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Business Intelligence: Open Sources and Methods C. Kenneth Allard

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Business Intelligence: Open Sources and Methods

C. Kenneth Allard

February 22, 2001

Dr. C. Kenneth Allard is a former U.S. Army colonel who now runs his own consulting company and also serves as an adjunct professor at Georgetown University. Col. Allard is best known as a frequent television and radio commentator on foreign policy and security issues, and especially as a military analyst with NBC News and MSNBC. His numerous publications include two books: Somalia Operations: Lessons Learned (Washington, D.C.: National Defense University Press, 1995), and Command, Control and the Common Defense (New Haven, Conn.: Yale University Press, 1990), winner of the 1991 National Security Book Award. His 26-year military career included service as an intelligence officer in Germany during the cold war, as a member of the West Point faculty, and as special assistant to the chief of staff, U.S. Army. After serving as dean of students at the National War College, Col. Allard volunteered for special assignment in 1996 with U.S. forces in Bosnia. In addition to his military decorations, his alma mater, Lycoming College, recognized his public service career with its 1999 Outstanding Achievement Award. He also has a master's degree in public administration from Harvard University and a doctorate from the Fletcher School of Law and Diplomacy, Tufts University.

Oettinger: It's a great pleasure to introduce our first speaker of the season, who as it happens is an alumnus of the first session of this seminar, and also was a speaker here in 1991 and 1997. It's his third appearance, or fourth counting his presence as a member of the seminar. So saying, I take pleasure in turning it over to you, sir.

Allard: It is a great pleasure, as always, Tony, not only to see you again but also to return from whence I came.

What I found from my own experience here with Tony was that by virtue of what he was able to teach me, I became a strategist. I certainly cannot claim to have been much more than a tactician when I got here. It's somewhat unusual for a military officer to come to Harvard to be

¹See C. Kenneth Allard, "Thinking About Command and Control," in *Seminar on Intelligence, Command and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 1–18, [On-line]. URL: http://www.pirp.harvard.edu/pubs_pdf/allard\allard-i93-1.pdf; and "Information Warfare: Hierarchies or Networks?" in *Seminar on Intelligence, Command and Control, Guest Presentations, Spring 1997* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-98-2, April 1998, 23–49, [On-line]. URL: http://www.pirp.harvard.edu/pubs-pubs-pdf/allard\allard-i98-2.pdf

turned into a strategist, but that was how it happened, mostly because he encouraged me to step back and not to get confused by the trees, but to look at the forest. That is a very tough thing to do, because there is so much that goes on in all of our professional experiences that doesn't allow you to do that. We call that "getting imprisoned by your in-box." On the Army staff in the Pentagon the phrase was that when you're up to your ass in alligators, it's very difficult to recall the fact that your original intent was to drain the swamp. These are all variations on that same theme.

I would encourage you to take full advantage of the great opportunity that you're being given here. It is an extremely unusual chance at this point in your professional lives, under some fairly tough advice and guidance, as I think you will see if you haven't already, to be invited to take that critical step back and then ask yourself what's really critical about what you're seeing or what you're trying to get accomplished.

I always believe that good research is knowing where to steal stuff, but then, of course, giving due credit (**Figure 1**). I immediately went to one of Tony's recent presentations and found, not to my particular surprise, that once again he had asked exactly the right question in focusing on a very old problem. Tony can certainly speak to that far more eloquently than I can.

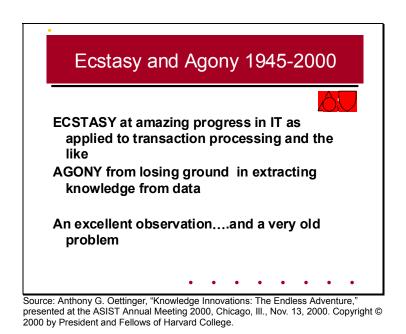


Figure 1

Oettinger: You stole it without subtlety. They've been subjected to that whole presentation.

Allard: One of the better commercials I've seen recently is from one of the big six, or however many are left, accounting firms. The voiceover says, "We have never had more knowledge than we do in the world today," a little pause, "and we have never been more confused about what any of it means." That's it exactly. We are surrounded by information. We are now drowning in it. In today's *Washington Times* I wrote about one of the great divides that separates junior and senior

officers in the Pentagon.² Our junior officers are very well equipped to deal with this information-intensive world in which they find themselves. Our senior officers, particularly the generals and admirals, were raised in the era of information scarcity, so they reach out to grasp every single detail and try to micromanage everything. Think of it as the twenty-first century information/generation gap!

This is an old problem. I spent most of my military career one way or another trying to bring information to bear on the classic problems of warfare and what military structures did with that information.

I can well recall October 1973. We were at DEFCON 3 [defense condition 3: hostile attack imminent]. We had been placed that way in response to the Arab–Israeli war that was going on, the Yom Kippur, or Ramadan, war, and Russia had alerted its airborne units for a move into Egypt—in other words, a direct superpower intervention. We had done a countermobilization. There we were in Central Europe watching what was going on and seemingly edging closer and closer to an armed confrontation. I'll never forget standing up in front of a crusty old colonel of armor, who had probably about three tours in Vietnam, and telling him, "Sir, I'm here to present the intelligence estimate of the situation." To which he said, "Captain, the best way to get intelligence is to take the hill and count the bodies," and he was not kidding.

If you fast forward from 1973 to Desert Storm and you suddenly find that a revolution had occurred, not a revolution in information, but certainly in the way in which we utilized information as a weapon of war. I would argue very strongly that information has always been a component of war, but information has never suffused war as it does right now.

The world that I find myself in today is the world of business, where I am making a reasonable living arguing that there are certain similarities between business and war (**Figure 2**). Indeed, one of those similarities is that information is transforming business in many of the same ways that it has transformed war. This is something that you will *not* see being taught across the river at the Harvard Business School: How does intelligence affect business? You have had a great reading from Robert Steele,³ so you know at least some of what I am going to talk about, simply because warfare and business have certain similarities, especially in information. Information affects both, but in the increasingly competitive global environment, the information edge has never become as important as it is right now.

What's also interesting is that so much of it is commercially derived and open-sourced. It is available to everybody, to me as well as my competitors, but of course, some competitors are better than others. In Desert Storm, some of us argued that we could have switched equipment with the Iraqis and still whipped them. That observation simply makes the point that the most important asset that we had were our soldiers, sailors, airmen, and Marines. We made our people our most critical investment, and that's basically what makes a better competitor.

²Kenneth Allard, "Military's New Day Dawning," *The Washington Times*, 22 Feb. 2001.

³Robert D. Steele, *On Intelligence: Spies and Secrecy in an Open World* (Fairfax, Va.: AFCEA International Press, 2000).

Major Points

- · The thesis of Business as War
- Information has transformed Warfare and is now transforming Business
 - Sharing lessons, disciplines & technology
 - Effects of strategic discontinuity
- · As in warfare, intelligence is vital in business
 - Revolution in means, availability and dissemination
 - It is also available to the competition, but some competitors are better than others!

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Figure 2

Much of this reflects our historical roots (**Figure 3**). Sun Tzu talked about warfare based on deception. Clausewitz talked about fog and friction and uncertainty. We are now utilizing this information revolution to increase our accuracy by orders of magnitude. What I find most fascinating about this is that this is all a very aggressive use of information as the ultimate form of competition, and this form of competition reflects technologies that come predominantly from the commercial world.

Information in Warfare

- · Philosophical:
 - Sun Tzu "all warfare based on deception"
 - Clausewitz fog, friction, uncertainty
- · Historical: Number of 2000lb Bombs--->90% OPK
 - 1943: 1500 B-17 sorties 3300 foot CEP
 - 1970: 176 F-4 sorties 400 foot CEP
 - 1991: 1 F-117 10 foot CEP
- · Current: Revolution in Military Affairs
 - Information Dominance
 - Network-Centric Warfare

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Figure 3

When I make the case to businesspeople about Business as War I begin by pointing out these similarities (**Figure 4**). I'll say, "Hey, look at this. My world and yours are not all that terribly different". Survival belongs to those who are the most speedy and the most efficient.

The Futurist Environment

- Worldwide broadband network of networks
- · Ubiquitous computing
- · Ubiquitous video
- · Virtual reality a commonplace tool
- Complete fusion of computation & telecommunications
- Crossover effects of computing, television, telephone, PDA, etc.

Cascading Effects of Multiple Changes!!!

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Figure 4

From Clausewitz comes the idea that everything is simple, but that the simplest things are very difficult.

Any businessperson why has been around for a while understands that he's not going to have someone blowing up his supply dumps unless he's in competition with the mob, but things do go wrong. Snowstorms occur that disrupt travel and other schedules, and he has to deal with that. Your adversaries can learn lessons. You have the O-O-D-A [observe-orient-decide-act] loop. As Admiral [William A.] Owens points out, information is a tool, a process, a weapon, and a target. Finally, strategy is fundamental. All these things directly pertain to business...and to war. As it has transformed both institutions, information technology has now created even greater similarities between the business of business and the business of war (**Figure 5**).

Similarities: Business & War

- Speed & Efficiency = Survival
- Everything is Simple, BUT.....
- Adversaries & Competitors can also learn lessons
- Information is a tool, a process, a weapon and a target
- Observe-Orient-Decide-Act....and do it faster, better and cheaper than the other guy!
- · Strategy is Fundamental

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Figure 5

If in doubt, just go to the *Harvard Business Review*, from which I have taken this chart and the one that follows (**Figure 6**). What the authors describe is the importance of strategy given what they call "the new economics of information". What are they talking about? They're talking about the fact that the competitive environment had begun to change under the impact of information richness and information reach. Typically that relationship is inverse. The stuff that everybody can reach is not rich, and what is rich is hard to reach. That basically determines your traditional production possibility frontier. But in the next slide (**Figure 7**) you see how that frontier is pushed up and to the right by the application of better information technology.

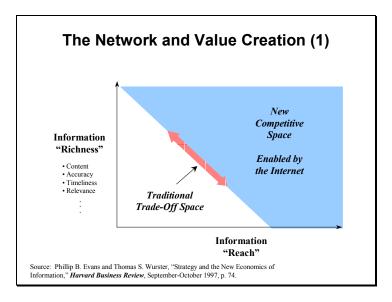


Figure 6

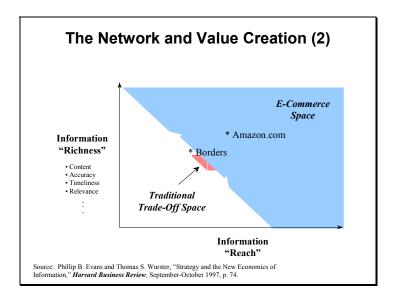


Figure 7

Because of this revolution in content, in accuracy, an in timeliness, there is an altered relationship between reach and richness. That is why the production possibility frontier shifts upwards and to the right. However, there is never a substitute for the classic patterns of business efficiency. Take a look, if you haven't done so already, at another one of the op-ed pieces of today's *Washington Post*, in which Robert Samuelson points out, yet again, that the Internet is wonderful when it works for free.⁴ When people have to pay up, that becomes the problem.

Oettinger: Let me interject something. There's something very classical about that as well. I had a conversation the other day with an executive, the tenor of which was, "What can you tell me about what opportunities there are in this nasty climate?" I said, "Look, the usual one. Buy cheap, and sell dear when the price is up."

Historically, technological progress is cemented, or solidified, when the first entrants, like Amazon.com, who have paid an excessive price to get where they are, go bankrupt and their assets become available in a fire sale. Then number two, at ten cents on the dollar, has a crack at the same thing, which may be more affordable. Usually number two can't hack it either, so it becomes a penny on the dollar, and maybe at a penny on the dollar it will work.

The dot-coms are just having their first fire sale. Every other industry that is alive or dying today went through that ten or a hundred years ago (whatever their history is) when somebody overreached, but then the next generation of fire sale purchasers find that they've got a cost structure that'll make it work. There's nothing remarkable or new about that phenomenon.

Allard: Exactly. I'm having a good time right now reading Steve Ambrose's new book.⁵ It talks about the Transcontinental Railway. It's fascinating because there are some wonderful parallels between that nineteenth century infrastructure project and the Internet infrastructure today. Every bit of that project ran not just at a loss, but at a hell of a loss for a long period of time until they got to Promontory Point and drove the spike, and there it was.

Oettinger: The victim of that was the Pony Express, which had started about a year before and miscalculated grievously. They didn't realize that the railroad was about to kill them.

Allard: What I love about Steve Ambrose is that he has an interesting way of bringing our own history back to us, when we were not a very delicate group of people. Consider what those folks went through building that railway: everything from the Indians to the elements. It was a routine thing for a couple of dozen Chinese immigrants to be killed in a snow slide in the Sierra Nevada. Nobody thought very much of it. It was also a routine thing for the company to be out of money. All of these things that would today drive us absolutely out of our minds they simply took in stride. That historical perspective is an awfully interesting one.

This historical backdrop prompts me to ask the question: Why in the world do we want to invest in business intelligence? The answer is implied by the continuous strategic discontinuities

⁴Robert J. Samuelson, "The Internet Predicament," *The Washington Post*, 22 Feb. 2001, p. A19.

⁵Steven Ambrose, *Nothing Like It in the World: The Men Who Built the Transcontinental Railroa*d, 1863–1869 (New York: Simon & Schuster, 2000).

we are experiencing, in which the ground is shifting almost underneath our feet (**Figure 8**). The cascading effects of those changes are things that need to be looked at and looked at very, very seriously. You don't get much of that from traditional market research, which is based on continuity, not discontinuity. You can go over to the Harvard Business School today, and I defy you to find anybody who is teaching anything about business intelligence. What are they teaching about this? They're teaching about operations research, systems analysis, and market research.

Why Business Intelligence?

- Information Age... "Continuous Strategic Discontinuities"
- Limitations of traditional corporate market research/operations research
- Too much information not enough intelligence uneven applications
- · Growth of corporate intelligence staffs
- Complementary need for intelligence outsourcing and analytical objectivity

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Figure 8

When I was here, Prof. Howard Raiffa taught a course here and at the Harvard Business School based on that approach. At the Business School it was taught as "Competitive Decision Analysis." He taught the same course over here at the Kennedy School, but because it was for government bureaucrats it was titled "Interactive Decision Analysis." That's a much softer and gentler term, but it was exactly the same approach to probability estimates: "If I drill ten holes in the West Texas oil fields, what are the probabilities they will come up dry, a gusher, or that the drill bit breaks off in the first ten feet?" Forgive me for using this term from game theory, but there are various "mini-max solutions" that go along with that approach toward bounded rationality. But when you think about it, it assumes the surface of the Earth is not going to change very much. It is a static linear approach toward forecasting. It is a black box approach.

Today that still has its place, but what I'm suggesting is that business intelligence, open source intelligence [OSINT], has begun to narrow the perimeters and the parameters of that black box. There are things that we can do now that are potentially a lot more interesting than what we were able to do before. Businesspeople to this point have not caught up with that basic fact. However, there are some corporate intelligence staffs, although they may call themselves "strategic planning" or one of those terms. Having worked for an independent business intelligence firm, I always used to point out that outsourcing of those functions makes sense. It simply is very hard for a corporate intelligence staff to avoid becoming cheerleaders—telling the boss what he *wants* to hear as opposed to what he *ought* to hear. You have to have professional wavers of the B.S. flag who don't have any skin in that game except being absolutely and rigidly honest.

Oettinger: By the way, you don't get paid as well for that as you do for lying.

Allard: Yes, except, Tony, that if you lie and it becomes known that you're a liar, your career will be considerably foreshortened. Unless, of course, you're a government agency, and then you'll simply be continued every year at appropriation time. Don't even get me started on that.

It is also worth mentioning that one of the enablers of open-source intelligence is digitization. Before 1980 the classic intelligence problem was the scarcity of information, so that the priority was on collection. I came from that world in the military and if I wanted a newspaper from Kiev, I had to recruit a guy to go across the line or someone to come out from Kiev with a newspaper under his arm. What do I do now? Go to www.kiev.whatever. Why? It's on the Web. More digitized data is out there and the Web makes it accessible—or is that vice versa? Unlike the pre-mid-1980s focus on collection, we now have to focus a lot more on sorting. This is what I meant when I said that you've got a race of generals and admirals today who were raised in that pre-1980s world. Information scarcity was their professional experience, so they still try to grasp every single detail. What we now find ourselves having to deal with is not too little information, but a river of it. So now we've got to worry about sorting it.

The thing that to me really is the key—and it's one of the points that Tony raised in his presentation—is that the human still really matters. That analyst, the basic machine—the M1A1 human brain, that thing between the ears—has not lost its relevance in either world. Now or then, the analyst is the key.

There are some firms, including some that deal in the business world, that really haven't caught up with these ideals. They think of themselves in almost pre-1980s terms. I found this quotation on a company that is famed for its expertise in the business intelligence world (**Figure 9**), and I saw some irony that this actually appeared on its Web site. You would have thought that they would have said, "Well, gee, since we have this on the Internet, is there not an internal contradiction here?"

Their real error was that they were tending to dismiss the entire Internet as a bad idea. Of course, the Internet or any source is no better than the comparison, than the collating that you do, than the integrity of the analysis. But simply to dismiss it as something not even worth your time seems to me to be a fundamental miscalculation. But you know what? I'm willing to bet you that most of the business people that would even consider this issue would probably say, "The Internet is a fine thing for helping me keep track of my stocks, check out the latest sports scores, and find out what CNN.com has got to say, but not really very much more than that." My point is that it is potentially extremely useful as a source of intelligence (if you know where and how to look).

By contrast, there's an awful lot of triumphalism about the Internet (**Figure 10**). Some people will tell you that you don't ever need to go to a library again. The best search engine that I know is probably Harvard's own Widener Library. Why? Eighty percent of the world's information is still on paper. It is not digitized. Sanity lies I in being able to move very quickly, in a very facile way, between the Internet and things that are still going to be in libraries, basic things like books and maps, that are all part of that open source world. You've got to be capable of going into the nonelectronic resources, because there are some things that you can't get through a search engine. The Web will give you the speed, the Web will give you timeliness. But

Business Intelligence: Dated Views!

The Internet or rumor chasing: "The Net is primarily a communications vehicle, not an intelligence tool. You can find hints at business intelligence, but you will also uncover rumors disguised as fact, or speculation dressed up as reality..."

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Figure 9

Caveats

- Most information <u>still</u> on paper!
- Most valuable digitized information is not on-line or accessed by special protocols
- Most of the web neither catalogued nor accessible through search engines
- A good research library dwarfs the web: quantity, quality, accessibility
- · Web's advantage: speed and timeliness

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Figure 10

a good library is extraordinarily important, because you've got to have the best of several different worlds. The Web gives you a tremendous advantage in the ability to collect information very, very quickly, but it is information that must be made accessible to cross-checking and verification. You also need to have that orthogonal fact that may not be part of any search engine but is still terribly relevant to a given business situation. Those are the things that you want to look for, and libraries are still awfully important.

Oettinger: You guys are uncharacteristically silent. He didn't say explicitly that he was interruptible with questions, but I've interrupted him and I shouldn't be the only one. I can afford to be somewhat rude in his presence, but let me remind you that the same thing applies to our prospective visitors in that this protracted silence is a disaster.

Allard: Yes, don't hesitate to interrupt. Even denunciations are welcome.

The intelligence process in the business world begins with the intent of the client (**Figure 11**). When I talk with a client, I will typically ask three things: "What do you want to know? Why do you want to know it? And tell me what you know about it already." I used the same discipline in the government world, but there we call it "essential elements of information." In the business world I call it the "central elements of competitive information." I want to know what's driving a given business engagement. I don't care what it is. It can be a problem in a region, a country, or a competitor.

The Business Intelligence Process

- Precise Understanding of Client Requirements not only the information but the <u>intent!</u>
- Typical Analysis: regional, country, competitor, risk
- Baseline Analysis:
 - Use of open sources 80-85%
 - Semi-active measures 10%
 - Active measures 5%
- Situational Monitoring: Based on competitive elements revealed by analysis

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Figure 11

Let me emphasize as well that it is possible to get other people's business plans without once violating their privacy. Why? Because it's available out there in open sources if you know where to look. I'm not talking about going in and purloining stuff, raiding their computers, checking out their trash, or any of the rest of it. It doesn't need to be that way.

Oettinger: Checking out their trash, by the way, is not a violation of privacy, because there's no expectation of privacy.

Allard: Exactly. There are some people who will argue with you as to whether there is expectation of privacy in e-mails, but I'm not even talking about trying to do that.

Oettinger: No, but trash has been litigated; e-mail has not.

Allard: Absolutely. But I'm saying you don't even need to go that far. You can find out what the competition is up to by exploit6ing publicly available information. So too when a company is concerned about competitive elements of a regional situation. You're thinking about going into country X. What is it that you need to know? Companies that don't know anything about potential regional competition find themselves at a disadvantage unless they can get very specific intelligence on a given area. Again, this is nothing more and nothing less than the classic

problems that commanders in the military faced over the years. Now business people are facing it as well.

How do we get it? Eighty-five percent we get from classic open source stuff: the Internet and libraries. Ten percent we get from what I call semi-active measures, which basically means interviews. About 5 percent of the time you actually have to send people to talk to various other people directly, face-to-face.

Notice that, as I said, I have not purloined anybody's corporate secrets. I have not violated U.S. law or regulations. But what have I done? I have gotten close to the people who have direct knowledge of a competitive circumstance, such as, maybe, an opponent's business plan. Do they want to acquire company X, or do they simply wish to compete with it, and drive it out of business. Those are the classic business engagements. Again, we get this stuff in the ways you see right here.

Student: Colonel, to what to degree does foreign language play into that if you're going to tap open, foreign sources, or individuals as a semi-active measure?

Allard: Good question. We have been able to do most of what we've been able to do with a primary competency course in English, but depending on the given target, you've got to have native-quality English speakers. There's just no question about it. English is still the primary language of the Net. I've seen some projections saying that Chinese will overtake it by the end of this decade. I frankly would warn you against making the mistake of straight-line projections. The point can't be made too often that, when it comes to dealing with the classic open source situations where I've got to start going to human sources, I've got have people who speak the language.

Student: Do you as an organization subcontract out to get expertise in a language?

Allard: Not if we can help it. The nice thing about it is that there are lots of people who speak lots of languages, and you'd be amazed at how available they really and truly are. That's one of the great strengths of this country. When I was doing the book on Somalia, one of the things I found fascinating was how many Somalis they found right here, including Mohamed Farah Aidid's son, who had just gotten out of the Marines. So there you have it. This is a great country! It's diverse. You will always be able to find somebody who speaks some language that you may have never heard of, but that may be important in a given competitive situation.

Student: What about when you're in that gray area between business intelligence and national security intelligence, like the Pope case in Russia?⁶

Allard: That is a fascinating case. I watched that with a great degree of interest, because it really does show one thing. Remember that I mentioned that 5 percent? That guy was operating at the 5

⁶Edmond Pope, a former naval intelligence officer, was convicted of espionage in December 2000 for gathering information on a Russian high-speed torpedo. He was subsequently released on humanitarian grounds by the Putin government.

percent level. Any time that you put a set of shoes on somebody else's turf you potentially have a problem. Why?

There are lots of countries in which espionage is not even on the books. I think Japan still is one. But there are others in which it is a constantly moving set of goalposts. That certainly was the case in Russia, in which (if this guy is to be believed, and I think he probably is) he thought that what he was doing was okay. It probably was, but guess what? In Russia what's unclassified and what's protected is subject to a somewhat fluid series of definitions. It became very much a bureaucratic contest and Pope found himself on the wrong side of it. That's one of the reasons why I much prefer to get what's needed through classic open source methods.

Oettinger: By the way, there's a lesson in that for any of you who, in writing your term papers, might be in a gray area where you know something that might come out of your government or private sector, proprietary, or classified background. If you are unable to trace it to an open published source that can be cited, don't use it. Even then, there is this gray area in the United States (and the gray areas are larger, let's say, than they are in Russia) over the question of whether an aggregation of unclassified material can itself be classified. That is a perennial bone of contention even in this blessèd country.

Allard: Indeed it is.

Student: It's like the atom bomb.

Allard: Yes. We always tend to come down on the side of the First Amendment but, sometimes, particularly for those of us who are in uniform, it seems like the First Amendment doesn't exist. I had that fight myself a lot while I was on active duty. I'll give you a quick war story.

When I was here in 1979 and 1980, I took Al Carnesale's course and wrote a paper on the verification of SALT II, which was an issue in 1979 and 1980. I said, "Let's assume that we could hear everything and see everything. Could we still verify SALT II?," and it took it down system by system and target by target. That was the best footnoted paper I ever did in my life, because I did not want anybody coming back to me and saying, "This is how you knew what you said right here." In every single case it was essential to trace back to things that were right there in the literature, in the open sources.

On which point: Thank God for Congress! If you're looking for original source stuff, for God's sake, the Congress of the United States has hearings every single year, and there is a welter of detail that gets provided by all the program advocates who come up before them wanting to get support and money. It's there. It's a treasure trove. Look at it. Every other intelligence service around the world does. Why not Harvard? So, have at it.

Student: I just wanted to ask you about how realistic actually that 5 percent is. My experience with developing countries has been that they have not been very "Web-icized," or words to that effect. Their information is not on the Web. Their language is not English. You really have to be on the ground interviewing people to get it. So, it might be true of many of Western European countries where information is documented, but most of theirs is not only not on the Web, it's not documented.

Allard: documented sources of information are precisely the ones that are most susceptible to the process that I'm describing here. When you are dealing with areas of the world in which much of the information is still undocumented, you're exactly right. Then you're back in that pre-1980s world that I talked about a moment ago.

In most of the companies that I deal with, there simply is not an awful lot of interest in paying for that degree of information. In general, they will commission you to do these things when they've got a specific reason to go into a specific country. Most of what I'm talking about here never comes up, simply because most companies that do that understand that they have no choice except to go native. That is the exact reverse of what I try to do. Why? Because I'm technology enabled. If I've got to do studies in areas of the world in which I'm not technology enabled, then they are better off not dealing with me; they're better off using traditional methods.

Student: If you made a prediction, how fast will that change? We're learning here, or the books that we're reading argue, that this is a world of open intelligence. I have the sense that cold war methods are more effective in developing countries because that's not going to change for forty years.

Allard: If you're dealing with things in the Middle East, or certain parts of Africa, there's no question about it. What you're dealing with is a level of technology penetration that is susceptible to various human-based impediments. (By the way, those are not the only places where you find this problem.)

It's very difficult for me to tell how fast that stuff is going to change. Partly why I'm saying that is because we have been chastened a lot over the last year to eighteen months as to how many problems the Internet is going to solve. I still think of it as a great enabler, but I think that we are very well advised to restrain our estimates of how fast that revolution is going to sweep the world, for precisely the reasons that you all know. You're dealing with humans in traditional societies. In various parts of the Arab world, everything that we're describing here on the Internet is seen as a huge threat and as a form of Western imperialism. In China it is seen in very much the same way, in some respects.

Again, humans make decisions about technology. I would have thought that over the course of this last year we would have been sufficiently disciplined to see that humans made those logical choices, and not to make the glittering assumptions that we've made about the future.

Oettinger: For more about that human within the U.S. or Western European context, you ought to go to the PIRP Web site and look at a paper of mine that has "Ripe" and "Hype" in the title, which will give you a sense of some of the Internet failures despite that burst of enthusiasm. The reality is that there are no miracles any more than there are in military technology. This is why you're reading Steele, and he's a zealot for this open source stuff. You've got to discount that as much as the opposite viewpoint.

⁷Anthony G. Oettinger, *Telling Ripe from Hype in Multimedia: The Ecstasy and the Agony* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-94-2, July 1994), [On-line]. URL: http://www.pirp.harvard.edu/pubs-pubs-pdf/oetting\oetting-i94-2.pdf

Allard: What I'm saying is that I understand what my competitive advantage is in that world. If somebody says to me, "Hey, listen, I want you to go to country X in the Third World," I'm probably not going to take the assignment. Why? It is much more to my advantage to do what I do behind a computer in Washington, D.C. It cost like hell to go and get a human source in the target country. I found that to be true when in I was in the military and it's turning out to be true in business as well.

Student: When we think of the pre-1980s situation, one of the first things that jumps to mind is counterintelligence. Can you tell us something about how counterintelligence works in business intelligence?

Allard: Yes, I can. Let me jump off my main subject here for a second and talk a little bit about that.

There are two kinds of firms. The best known ones are the ones that do sort of the industrial security, counterintelligence work: "Gee, I think my chief financial officer is on the take. Can you tell me whether he is or he isn't?" Kroll Associates is probably one of the best known ones. They do that classic kind of work—the same sort of thing that I used to do in the early phases of my military career.

The second types of firms are those dealing in cyber defenses of all kinds. The thing that's interesting about that world right now is that it has been transfixed over the last several years by an absolute horror that unless you protect your information technology base you are literally betting the company. If you've got a data warehouse, for example, those are the crown jewels, with some very critical information about your company. If you don't believe that, ask Wal-Mart. NCR provides their database. I think it was at least at the terabyte level the last time I looked, and they're very proprietary about it in every sense of that term.

Cyber defenses are vital, but if you're not thinking through the issue of who has access to that information, then you're not thinking through some fairly fundamental issues. Whom do you have working for you, and what proprietary information are you trying to protect? It gets as simple as that. Many companies have only lately come to that realization, even as they busy themselves putting things in place, such as firewalls, antivirus software, network sniffers, and good systems administration.

One of the things that I think is fascinating, though, is the extension that many companies don't realize their own vulnerabilities to exactly what I'm describing here. Let me give you a for instance. My current partner and I wrote a piece for the *Wall Street Journal* that appeared in 1997.8 He was running a technology company at the time, and had a group of very talented young analysts. He simply said, "We're looking for contracts here. Spot that part of the U.S. infrastructure that you find the most vulnerable." They very quickly zeroed in on energy. They very quickly zeroed in on nuclear. They very quickly found the U.S. nuclear power plants that had the worst safety records, and by simple correlations they found out almost everything that a

⁸Howard Whetzel and Kenneth Allard, "Internet Insecurity May Prove Deadly," *The Wall Street Journal*, 14 May 1997.

terrorist would ever want to know about that plant: physical layout, pictures, site diagrams, et cetera. By virtue of some fairly interesting linking that they did, they knew the model of the reactor, and having laid that out against the site diagram, they were able to pinpoint the most likely locations of fissile materials in the plant, as well as the names, addresses, and photographs of the security forces.

As we pointed out in the article, these are the classic things that you would want to know if you were mounting a terrorist attack against that kind of an installation. Whereas before, if you were a terrorist, you would have to take actions that might reveal to any kind of security force that you were planning to do something, in this case you wouldn't have to leave the security of your front room if you knew what you were looking for.

Oettinger: Yes, but also you'd be leaving traces all over the place.

Allard: If you're doing that physically, you're right. If you're doing it on the Net, if you know what you're doing, you can obviate an awful lot of that, although I strongly suspect that by virtue of this current FBI espionage case, we will find out an awful lot more about things that we should have been looking for. It is an ever-changing kind of universe out there. My point, very simply, is that there is an awful lot of information that is "out there" if you know where and how to look, and that is true whether you are seeking intelligence or trying to defend against it. I'll sell it to you both ways. It's not a problem.

I give somebody an analysis, and no matter how good that analysis is of a given business problem, the moment that I give it to them it is out of date unless I accompany it with monitoring. Most of my costs are up-front costs in terms of acquiring the information and getting the analyst up to speed. I do all that. Wouldn't you like to buy a larger chunk of the time when the cost drops and can be amortized? And in monitoring I'm constantly seeking to refine information.

How do I do that? As I said, if you've done the baseline analysis you know what you ought to be looking for and then it simply is a matter of looking for new sources. Those of you who have done a fair amount of Internet research know what I'm talking about. You're constantly trying to point your search engine more efficiently. You're constantly looking for new sources, new linkages.

I'm also looking for pointers to individuals, somebody with direct knowledge of a given situation. When I was at the Kennedy School, one of the first assignments that I had, I forget what course it was for, had something to do with foreign policy. It was something to do with a meeting between Ford and Brezhnev that had taken place in Vladivostok. Someone said, "You know, the guy who reported what happened there was Tom Brokaw. Why don't you give him a call?" At that time I had been out of company command a total of maybe three months. I was not used to being here. My advisor said, "Look, you're here at the Kennedy School. Why don't you call him up and try?" Guess what? It worked. That was the first conversation I ever had with Tom Brokaw, because I said, "Listen, here's what's going on. I'm doing a research project at Harvard. This is what I'm after." There was a certain amount of credibility there. I got to that individual.

⁹Robert Philip Hanssen was indicted for espionage in February 2001.

In business intelligence I am concerned about whoever has direct knowledge of a given business situation. If I'm checking up on a company, what individuals do I want to talk to? Has the guy ever been sued? I can't talk to *his* lawyer, but I can talk to the opposing counsel, who may very well have done an awful lot of my work for me. If it's anybody who has ever been sued for divorce, talk to the spouse's attorney. You may find an awful lot of your work has been done for you. All of these people have direct knowledge of a given situation, and that may be relevant in a business intelligence sense.

Student: One question I have concerns an analogy between commercial intelligence and military intelligence. In military intelligence, you might say one class of "stuff" is learning facts about *things*—for example, about airplanes, how high they fly or what munitions they have and so forth. The other kind of military intelligence concerns how an aircraft or a radar would be used—what the tactics would be—which would also be valid military intelligence. Is there an analogy between the *thing* intelligence—the plane or the radar—and commercial intelligence? Is there an analogy between the human operators, such as pilots or radar operators, and the commercial world? If so, what would it be?

Allard: There really is, because when you look at a company, one of the things you will tend to look for is what that company has said, if it's publicly traded, in its filings with the SEC [Securities and Exchange Commission]. What else do you tend to look for? You tend to look for the people they've got on their board of directors. You tend to look at their corporate CEOs, and you find out very quickly if they are actually organized to carry out what they say they are attempting to do in terms of their strategic business plan.

There are the same kinds of audit trails, if you will, of knowing what to look for, in the corporate intelligence world as you've got in the military intelligence world. You take a look at a given missile and its range parameters and you can tell precisely why they've bought the plane. What are its ranges? What are the ranges of the missile? Where are they likely to be deployed? The same thing is true in the business world. If you simply take a look at what a company says it is going to do and whom it has where, you've got the identical circumstance or situation.

I start with Lexis-Nexis or (or other search engines). Depending on the target, I'll use Dow Jones or Google.com, or one of them. I don't care. I've got lots of people who are younger than some of the folks here and who are far more literate on that aspect of things than I am. They do very well.

What am I looking for? Key events, key names, key linkages. That's what I want. I'm looking for someone who has direct knowledge of a given business circumstance. If there is a supplier problem, if there is a shortage problem, is that real or is that contrived? Is somebody trying to control the market? Alternatively, is somebody trying to flood a market? Are they thinking locally and acting globally, or vice versa?

Remember what I said: if my client is not specific with me, I'm going to waste an awful lot of time and a lot of his money. The more specific the target, the more specific the engagement, the better I can do it.

Student: Keeping that in mind, a key part of the intelligence process is deception and disinformation. If you're trying to protect yourself or trying to mislead others knowing that you're playing these sorts of games, where do deception and disinformation cross the line into securities fraud? If I'm trying to take everybody out, I'll start putting all sorts of disinformation and deceptive material on the Web site trying to mislead people. What do I have to worry about? I assume people are doing that. If I'm smart enough to think about it, they are. Where do you cross the line into the securities fraud in publicly traded companies?

Allard: I am not the absolute expert on what you've got to tell the SEC, but I do know this. There is a tremendous amount of latitude and leeway that people customarily assume in advertising as distinct from what they tell the SEC on letterhead over signatures, or put in a corporate report that is offered to shareholders, because that gets very quickly into audits.

There is a fair amount of latitude in terms of advertising. However, the stuff that you put down on the spreadsheets and put over signatures is very tightly controlled. That's one of the reasons why we try to look for things that have the effective force of law or regulation. It's what I learned when my wrestling coach in high school said, "When you're out there on the mat against your opponent, don't look at his hands. Don't even look at what he's doing with his legs. Look at his belly button. He's not going very far from that." That center of gravity is what you want to look for in the business world as well.

Student: Maybe I'm betraying some degree of naiveté, but it seems to me in a military sense you focus on your opponent and you want to impose your will, destroy him, defeat him, or whatever word we tend to use. In the business arena, certainly you're worried about your competitors, and maybe you'd like to destroy them, but there is more involved. How much effort do you focus on your competitor and how much do you focus on making a better product or service or finding out about your market? I would think—and maybe this is where the naiveté comes in—that if you can find out the formula for Coke or Kentucky Fried Chicken or something like that it's nice, but other than that, what value does that have?

Allard: I find most companies know their own business pretty well. They know the thing they want to produce for the marketplace, whether it's Coke or Kentucky Fried Chicken or what have you. What they don't know nearly as much about are the significant changes in the competitive environment that are going to affect them. That's the whole point that I've been trying to raise here. They think they know enough about market research, and that's as far as it goes. So they tend to be, if anything, short-term focused and internally focused. You don't need to make them more internally focused. They do enough of that already. You don't need to make them more cognizant of their stock prices, because that's what their CEO's bonus is tied to as well as his probable tenure. That's not the issue.

The thing I try to do with the smart companies is to say, "Look, if you're smart, if you're competitive, you will think globally and you will think strategically. If you're prepared to do that, I know how to get the information to help you be more global and more strategically competitive," and that's it. I will tell you that sometimes that is a very tough sell.

What I found is that if I'm going to the vice president level I've wasted my time. Why? Because, first, they don't have the authority to give me what I'm going to need anyway in terms

of signing the checks; and second, leadership is a top-down process, particularly in the business world. If you don't have the attention of the CEO or the COO [chief operating officer], you've just wasted your time. Believe me, I've got the scars. I've had that conversation more times than I can count, and it becomes, "Thank you very much for a really nice briefing. I really appreciate your coming out here, but no sale." What's the reason? If you're not reaching the very top of the company, you're not reaching out effectively to do this. Why? Because it's a new discipline.

Oettinger: Your point is well taken, but I think that what he's trying to say, which makes more sense, is that they're absorbed in things like market research and so on, and tend not to pay attention. They focus on the next quarter, and it's getting worse and worse. In our fundraising for our research program it's getting harder and harder to find somebody who is inclined to think more than the next quarter ahead, and in so many companies they are no longer the executives, but the board of directors, because they're the only ones left who have both a sense of responsibility and a measure of leisure to think strategically. The CEO and COO types are so totally absorbed in bailing out the water that's going to drown them tomorrow, and some of the most ludicrous stories of corporate failure come out of that.

One example that I use, because it involves figures who were otherwise extraordinarily successful, is a venture of FedEx's about fifteen years ago called ZapMail, in which they went into competition on facsimile transmission services. I won't bore you with the details of it, but they had the bad luck of doing this a year or so before the Japanese let loose the Type 4 standard thing and flooded the market with individual fax machines anybody could buy, and the business sank in sort of the same way that the Pony Express did. This is another example of a gross strategic failure, because, again, they hadn't the damndest inkling that there were competitors out there who were about to take all their premises and shatter them. That doesn't mean that the intelligence would have necessarily helped them, because in business as in the military there are lots of failures. The material I went into in the first couple of sessions about unk-unks [unknown unknowns] coming to bite you is as true in business as it is elsewhere. There is no recipe for perfection. The need is less, but the proportions may be quite different.

Allard: Exactly! Companies tend to focus on three things: market research; to the extent that they worry about it at all they worry about corporate security, and they understand the term "due diligence." That's it! By the way, some will give lip service to strategic planning. A rule that I first learned here at Harvard is that there is an inverse relationship between the worth of a strategic planner and his career progression. If you are not involved in the day-to-day operation, it is assumed that you are not pulling your weight. I wish it were another way, but that is the way it is. I'm hopeful that it's going to change but I'm not terribly confident it will.

Student: I have two questions for you. One, how do you differentiate your value proposition from what McKinsey, Bain, or Monitor could offer a client? How do you get over that hurdle, because obviously their brand names are very strong?

¹⁰Anthony G. Oettinger, *Whence and Whither Intelligence, Command and Control: the Certainty of Uncertainty* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, P-90-1, February 1990), [On-line]. http://www.pirp.harvard.edu/pubs-pubs-pdf/oetting/oetting-p90-1.pdf

Allard: Yes, they are. In fact, there are two things that you've got to get over. Number one is not having a brand name, and number two is having a brand new concept on the block. The last thing I did before I came over here was to go over and see a professor at the Harvard Business School about writing an article on business and intelligence for the B-School. Why? Because that is the best way to effect a paradigm shift. The first thing that I can do is to say, "Hey, here's a new idea. Have you thought of this?"

I would tell you as well that what is interesting about these accounting and management firms is that you can see an evolution in firms that began life doing one thing and doing that fairly well. In the case of the usual accounting firms, it was doing audits to get you ready for the Internal Revenue Service or the shareholder meeting or whatever. When about five years ago we began to be more concerned about information assurance, a lot of those companies began to develop those wider kinds of practices. There's only one problem, and that is that the audit partners regard anybody coming in with a new business line as potential internal competition, and their enthusiasm for adopting some of these new services is under somewhat firm control. Consequently, the whole business intelligence field today is dominated by the onesies and twosies. No one has yet succeeded in putting together the vertically integrated kind of company that combines a lot of these services. Kroll does corporate security. Fuld & Co., not too far from here in Cambridge, does a form of business intelligence. To this point, no one has come out with *the* solution to say, "Hey, this is what it needs to be. Offense plus defense!"

Oettinger: There is another alumnus of this seminar at Coca Cola. He worries about things like preventing as well as identifying things like the recent very public incident in Belgium, where somebody sprayed something on the cans and they got into deep trouble. That one got away from them. There are lots of threats, and he collaborates with public and private organizations to thwart them. The full range of things that you can imagine in the military sector apply to the corporate sector as well.

Student: The second question was: what if I wanted to have you do an engagement to collect on a private company, such as Campbell's Soup?

Allard: That's a tougher proposition.

Student: Yes, but more valuable to me if I were your employer.

Allard: If it is a family-owned corporation, or is in any other way held entirely in private, it's a much tougher target. In the same sense, it is a tougher target if it's someplace in the Third World, where I don't have the multiplicity of sources of documented information. I can only get maybe 30 percent as much information here by using open sources as I can when I'm dealing with a publicly traded company. My fees would be correspondingly adjusted.

The whole point here is that I don't care who the company is. They have suppliers, they have employees, they have former employees. They've been sued a couple of times. They've got a reputation in the community in which they are located. There are reporters out there who have covered them, and I'll find them. There are people who have direct knowledge of whatever you want to take a look at. They probably have a company newspaper if they are of any size at all. As I said, I'm not talking about going in and stealing disks. I'm not talking about having someone

wear a wire. I'm simply saying that you do it a little differently, but the fact that it's a difficult target does not make it impossible.

Oettinger: Going back to your reading in that piece about balances and so on,¹¹ remember that every one of his targets faces the balance between operational efficiency and effectiveness and protection of sources. If you're going to operate in all the dimensions that he's talking about, you have to share information, not only with your employees, but with all of the outsiders he's mentioned. Most companies will do a great deal of that, because it's essential. They're not even being lax; they just have to do it. You have to communicate your plans to your employees; otherwise, you can't carry them out if they're not briefed yet. If you obfuscate too much your own people will screw things up.

Allard: Nevertheless, remember that final 5 percent that I had on that earlier figure [Fig. 10]? Sometimes you have no choice except to find that person who might know the CEO well enough to know that CEO's mind, but not well enough to key him to your interest in knowing what it is. That's where you really get into some very interesting situations: difficult, but not impossible.

Oettinger: There are plenty of analogies. I was just looking at someplace on the Web that was talking about the CIA [Central Intelligence Agency] acquiring some equipment to help disguise their inquiries into the Internet so that they wouldn't reveal what they're looking for.

Student: How do you do that? I can understand if you're someone from, let's say, Harvard or the government, and you're saying, "I need some help on this. Could you give me some information on X?" But if you're saying, "I'm a for-profit business intelligence company trying to find information on X," why should I want to give you that information?

Allard: Notice that I said I would not violate U.S. law or regulations. I didn't say that I would always tell the complete truth.

Student: So, "I'm Joe Shmo from" I've got it.

Allard: Absolutely. Have I done that in the past? Yes, I have. You can call up people under a wide variety of different pretexts and get them to tell you a lot of different things. I will tell you, having done this as a badged, certified, counterintelligence special agent—the Army's equivalent to the FBI—I was constantly surprised at the amount of derogatory information that I got from people who had been listed by the subject as character references. Why would you list a character reference who hates you? Well, people talk. Sometimes what you don't want to do is to say, "Hi, I'm representing an open-source intelligence company." Instead, there's: "Hi, I'm researching a paper on topic X." "I'm thinking about submitting a story to a news magazine. I've occasionally written these things in the past." Pick your favorite pretext.

Student: Has it ever come back and proverbially bitten you in the ass? Or are you still batting a thousand?

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¹¹See note 11.

Allard: You can say, "Listen. This guy walked in here today, and I'm not sure why, but, he used your name in vain. I was just wondering, do you know anything about this?" People generally are very trusting, and you'd be amazed at what they will tell you.

Student: How much do you subcontract or outsource if you want to get information? Do you usually pay for the crucial information?

Allard: Sometimes yes, mostly no. Sometimes, you literally have no choice. Sometimes you've got to say, "Look, go here, befriend this person, and see what you can find out." Then again, notice what I just said. I did not say, "Go into that company and steal their disks, enter under false pretenses, or wear a wire." No. What did I just say? Talk to the person. There is no law against that.

Student: I would just add that there are a lot of people out there doing obscure research or who have obscure knowledge. A lot of them are dying to tell somebody about what they have learned, so if you go to them on whatever pretext and ask them about some minute thing that they have tremendous knowledge about, they will spill a lot of these things out.

Allard: People are so flattered to be recognized, to be asked questions, to be invited to Harvard to lecture, that they will brave snowstorms and any other thing you can think of to come up and spout everything they know. I rest my case.

Student: Actually, even government employees will do it. I used to work for a company called Washington Researchers, run at that time by Matthew Lesko, who is quite a personality and now runs Information USA. Matthew discovered that there is an expert on everything in the government. In the Agriculture Department, he found the person who knows more about potatoes than anyone in the whole world. Most people don't care, but when Matthew contacted him and said, "Tell me all about potatoes, and what's the potato crop going to be?" this guy was absolutely thrilled. He got free invitations to the Washington Researchers seminars as the famous Charlie Porter, who knows all about potatoes and introduced Matthew to the wonders of government expertise.

Oettinger: That's truly a search for roots.

Allard: In this next slide, I was thinking of the government as a consumer of open source intelligence, but you made exactly the right point (**Figure 12**). The government is a great provider of open source stuff. I'm looking for government experts. I'm looking for academic experts. I'm looking for experts in the press who have written the journals and the articles.

The government is a great provider of open source expertise on almost anything you can think of. We use it very much that way for the reasons you described. However, when it comes to using intelligence—and what I'm talking about here is primarily how the intelligence community uses open source information—it is traditionally accepted in doctrine, but marginally used. Bob Steele has written very eloquently about that, and I commend him to you. It's one of those instances in which he cannot be accused of exaggeration.

Government Use of Open Sources

- Accorded traditional acceptance in doctrine but marginal use in practice.
- Open-source outsourcing can produce information that is cheaper, faster and more accurate than government holdings.
- Primary utility is economy of force: covering some key areas and freeing government agencies to exploit their strengths.
- Major obstacles include: bureaucratic resistance, awkward contracting practices and ill-informed decision-makers.

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Figure 12

As a young intelligence officer, I learned about open source information. What did that mean? Newspapers. Today there are all kinds of government intelligence people who tell you that open source information is important—but hey don't believe it in practice. They tend to confuse classification and significance, They will also argue heatedly with the second point I make on the slide: that we can get information cheaper and faster than the government can, and that it is more accurate and certainly more up to date. Why? Because what we are is a network. What they are is a hierarchy. By the time the community gets its act together to produce a country estimate on country X, I don't care what it is, I can beat the hell out of them. I can do it faster, I can do it cheaper, and I think I can do it better.

Student: Maybe this is just my cloak-and-dagger mind working here, but one of the problems I saw when I was reading Steele and when I'm hearing this is why should the government trust open source companies that can be paid for the same kind of information if they are depending on that information for the national security? What kinds of safeguards do you have in place to reassure a government buyer, for example, that you're not going to turn around and sell some of the information they put out?

Allard: As a matter of fact, I don't give them that assurance. If I do an analysis of, let's say, South Africa, I don't care whom I sell it to, because if it's open source, who has the money?

But the real reason for the reluctance of these people to deal in open source is that it absolutely threatens the rice bowls of the GS-13s in all of those bureaucracies. The real, strong rationale for open source intelligence in the government is that if you use it, you can fire many of the government bureaucrats. This is not something that will endear you to the government bureaucrat.

It's a whole other discussion, but I will tell you, that I get very deeply concerned about a whole new group, a whole new generation, of intelligence officers who are used to believing everything they see that comes across their computer. That scares me to death. I have intelligence

analysts whom I beat up constantly about not going native, not going expert, zero assumptions, all of this stuff, and you know what? I do that better than the intelligence agencies do. The intelligence agencies, unfortunately, are guilty of log-rolling, a certain amount of "satisficing," because we want to make this all come out nice for the decision maker. As I said, I face the same thing in the government world that I do in certain corporate sectors in which I say, "If you want happy face and happy talk about why you ought to go to Brazil, don't hire me. I will tell you the truth, and I don't care whether you like it or not. That's up to you." I make no guarantee to the government that I would not make to the commercial world for exactly that reason.

Oettinger: Let's go back to the way you opened up by pointing out that some of your assignments were going in to be the check on the analysis of the internal guys. If I'm one of his clients and I have half a brain, I'm going to run an internal check or hire another company to check up on him. If you don't believe that happens in the government, look at the record of some of the last seminars, where you look at the apparatus that in the Reagan Administration was built up inside the National Security Council [NSC] staff for checking up on the intelligence agencies. ¹³ Every administration has its own mechanism for double-checking on the intelligence people and vice versa.

Finally, if you're an executive worth your salt, you devise strategies that will help you be successful whether or not your intelligence analysis is correct, like, "Bomb living shit out of everything in sight with megatonnage, just in case you didn't get the location right." Another example is, as I'm going to advise him in connection with his problem, we now have a guaranteed reservation at the Airport Hilton. Whether you use it or not, after four o'clock we'll be charged for it. Your optimum strategy is not to depend on the lies or the half-truths that you get directly at the airport. If you're on the ground and see the plane is leaving, you leave, and you pay for the hotel without using it. It then looks to me like an insurance premium, which was ultimately very much worth it, because you're worth it, buddy. If it turns out that at 11:15 the plane is still sitting there, you go to bed. The strategy is now totally independent of whether the messages we got here are truth or lies. His strategy is robust against intelligence failure, but at a cost. It's costing me, not him, \$195 to buy the insurance so that he can sleep tonight and he won't hate me, and he'll come back again some other year.

 $^{^{12}}$ Xrefer defines "satisficing" as "seeking or achieving a satisfactory, but less than a maximum or optimum, result for the agent or for some group." On-line at URL: http://www.xrefer.com/entry/553457

¹³¹³ See John Grimes, "Information Technologies and Multinational Corporations," in *Seminar on Command*, *Control, Communications and Intelligence, Guest Presentations, Spring 1986* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-97-1, February 1987), 135–149, [On-line]. URL: http://www.pirp.harvard.edu/pubs-pubs-pdf/grimes/grimes-i87-1.pdf; Rodney B. McDaniel, "C3I: A National Security Council Perspective," in *Seminar on Command, Control, Communications and Intelligence, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 107–124, [On-line]. URL: http://www.pirp.harvard.edu/pubs-pubs-pdf/mcdaniel/mcdaniel-i88-1.pdf; and *Intelligence, Guest Presentations, Spring 1990* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-91-3, December 1991), 19–35, [On-line]. URL: http://www.pirp.harvard.edu/pubs-pubs-pdf/lucas/lucas-i91-3.pdf

Allard: Look at my third bullet [Fig. 12]. The primary utility for doing this stuff, particularly if you fire a whole bunch of GS-13s too, is economy of force. I can cover things that they can't. It's the classic outsourcing strategy. We do the things that we do best. You do the things that you do best. In the Army, we found out that we really were not about mopping the floors in mess halls and peeling potatoes. If we really wanted to be a warfighting force, we ought to focus on that and not assume that we were simply developing character by having guys on KP [kitchen police] duty. I have done enough KP for that rationale-to make perfect sense to me.

The same thing is true here as well. In the same way that the technology of overhead surveillance has now enabled one-meter resolution from commercial sources, business intelligence can now do things that used to be the exclusive purview of the government. The commercial guy, if he's smart, will use me for that. For the government, the use of commercial open source intelligence is all abut economy of forces. You can fire people and concentrate more effectively on what you need to do better.

Student: Obviously, books have hammered home the importance of OSINT. You today have talked about the advantages of OSINT, but I've got to tell you, based on my experience in government, that OSINT from a policy-making perspective is largely worthless. Those in the intelligence community definitely value OSINT, but I'm not convinced that those in the policymaking community do. When policymakers have intelligence from an intelligence agency they really don't care about the unclassified stuff, because they think that intelligence agencies aren't in the business of the unclassified. They're in the business of the classified, and they have their own staffs that can go in and get the OSINT themselves. Besides, these are the same people who were up sixteen hours a day reading *The Washington Post* and doing everything else like gathering their own perspective on intelligence in the world. I'm not convinced that more use of open sources in the intelligence community is really going to add a lot of value to the products given to the policymaker.

Allard: One thing that would improve the intelligence agencies is opening themselves up to an outside perspective that will allow debate on their own turf and on their own terms. As it is now, so much of what they do is a closed loop, and they wind up drinking their own bathwater. That's a real problem. The intelligence community needs more dueling analysts, in the same way that in academe you have dueling scholars. The competition improves the process considerably, and right now the intelligence guys are insulated from too much of that. It's one of the reasons, damn it, why they get it wrong so often. That happens when you don't compete.

Student: With all due respect, I think what you're talking about right now is probably closer to the reality that's going on within the Pentagon than your first bullet, which oversimplifies the situation [Fig. 12]. What you just articulated is closer. There is significant use of open source material in the intelligence community and it is widespread. That's not the issue. The seams they are trying to mend right now are in how it can be properly integrated into the other sources of information for the policymakers, which is what you guys just talked about.

The other area where it's confused is in the prioritization of the resources, for example, between active and reserve components, for country studies of such things. You're got Tier One, Tier Two, and Tier Three countries. So now we're going to outsource these other things, and

reserve components and other people are going to use open-source materials, because that's what they have available to them. They're going to do country studies and a lot of these things. I don't think you quite accurately capture what's going on right now by saying that in doctrine it's marginally used, because it's significantly used. The question is where it is being used and when the choice was made to do it.

Allard: If you're happier, I'll put in "marginally effective use in practice." To me, it is not so much that they do it, it's that they don't do it well. Maybe it's like a talking dog. It's not what he says, it's that he does it at all. I can give you stories. So can Steele.

Student: I think you're missing the point. There is a real shift occurring here to integrate it and use it in a way that's being lost in the discussion.

Allard: All I'm saying right now is that they do not do it well. The reason why I'm saying that is because there are some agencies (I probably know the Army best) that actually do that. I've had guys call up to tell me that, "Listen, I'm the OSINT guy for XYZ," and that's great. But, you know what? The reason why the OSINT stuff inside the government is fatally compromised is precisely because it is internal to the government. I would say the same thing if it were internal to a corporation. Remember what I said before: you can certainly have a corporate intelligence staff, but you'd better have somebody who doesn't have skin in the game to tell you whether you got it right or not.

That's my sole point here. The open source stuff in the government today is part of the problem rather than the solution. Why? Because their analysis is like all of the rest of the analysis in government. It is bureaucratically compromised from the beginning. That's why in that last bullet I'm saying you've got bureaucratic resistance. The contracting procedures are horrible, and finally, you've got decision makers who really don't know what the system can actually do for them.

Student: I also wanted to say on the limitation of government use of open sources (and I accept everything else you said) is a technical and physical one. In government intelligence, you're fusing information from all levels of classification. If you use an open source, particularly if you use it based on the Internet, you have a very big problem, because you've got to use a computer net that is outside the SCIF [secure compartmented intelligence facility]. You need a way of merging those data, and it just becomes a big hassle because of the physical limitations and the security limitations of the various networks.

Allard: Don't even get me started. Let me give you a story from my own time in Bosnia. One of the things that drove us absolutely nuts was that problem you just described, but we were now dealing with a 31-member coalition and that includes the Soviet Union (I beg your pardon, the Russians; old habits die hard). We had the Russian Airborne Brigade.

Oettinger: General Shalikashvili took great pride in having them all fighting together.

Allard: It's one of the things that gets into some very dodgy areas as to what information you're going to share with the coalition. Everything that you just described is part of the pathology. It's

part of the problem. I understand the reasons for it. I speak those languages. But what I'm saying is that you've got a lot of self-contained information that has to be kept separate and unto itself. That is beginning to encourage certain really bad habits of mind. The fact that you've got to protect it that much, that you're so entirely constrained dealing in that world, means that you can't look outside it and you tend to believe everything the damn machine tells you. That's the thing that concerns me more than anything else right now.

Oettinger: We are reaching near four o'clock. What I'd like to do is maximize our time, so I'm going to start breaking down the equipment and deprive him of his visuals while he continues to talk with you until four o'clock.

Allard: Before I take the question, let me just very quickly show this last slide (**Figure 13**). I hope I persuaded you of these four things. First, we've got a cutting-edge capability. An awful lot of businesspeople just don't understand that. The second thing is that it's getting even easier to provide this intelligence all the way down to decision points. It's happening. It's getting easier all the time. The third thing, as I said, I love search engines, I love libraries, and analysts are all important. The final point is that whether you're talking about government or business, the technology has very little to do with whether you use a source or you don't. That comes down to humans.

Conclusions

- Open Source Intelligence can provide a cuttingedge capability for business leaders, especially those engaged in global business.
- Production and distribution of business intelligence are being made easier through the Internet and wireless revolutions.
- Search engines are helpful, so are libraries: but good intelligence continues to depend on good analysts.
- In both government and business, the use and exploitation of Open Source Intelligence is limited by factors other than technology.

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Figure 13

Student: My question has to do with the defense consulting firms in the D.C. area. The Pentagon, in many ways, is particularly farming out a lot of strategic contracts to them. Given that these are outside agencies and many of their employees have offices in the Pentagon, they are kind of half way between the private sector and the government. How far do they go toward breaking up that inward perspective that the government has?

Allard: Not far enough. The problem is that, as any contractor will tell you (and I've done a lot of work for them since I've been out of the military), their main objective in life is to sell more or their product for as much money as they can. So what? So the last thing in the world they want to

do is to offend the guy who is giving them the money, and that encourages certain limits on their candor. That's one of the reasons. If your primary focus is on your government client, you've got a problem dealing with the stuff I'm talking about here, and the reason for it, very simply, is if government contracts ever became important to me, I would get out of them.

Oettinger: Let me underscore this point so that it doesn't look like such an *ad hominem* argument against government interests. It is the fundamental dilemma of any profession that if it serves only one client, it becomes subservient to the client. So what makes what used to be called a "liberal" profession is multiple clientele and the ability to tell one client to buzz off and not feel that you've lost your livelihood. This is one of the reasons why medicine and law and so on have survived a bit longer and a bit better than some other professions. They've tended to have it easier to have multiple clientele. Of course, there aren't perverted medical institutions or perverted law schools. The most extreme example of a perverted medical establishment was "medical" experimentation under the Nazis, but even in the United States we've done experiments on prisoners and military personnel. By and large, that is a fundamental professional dilemma, and the difficulty with the whole notion of a government intelligence agency is that it is *ipso facto* a single-client organization. What I hear him saying is not so much an argument that intelligence agencies are more corrupt than anyone else, it's that a single client is a serious problem.

Allard: The other thing that I can't stress strongly enough is that everything I'm talking about here is commercially available, which is defined as meaning that it is as available to Saddam Hussein as it is to me. So, guess what? He doesn't much care about procurement nightmares. He's not terribly tolerant about them, as a matter of fact. But my point very simply is that, more than anything else, what the government needs to understand is that it is no longer the information monopoly it once was. That's certainly true in terms of satellites. I'm suggesting that it is equally true in some other areas of intelligence. There is no way in the world that I can go in to the CIA, with all its in-depth expertise, and say that I can compete with them, and I'm not saying that. What I am saying is that there are certain things that I can do better than they can. Why? Because I'm not part of their problem, whatever their problem is. I can give them an outside perspective, and an honest view. I would tell you, in Washington, D.C., that's a very precious commodity.

Student: Seeing that you did bring up Saddam Hussein, one of my major worries is that while some would say he can't put his own satellites up ...

Allard: Sure he can.

Oettinger: He buys the pictures from the French.

Allard: The French will sell you anything that you can slide over the bar.

Student: I suppose companies like yours, say two years down the road, will have satellite capabilities that will rival those of the military. How do we prevent them, or should we prevent them, from selling real-time information on troop dispositions to adversaries?

Allard: You can't stop it.

Oettinger: Actually, one way would be to put the U.S. satellite things into the private sector with a subsidy so that they could undersell everybody else and corner the market.

Student: People would say you're dumping!

Oettinger: Put that in your pipe and smoke it, because one of these days it may be the only serious way of addressing the problem you mentioned. Certain traditional solutions are so bankrupt that if you do not think of something as radical as what I've just mentioned, then you're just going to go chasing your tail hopelessly. It would be a small cost to the taxpayers.

Allard: By the way, one of the things that I find fascinating, and we have not talked about it nearly as much as I would love to, is that by virtue of my work with the media, I am constantly impressed and surprised by how fast information moves. There is no way in the world the government can compete with that. If you don't believe that, just walk into the National Military Command Center, the NMCC, down at the Pentagon, and what have they got on? CNN and MSNBC.

What does that tell you? We do a far more efficient job. When I sit up at MSNBC, I have access to the NBC hotwires. That's the direct pipeline from all of our correspondents, all of whom are really good at what they do. I've got all the stuff that is on the Internet, and I've got 120-plus satellite channels coming in 24/7 being edited by 22-year olds. Now, guess what? That's a lot of information. There is no way in the world the government people can keep themselves abreast except if they watch us, if they're lucky. I'm used to dealing with stuff on an immediate basis.

As I was telling the group at lunch, on Friday I was doing some errands and the cell phone rang and it was MSNBC. They said, "Hey, what do you think about Iraq?" I said, "It depends. What's happened?" They said, "Oh, we just attacked them." I said, "Gee, that's great. Where?" They said, "Close to Baghdad." The next thing I knew, they patched me into the control room, and I was talking to one of our anchors live on national television from McLean, Virginia, from my cell phone in McLean, Virginia.

I'm suggesting that the news organizations are like the intelligence agencies, except, being networks, they've got a hell of an edge because the intelligence agencies are hierarchies, and hierarchies do two things with information: they take time and add spin. Again at the risk of sounding like a determinist, all I'm suggesting is that there is something about this second information age that we're into (Gutenberg gave us the first one) that is terribly subversive of hierarchies, because of the electron. I'm not saying it will do away with hierarchies, I'm just saying it limits their effectiveness, particularly when it comes to dealing with information.

Oettinger: Shifts the balance is the way I would put it.

Allard: Exactly. It's the same way of thinking.

Student: In twenty years, do you really see a viable function for U.S. intelligence, or any sort of intelligence agency?

Allard: I said this on the air the other night after being asked the following: "How come, since the cold war is over, the Russians are spying on us and we're spying on them?" I answered, "Welcome to the real world. It is the information age, and while the Internet is a wonderful thing, do you know the reason why these old tried and true methods—dead drops, clandestine meetings—are used? Because they still work."

Oettinger: And because folks still keep secrets.

Allard: Yes. There it is, welcome to the wonderful world of the information age!

Oettinger: The balance has shifted. It is more open now. That doesn't mean that secrets have gone to zero.

Allard: Exactly.

Student: One of the key points, since you mentioned it, is the information the Russians were buying from us. They were buying information about whom we have spying on them.

Allard: Yes. The very first requirement you set as a former intelligence officer is to penetrate the other guy's organization. Why? Do you understand about feedback loops? That's the first thing that I want to try to do. Why? I want to cover my own ass at the same time I'm trying to spy on yours.

Oettinger: That's also another argument for openness, because the amount of energy that gets absorbed in this sort of tail-chasing and the expense of it are worrisome. You end up having secrets. They're vital to the guy who gets caught and gets shot, but in terms of the value of the information, it's about as close to zero as you can get.

Allard: It doesn't take much of a genius to take a look at the track record of the various intelligence agencies and not to conclude that there is a fundamental need for reform. When the National Imagery and Mapping Agency they did not know where the Chinese embassy in Belgrade really was, it astounds me that you still have yet to begin that reform process.

Oettinger: On that note, you've got to get out of here. I want to thank you, and here is a small token of our appreciation.

Allard: I don't deserve it! But thank you, sir.

Acronyms

CEO chief executive officer
CNN Cable News Network
COO chief operating officer

FBI Federal Bureau of Investigation

FedEx Federal Express

KP kitchen police

MSNBC Microsoft National Broadcasting Company

NBC National Broadcasting Company

OSINT open source intelligence

SALT Strategic Arms Limitation Treaty
SEC Securities and Exchange Commission



