecast	Forecast	1003	CY2003
5	VPN and Firewall Appliances	18,931	51,957	15,264	23,813	33,381	40,572	113,036	45,959	202,401	79%
6	<\$500										34%
7	>\$500	21,706	70,016	26,976	29,873	34,652	39,157	129,659	42,881	186,576	157,860
8	Growth	NA	223%	NA	15%	16%	13%	89%	9%	44%	47%
9	\$500 to \$1,499	43,437	83,533	24,552	28,234	31,905	36,372	121,863	40,736	179,703	27,510
10	Growth	NA	92%	NA	15%	15%	14%	89%	6%	46%	15%
11	\$1,500 to \$9,999	34,301	54,446	15,987	18,161	21,460	23,575	73,575	24,266	92	4,568
12	Growth	NA	59%	NA	6%	13%	12%	30%	9%	21,057	10%
13	\$10,000 to \$30,000	7,430	12,745	3,839	4,223	4,518	4,880	17,459	5,124	21,057	2,165
14	Growth	NA	60%	NA	10%	7%	8%	37%	5%	21%	40%
15	>\$30,000	692	1,609	438	471	513	575	1,887	632	2,863	200,462
16	Growth	NA	133%	NA	10%	12%	12%	23%	10%	44%	2%
17	Subtotal Units	107,656	222,349	70,792	79,757	90,750	102,444	343,743	112,565	409,114	983,510
18	Growth	NA	107%	NA	13%	14%	13%	55%	10%	43%	35,244
19	Other VPN and Firewall Hardware										47%
20	Software secure routers	89,569	129,810	32,455	36,025	39,207	43,194	150,941	46,201	201,500	13,222
21	Growth	NA	45%	NA	11%	9%	10%	16%	7%	33%	37%
22	Hardware secure routers	11,872	16,721	3,739	4,412	5,118	5,732	19,001	6,191	26,362	983,510
23	Growth	NA	41%	NA	18%	16%	12%	14%	8%	30%	79%
24	Application-layer gateways	NA	NA	6	23	59	112	201	164	362	39%
25	Growth	NA	NA	NA	291%	151%	91%	NA	46%	376%	NA
26	Total Units	209,895	348,880	106,992	120,218	135,194	151,482	513,886	165,201	719,929	982,703
27	Growth	NA	78%	NA	12%	12%	12%	39%	9%	44%	59%
28	Revenue										NA
29	VPN and Firewall Appliances										NA
30	<\$500	\$5,956,911	\$15,412,924	\$4,456,841	\$7,458,076	\$9,593,811	\$9,632,692	\$30,221,420	\$9,944,776	\$41,475,368	NA
31	Growth	NA	163%	NA	67%	10%	12%	80%	3%	37%	NA
32	\$500 to \$1,499	\$75,113,861	\$130,075,303	\$41,437,100	\$43,333,320	\$47,744,000	\$51,030,900	\$174,044,000	\$51,030,900	\$196,700,000	NA
33	Growth	NA	73%	NA	15%	15%	15%	100%	10%	44%	NA



- Numerous spreadsheets of market data entered into War Room data base.
- Included market share by vendor, geographical data, and time period.
- Using visualization tool analysts were quickly able to see anomaly.

Anomaly: Small market share in all geographical areas except one region.

- > What is special or different about this area?
- > What is the company strategy?



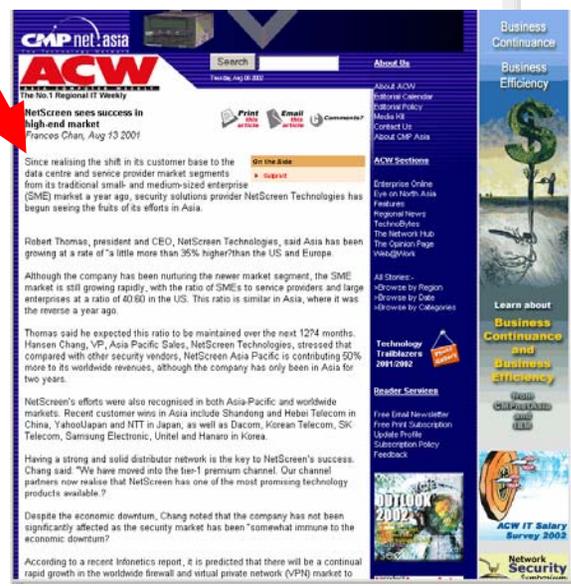
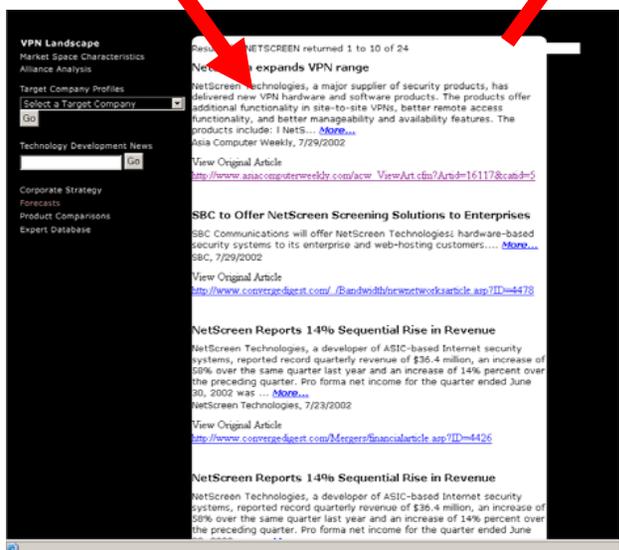
Case Study 1

Using interface tool
ran queries on company.

Full text of article is stored and parsed in database
under relevant topical area.

On the Side Snapshot Since realising the shift in its customer base to the data centre and service provider market segments from its traditional small- and medium-sized enterprise (SME) market a year ago, security solutions provider NetScreen Technologies has begun seeing the fruits of its efforts in Asia. Robert Thomas, president and CEO, NetScreen Technologies, said Asia has been growing at a rate of a little more than 35% higher than the US and Europe. Although the company has been nurturing the newer market segment, the SME market is still growing rapidly, with the ratio of SMEs to service providers and large enterprises at a ratio of 40:60 in the US. This ratio is similar in Asia, where it was the reverse a year ago. Thomas said he expected this ratio to be maintained over the next 12-14 months. Hansen Chang, VP, Asia Pacific Sales, NetScreen Technologies, stressed that compared with other security vendors, NetScreen Asia Pacific is contributing 50% more to its worldwide revenues, although the company has only been in Asia for two years. NetScreen's efforts were also recognised in both Asia-Pacific and worldwide markets. Recent customer wins in Asia include Shandong and Hebei Telecom in China, Yahoo!Japan and NTT in Japan; as well as Daicom, Korean Telecom, SK Telecom, Samsung Electronic, Unitel and Hanaro in Korea. Having a strong and solid distributor network is the key to NetScreen's success. Chang said: 'We have moved into the tier-1 premium channel. Our channel partners now realise that NetScreen has one of the most promising technology products available.' Despite the economic downturn, Chang noted that the company has not been significantly affected as the security market has been 'somewhat immune to the economic downturn'. According to a recent Infonetics report, it is predicted that there will be a continual rapid growth in the worldwide firewall and virtual private network (VPN) market to US\$5.3 billion and US\$4.3 billion in 2004 respectively, a more than 200% increase from 2000. In a Q2'01 report by IDC, NetScreen was ranked as the leading Internet security vendor in the high-end firewall/VPN appliance market worldwide. The report stated that NetScreen has 57% of the high-end market which it defines as products in the over-US\$50,000 price band. In Asia-Pacific, NetScreen's product strategy is to offer customers 'comprehensive security solutions with depth and breadth' and to offer the best end-to-end VPN solutions, exceeding customer requirements. NetScreen's products range from low-end NetScreen-SXP, to the mid-range NetScreen-1000, to the high-end NetScreen-2000, catering to different requirements on speed and capability. In June this year, the company introduced the NetScreen-SXP, a security platform combining firewall, VPN and traffic management features for enterprise telecommuters, small-office/home-office sites, and branch and remote offices.

Date Posted: 6/13/2001
 Author(s): Frances Chan
 URL: http://www.asiacomputerweekly.com/acw_ViewArt.cfm?ArtId=11222&CatId=5



System had automatically
stored numerous articles
on company.

System allowed look at original
Web site if desired.



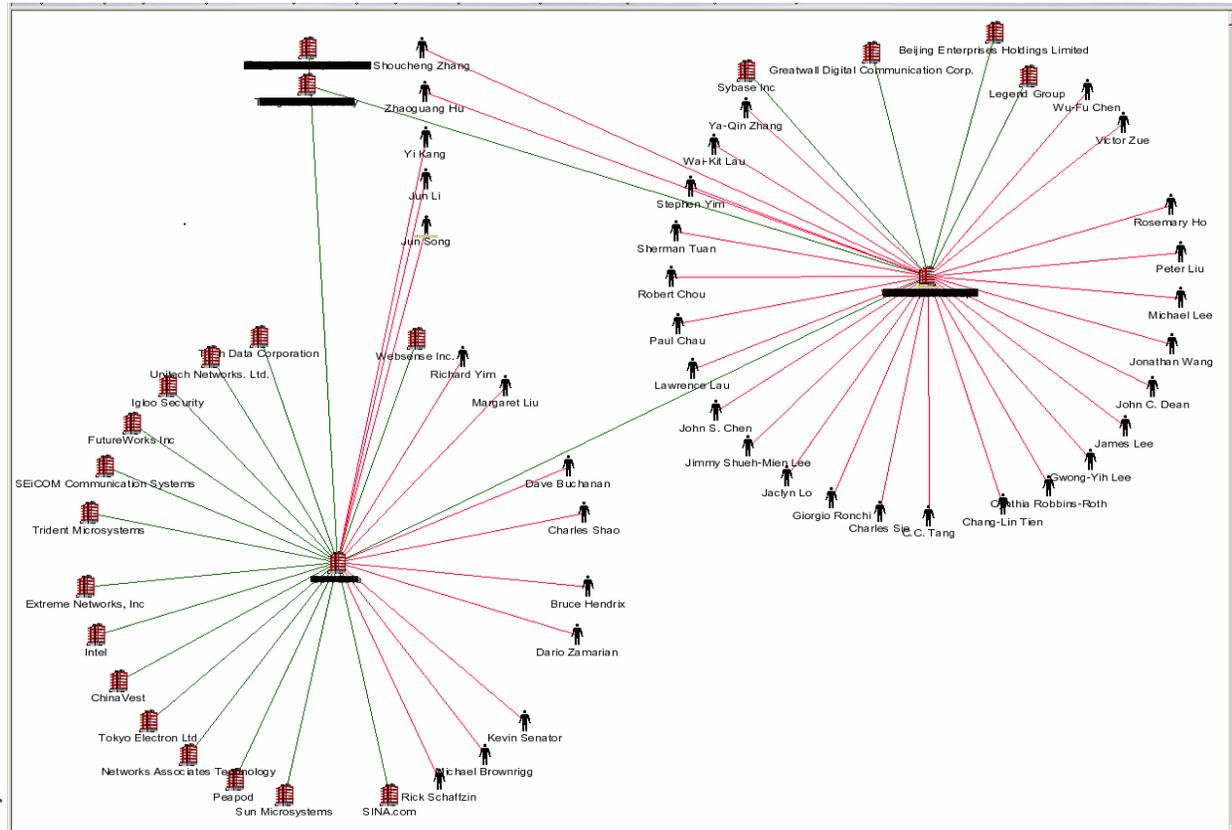
Case Study 1

Company with larger regional Market share started with seed money from university located in region with large share.

Founders migrated to Silicon Valley and networked with other former alumni involved in investments. Attracted larger investors, and company able to return to country of origin with major operational capability.

Analysts learned that this is business model being pursued in number of critical technology areas.

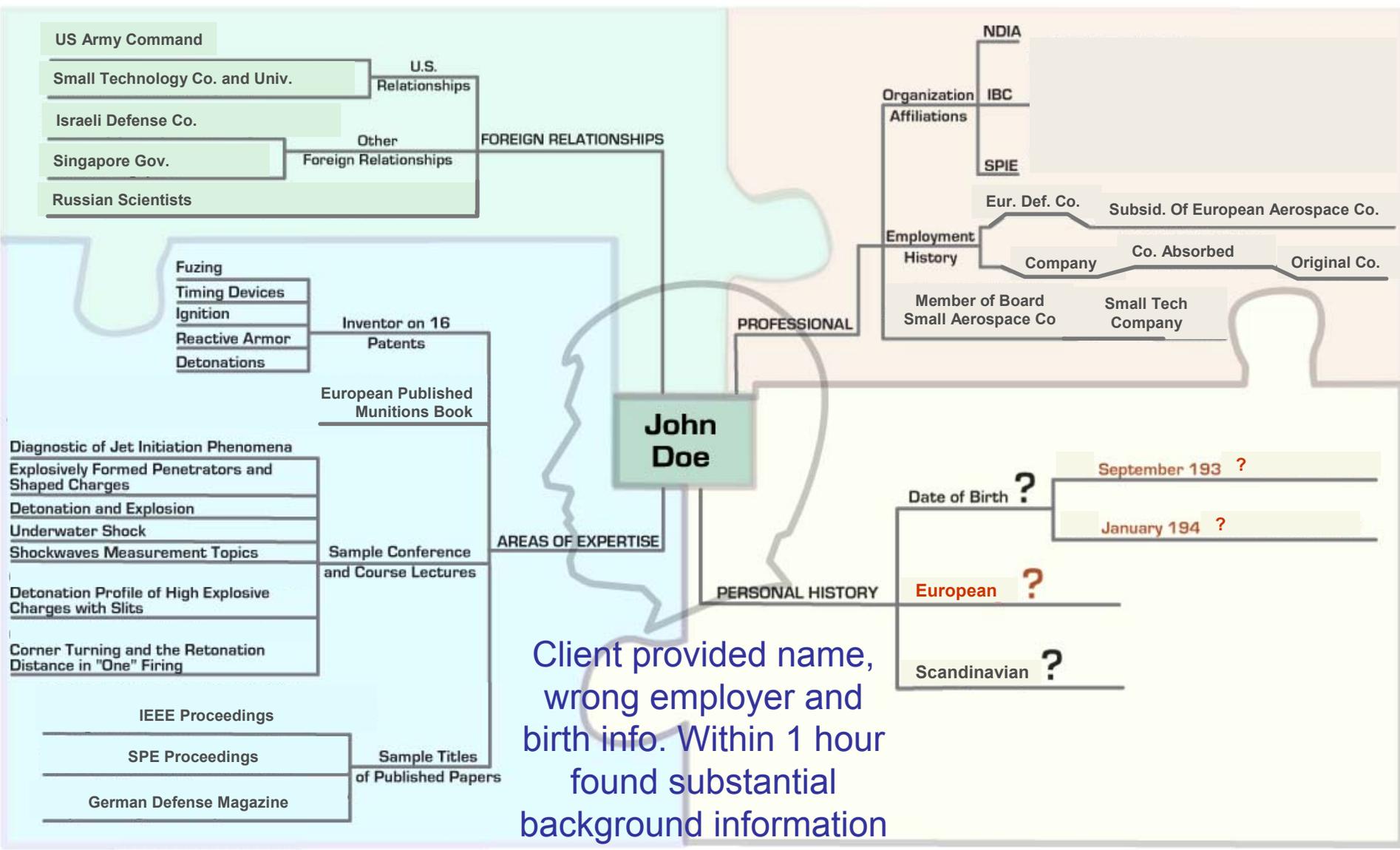
From detection of anomaly to identifying new business model only took several hours!



Database automatically feeds link analysis visualization tool that reveals relationships between people, companies, activities, and events.



Case Study 2: Personal Profile Example



Client provided name, wrong employer and birth info. Within 1 hour found substantial background information using War Room.



Lessons Learned & The Way Ahead

- War Rooms are process driven
 - Need to map analytical methods and logic flow before selecting tools and hardware.
- Team-based thinking and decisionmaking



- Team of analysts and IT experts
- Information density and visualization techniques



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