

TKA Working Paper 08-01

Intelligence: Building the Business Case

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July 1, 2007

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INTELLIGENCE: BUILDING THE BUSINESS CASE

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*An edited version appears as a chapter in the book **Starting a Competitive Intelligence Function** (SCIP, 2008).*

SUMMARY: Intelligence should be seen, not as a cost, but as an investment. But to do that, one must define specifically the ways in which intelligence creates value. And, to the extent possible, each of these ways should be quantified wherever possible. Intelligence is a fact-based discipline, and demonstrating its value should likewise be fact-based.

This chapter proposes using a discounted cash flow (DCF) project financing model to seek and justify new investments in corporate intelligence. The economic value-added from intelligence is estimated based on the benefits that derive from each of four major roles played by intelligence professionals.

Introduction - Two Vignettes

Scenario 1 – A Visit to the Doctor

You pay a non-routine visit to your doctor. The doctor's first question is, "What kind of pills would you like today?"

Your reaction? You're shocked at the incompetence, and look for another doctor. Any doctor that prescribes medicines upon request is little more than a very expensive vending machine. We expect the doctor's first question to be something more like, "What is bothering you today?"

Yet, too often the former is how intelligence practitioners and other information professionals approach their clients. They ask—with the best of intentions—“What kind of intelligence or information do you need to do your job better?”

It’s basically the same “vending machine” mindset, and invites the same reaction. It’s unprofessional, and adds little value.

A more productive approach for the intelligence professional to take is to start by asking, “What business problems are you having?” He or she should then be able to translate from the problem expressed by the client, to the solution he or she can offer – just like a competent physician does.

Scenario 2 – A Call to the Broker

You call your stockbroker with some money to invest. She says, “Here’s a great investment idea for you. Unfortunately, it’s a new stock, and totally different from any other, so there is no way to know how it might have performed in the past. And no analysts cover it, so there are no forecasts of how it might do in the future. And it pays no dividends, so you might be up or down a year from now. You have to just trust me on this one.”

Sound appealing? Not very. Yet that is how many intelligence operations approach the issue of the ROI of intelligence. They have more questions than answers—or, worse yet, they just ignore the issue.

Return on investment (“ROI”) and value creation should be at the beginning of any conversation about intelligence. Intelligence must at least have a fighting chance of paying for itself by creating benefits greater than its cost. In today’s cost-conscious world, if it does not, it becomes simply another good idea that never gets fully implemented.

Proving the Business Case

Conceptually, developing and presenting a business case is simple. One creates a “pro-forma” (that is, *future estimated*) financial assessment of the scenario in which a certain project is implemented, then compares that to a scenario in which it is not. The key question is, *What is the net incremental benefit?* The key test of value is that the total incremental benefits must outweigh the total incremental costs (plus some return on our investment) over time. If they do not, the initiative is not funded.

This model is widely used in corporate financial decision-making—for example in undertaking new projects, in making acquisitions of companies, business units, facilities, and equipment, and in planning financial moves like stock re-purchases. Since the model is understood by most senior financial and general managers, we suggest that it is the most appropriate model for undertaking a new corporate function (like intelligence.)

Note that this is a generalized model, and will need to be configured for each specific organization that implements it. Your organization may use its own derivative of this general model. This is a template that will at least get you started on developing your own business case.

As regards intelligence, the initial impetus for even considering a formal intelligence process is often some recent significant competitive surprise. In such a case, there will be a strong sense of urgency to initiate an intelligence capability, typically championed by someone within senior management. Still, we recommend a rigorous assessment like that proposed here be undertaken, in order to determine the exact mission and scope of the initiative.

There seven specific steps in developing a business case using this “project” model:

1. **List the incremental costs**
2. **List the incremental benefits**, in a qualitative sense

3. **Measure** (or estimate) the value of **the incremental costs**
4. **Measure** (or estimate) the economic value of **the incremental benefits**
5. **Plot these incremental costs and benefits and costs** over the life of the project
6. **Calculate the value of the initiative** using a *discounted cash flow* (DCF) model
7. **Benchmark the DCF value** against some corporate *hurdle rate* that new projects must meet in order to get funding.

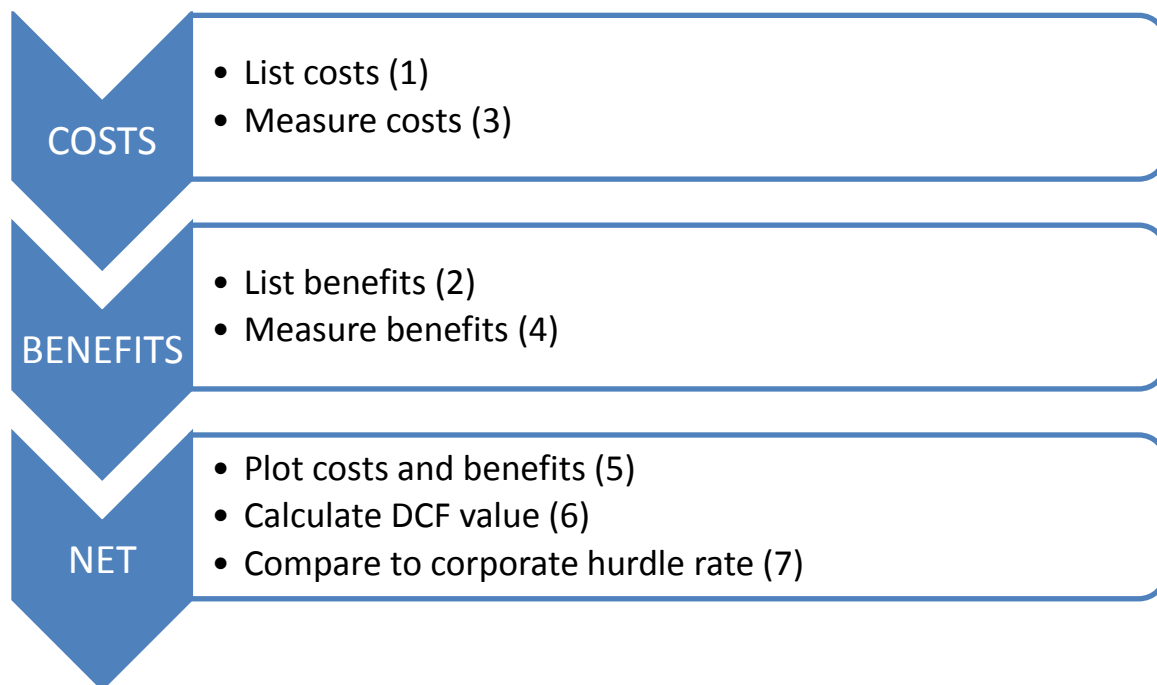


Figure 1: A Process for Proving a Business Case

Your case will be strongest to the extent you are able to complete all seven steps. In fact, the DCF model depends on having all seven steps completed—without any one of them, you can’t run the quantitative model. In that case, you’ll be left using “trust us” arguments—like the stockbroker in the introduction.

We’ll describe later how to execute each step (though not necessarily in the order listed here). The hardest step is usually Step 4, measuring the benefits. In fact, there is some disagreement among experts in the corporate intelligence discipline as to the extent to which you can identify and measure such quantifiable benefits. However, in light of the fact that there are at least

some companies with sophisticated processes for measuring intelligence benefits, we'll leave this in the category of "difficult, but possible."

Moreover, in this era of financially-savvy executives who depend heavily on the views of Wall Street analysts and investors for their own compensation and advancement, we believe that *it is essential to at least estimate the quantitative impact* of intelligence.

The exercise of going through each of the seven steps itself has value in that it:

- ▶ Guides you in thinking through the specific **problems** that intelligence is expected to address in your organization
- ▶ Helps you think through the specific **roles** that intelligence will play
- ▶ Challenges you to think through and **document** the costs and benefits of these roles
- ▶ Challenges you to **measure** or quantitatively estimate those costs and benefits, where possible
- ▶ Helps you communicate the **feasibility** of undertaking the initiative
- ▶ Helps you determine the **scope** of the initiative (for example, how many people should be assigned?)
- ▶ Helps you develop **metrics** for the initiative that can be used to evaluate the effectiveness and efficiency of intelligence after implementation

Is Intelligence Truly Incremental?

We'll define *intelligence* as "A business process that develops and manages current knowledge and forecasts of the business environment used in making strategic and tactical decisions." By this definition, virtually no company starts the process completely devoid of intelligence. Most have *multiple existing* channels for acquiring information from the outside environment, for example:

- ▶ Their **sales and market research** people talk to current and prospective customers
- ▶ Their **support** people talk to customers

- ▶ Their **investor relations** people talk to securities analysts and institutional
- ▶ Their **business development** people talk to other industry players
- ▶ Their **executives** talk to other industry executives at business and social events
- ▶ Their **scientists** talk to other scientists at conferences
- ▶ Just about **everyone** reads about their segment of the industry
- ▶ Just about **everyone** conducts Internet searches on topics of interest to them

These “boundary-spanning” processes are a few of the conduits for external information, and typically there are many more. And that’s the point—all these multiple points of contact are typically uncoordinated and unsystematic. They remain “silo-ized” and unconnected. Therefore they often contain redundancies and yawning gaps that leave the organization as a whole vulnerable. In fact, there often exists a situation where information of vital importance to one part of the operation sits in another part—unused, or used for some other purpose.

How Does Intelligence Add Value?

There’s a marketing maxim that a customer doesn’t really want a drill, he wants a hole. The drill is merely the means to creating a hole—just as intelligence is a way of solving business problems. The key to creating value (and ROI) for intelligence is creating value for the intelligence “customer” or user in solving his or her problem.

In my experience, companies and decision-makers typically don’t actually need, or even want, intelligence as such—but they do need solutions to their business problems.

Too often, though, intelligence presents itself as a solution in search of a problem. (See Scenario 1 above.) We try to sell the customer a drill, instead of figuring out how to cut him a hole. The key to adding value is to focus *first* on the nature of the client’s business problem, *then* address how to solve it using information and intelligence.

Intelligence can and does address a wide range of business problems, depending on its mission and location in the organization (described further in “Value in Context” below.) In supporting Marketing, for example, intelligence can help with problems such as improving a company’s marketing strategy in light of intensifying competition, setting a more effective pricing strategy, and determining whether to expand into new markets, to name just three examples.

Each business problem then is supported by an intelligence plan that describes short-, medium-, and long-term intelligence goals, priorities, and deliverables. (These are sometimes called *key intelligence topics, or KITs.*)

As noted earlier, the information available to companies to help solve business any given problem is often uncoordinated and unsystematic. As a result, companies suffer from unreliable, incomplete, or contradictory information when assessing these business problems. A well-designed and executed intelligence process coordinates information flows and adds analysis to help managers tackle important business problems. It is in this role that the value of an intelligence process must be measured.

In each organization, the specific mission for intelligence, and the intelligence plan that supports that mission, will vary. However, a set of “information deficiencies” that is strikingly similar across many organizations, across all industries, remains. These include:

1. **There is too much information “out there”, and often it’s hard to find.** According to the search engine Technorati, the number of blogs is now over 93 million—with 175,000 being added *each day*. Not all of these have business value—but a surprising number do, and should be on your intelligence “radar screen”. And it’s only going to get worse. A recent study found that worldwide information production increased by 30 percent each year between 1999 and 2002.ⁱ

2. **We can't even quickly mobilize the information we already have "in here."** A recent study found that large company managers spend an average of two hours a day looking for data they need—then when they get it, they typically find that about half has little value. This is due to organizational silos and lack of governance systems that define how and where information is to be shared.ⁱⁱ

3. **We're not sure what it all means, and where it's going.** The science fiction writer William Gibson said, "The future is here. It's just not evenly distributed yet." The seeds of the future are in the present—right here, right now. It's just that figuring out which events are "trends" that you should study closely, and which are "blips" that you can safely ignore, is not so easy.

4. **We're not sure what to do about it.** Even if you had perfect information—which none of us does, or ever will—it is still often not clear what to do about it. Stanford professors Pfeffer and Sutton have described a "knowing-doing gap" that afflicts most companies, and prevents them from effectively using much of the knowledge they already possess.ⁱⁱⁱ

The Four Key Roles of Intelligence (Step 2)

There are four key roles that corporate intelligence plays in a typical organization. Each of these roles addresses one of the fundamental information disconnects discussed in the previous section.^{iv} For each of these intelligence roles, a specific set of benefits will result. We'll start by listing these benefits qualitatively—then later try to quantify them.

First, **intelligence finds, filters, and edits "news" and other information that could be useful to the organization.** This includes information from secondary sources like the Internet and databases, as well as from primary sources like contacts in the industry (including those internal to the organization). Intelligence serves the role of the advance party. We'll call this role **"SCOUT"**.

For the **Scout** role, benefits could include:

- ▶ Capture things that we would otherwise miss.
- ▶ Reduce the amounts of time each of us has to spend chasing things down.

Second (and these are not in order of importance), **intelligence serves as a central clearinghouse for information already gathered**. Archival hard files and electronic repositories are maintained, and intelligence becomes the reference point for future efforts. If the intelligence process is seen (as it should be) as relying on an internal network, the intelligence function is the center of that network. We'll call this role "**HUB**".

For the **Hub** role, the benefits could include:

- ▶ Make sure we are all working from the same data set.
- ▶ Make sure we do not have undesired redundancy in the system.
- ▶ Coordinate so that we do not have gaps in coverage.
- ▶ Make sure that we can find what we have already captured, across organizational "silos", when we need it.

Third, **intelligence helps to figure out what it all means**. This role itself has three aspects: (a) what does it all add up to?; (b) what are the implications for our organization?; and (c) what is likely to develop in the future? This involves a massive breaking down of all the unconnected "factoids" that come across, and putting them back together in a way that makes a coherent picture of the business environment *now*—and its likely picture in the *future*. We'll call this role "**ANALYST**".

For the **Analyst** role, the benefits could include:

- ▶ Integrate disparate data points into a unified picture of what is happening.
- ▶ Develop the implications and "so whats" for our organization.
- ▶ Describe trends and scenarios of likely future states.

Fourth, **intelligence recommends what to do about the findings** from the first three steps. Intelligence creates value for the organization only to the extent to which it is used in making business decisions and taking actions. Without that key part of the intelligence role, it is just more informational “noise” that can be overlooked and ignored. We’ll call this role “**ADVISOR**”.

For the **Advisor** role, the benefits could include:

- ▶ Develop feasible options for decision-makers to consider.
- ▶ Apprise the decision team as to the pro’s and con’s of each option.

Measuring the Benefits (Step 4)

Qualitative benefits are real, and they give you a solid start in building a case for intelligence. But in business, there is a perception—whether entirely valid or not—that “if you can’t measure it, you can’t manage it.” Consequently, real bottom-line benefits are far superior in building a case, and should always be used if and when they are available. In many cases, even taking an educated guess as to the financial impact will be better than simply saying “trust us”.

Our model so far looks like this (Table 1):

INFORMATION DEFICIENCIES	INTELLIGENCE ROLE NAME	INTELLIGENCE ROLE	QUALITATIVE ROLE BENEFITS
Too much data	SCOUT	Find and filter news	<ul style="list-style-type: none"> ▶ Capture what we’d miss ▶ Save us time
What do we know/ not know?	HUB	Act as central clearinghouse	<ul style="list-style-type: none"> ▶ Develop consistent data set ▶ Reduce redundancy ▶ Reduce gaps ▶ Cross silos
What does it mean?	ANALYST	Develop implications and	<ul style="list-style-type: none"> ▶ Integrate data points ▶ Describe implications

		trends	▶ Describe trends
What should we do?	ADVISOR	Recommend actions	▶ Develop options ▶ Recommend among options

Table 1: Intelligence Roles and their Benefits

Now we just need to measure those benefits quantitatively. But before we try to do that, we'll first take a side trip to explore what the overall ROI model will eventually look like.

A Time-Value ROI Model (Step 5)

A generic ROI model can be diagrammed as shown in Table 2. Neither project costs nor benefits are likely to be one-shot events; they are likely to be recurring, year after year. There are costs associated with the initial investment ($Cost_0$) and both costs and benefits associated with each time period for which the investment is to be evaluated. Either costs and/or benefits may change over time—costs often go down over time, while benefits may accelerate.

Capital investments are typically evaluated by year, though more or less frequent units of measurement are also possible. Calculations are usually made on *constant currency* terms, such that any effects from inflation are factored out.

This ROI model uses *cash flow* as its unit of measurement. Cash flow is literally the amount of cash that comes in or goes out—without any accounting adjustments.^v

	INITIAL	YEAR 1	YEAR 2	YEAR 3	YEAR N
BENEFITS (cash in)		Benefit ₁	Benefit ₂	Benefit ₃	Benefit _N
COSTS (cash out)	Cost ₀	Cost ₁	Cost ₂	Cost ₃	Cost _N
NET CASH FLOW	Net ₀	Net ₁	Net ₂	Net ₃	Net _N

Table 2: A Generic Return on Investment (ROI) Model

This general model fits comfortably into an electronic spreadsheet, and you are encouraged to create a template as shown in Excel or other spreadsheet software. This will greatly facilitate revising and running the model. The formula for each year—each column in Table 2—is:

$$\text{Benefit}_N - \text{Cost}_N = \text{Net}_N$$

Costs (Steps 1 and 3)

Costs for intelligence generally must be estimated, in both qualitative and quantitative sense, as part of the budget request. Costs are typically easier to estimate than are benefits because, by definition, costs usually are financial and may be estimated through a formal purchasing process and/or informal discussions with vendors.

Costs for an intelligence initiative typically include labor, hardware and software, data, and other related outlays. Some costs are obvious (such as software and database licenses), because they appear on invoices from vendors. Others are hidden costs, for example, the time of people to learn, use, and maintain a source or application.

- ▶ **Labor** includes staff salaries and benefits. Salaries may be a “sunk cost” if the personnel are already on board; nevertheless, it should be included in a rigorous project analysis.

- ▶ **Hardware** includes workstations (laptops or desktops), servers, network storage, routers and wiring, and telecommunications equipment. Costs include purchase or lease costs, maintenance costs, and any related support costs.
- ▶ **Software** includes the software for intelligence applications, operating systems, network management, and so on. Software may be licensed or purchased. There may be an initial fee and a periodic license fee. License fees for many applications are charged on a “per seat” basis, that is, how many people are using the application at any given time. License fees often cover help-desk support and applications maintenance and upgrades; however, to the extent they do not, these costs must be factored in separately.
- ▶ **Data** includes electronic database subscriptions, hard copy journal and newsletter subscriptions, books, and “webinars”.
- ▶ **Other** can include related contracted costs, such as outsourced intelligence and consulting support, and telecommunications charges.

Benefits (Steps 2 and 4)

Benefits consist of the incremental—in the sense that they would not have occurred without the project—cash flows generated by the investment. These can be *financial*; *non-financial* but measurable; and *qualitative*, or essentially non-measurable.

- ▶ **Financial metrics** can be top line or bottom line. Top-line financial benefits include *revenue enhancements*, which typically are incremental sales that would not have otherwise occurred. Bottom-line improvements include *cost reductions or avoidance*, which are outlays that can be reduced or eliminated by the project. The ROI measurement only takes financial metrics into consideration.

- ▶ **Non-financial metrics** are the subject of various kinds of business scorecards now in place in many organizations. Examples include:
 - ❑ Percentage of revenues from new products
 - ❑ Employee turnover

For the intelligence process, an example of a non-financial metric would be the “customer satisfaction” scores derived from surveying the clients of that intelligence process and its products.

Though non-financial metrics are worth discussing, they cannot be directly incorporated into a financial ROI analysis. However, it may in some cases be possible to arrive at an estimated financial equivalent for a non-financial metric.

- ▶ **Qualitative benefits** are assumed to exist, yet in practice typically are not measured because either they cannot be measured reliably (for example, “better decision making”), or because economically it is not worth the cost of doing so.

Benefits of any kind may be especially difficult to estimate in “out years”, farther away from the date of implementation.

		YEAR N
BENEFITS (cash inflows)	TOTAL BENEFITS (= Benefit_N)	\$
	Revenue enhancements	\$
	Cost reductions	\$
	(Non-financial)	(List only)
	(Qualitative)	(List only)
COSTS (cash outflows)	TOTAL COSTS (= Cost_N)	\$
	Labor	\$
	Hardware	\$
	Software	\$
	Data	\$
	Other	\$
NET CASH FLOW	Net_N	\$

Table 3: Annual Benefits and Costs

Strictly speaking, benefits should be *outcome measures*—that is, they should reflect measurable end results that directly derive from the intelligence process. Too often, intelligence advocates rely on *output measures* (for example, number of reports produced, or number of page hits on an intranet site), which are not nearly as convincing as outcome measures in making a business case.

Net

The net cash flow for any year “N” is the incremental cash inflow (**Benefit_N**) less the incremental cash outflow (**Cost_N**) for that period (Table 3). The initial outlay (often called “Year 0”) is typically not offset by a benefit.

Each “column” of our model, then, looks like that in Table 3. Cash flows should be estimated for all future periods for some reasonable planning horizon. Five to seven years is a typical horizon for estimating project costs and benefits.

Cash flows for each period should be estimated independently; however, in many cases, they are based on the same value formulas. For example, benefits may “ramp up” over several periods before maturing to their full potential. Certain costs (for example, vendor charges) tend to increase over time, whereas others (for example, training) may actually decrease based on an experience curve that makes this function progressively more efficient.

Cash flows, both positive and negative, should be estimated as conservatively as possible. Wildly optimistic assumptions will usually be detected in the reviews of the project proposal, and the chance to go back with a revised model may be limited. To preserve your precious credibility, it’s better to run the model conservatively—estimating costs on the high side and benefits on the low side. If the model “works” under those conditions, then it is robust and will give you some margin for error.

You can build credibility by expressing estimates of future benefits and costs as *ranges* of values. A good practice is to run three versions of your model: one *optimistic* (costs low, benefits high); one *most likely* (midpoints of the ranges); and one *conservative* (costs high, benefits low—as described above).

Time Value of Money (Steps 6 and 7)

Once you’ve estimated the cash flows for each period, you then should account for the *time value of money*. Put simply, a dollar^{vi} to be received in the future is worth less today than a dollar received today. The difference is the amount of income that could be earned in the interim if the sum were invested.^{vii}

Each of your future cash flows must therefore be “discounted” by the *discount rate*, that is, the amount that the alternatives to this potential investment could be assumed to earn in that time. The discount rate for your organization depends on a variety of factors, and is usually available from the office of the chief financial officer. If you cannot find this number, we suggest you run your “baseline” model using 10 percent as the discount rate, then make necessary adjustments from there.

There are two related types of discounted cash flow (DCF) calculations: *internal rate of return* (IRR) and *net present value* (NPV). These are different ways of expressing the same fundamental financial principle. The IRR is the *compounded percentage rate of return* the project is expected to yield over the planning time frame. Mathematically, it represents the discount rate at which the total cash inflows and outflows of the project are exactly equal. The project IRR is compared to a *hurdle rate*—the rate defined by the organization as the cutoff for capital projects. If the project IRR is greater than the hurdle rate, the project should be a “go.”

The NPV is the *present-value financial equivalent of the stream of future cash flows* that is expected to be produced by the project. NPV expresses the economic value of the project in one dollar number. The NPV formula builds in the hurdle rate, such that any project with an NPV greater than zero should theoretically be accepted.

Net₀	Net₁	Net₂	Net_N	IRR = X%
				NPV = \$Y

Table 4: Internal Rate of Return (IRR) and Net Present Value (NPV)

Formulas for calculating both NPV and IRR from a series of cash flows are widely available. You can find them in most PC spreadsheets’ formula libraries, in hand-held financial calculators, and in financial software for hand-held personal digital assistants.

We have said that, ideally, any project proposal with an IRR above the enterprise hurdle rate—in other words, with a positive NPV—should be accepted. In the real world, however, such proposals are typically further evaluated along with other “NPV-positive” proposals in order to arrive at final budget allocations. In this capital-constrained world, these methods usually just get you to the discussion table; they do not guarantee you the funding you are seeking.

Populating the Model – Two Examples

So far, we have the structural outline of the ROI model. Now we need to determine the value of each cell in Table 2. In doing so, we’ll refer back to the intelligence roles and benefits described earlier, and attempt to place an economic value on each of them.

Please bear in mind that this is not a cookie-cutter model—you’ll need to tailor this thoughtfully for your own organization, as it’s beyond the scope of this chapter to go through every possible calculation. It really would not help, since every organization has different cost structures, different intelligence implementations, and different resulting benefits.

As an example, let’s take the SCOUT role. Earlier we listed two of the possible benefits of this role. “Spot things we’d miss otherwise” sounds pretty “qualitative”, although it can have great value. But “Save us time” sounds like a natural place to start estimating quantitative benefits. Time literally is money, and if we can save it, there is a direct cost avoidance.

In many companies, intelligence prepares regular summaries of relevant news for senior management, as well as an interpretation of key news items’ implications for the company. These may be daily briefs, or weekly summaries, or both. In one large company we’ve worked with, these briefs go out to the top 400 decision-makers throughout the company. These are well-paid, busy people, who average cost to the company is well over \$250,000 per year. Let’s

guess that the scouting done by intelligence saves them at least one hour per day of research they otherwise would have to do. (We can always refine these numbers later, but it's better to just put something—even a “best guess”—as a placeholder as we're getting started.)

Let's say each executive works an average of ten hours per day. So, we are saving them 1 hour/10 hours or ten percent of their time. The annual time saved is $1/10 \times \$250,000 \times 400$ people, or \$10 million, assuming the executives' saved time was re-directed to some other productive activities. That's a nice first entry in the “cost reduction” part of your spreadsheet (based on Table 3.)

Now you need to estimate this for each year until some time horizon, say, five years. What about inflation? Remember, all of our numbers are going to be “constant” currency, so we don't need to factor inflation into our model. We know this company may have some personnel reductions next year, so we can estimate that as, say, \$9.5 million in each of the next four years.

OK, here's another example, a “revenue generation” example that really includes all four major intelligence roles. It's widely accepted that intelligence can help sales people, especially in a business-to-business situation to win incremental sales. I know of at least one company where intelligence people supporting intelligence are given performance bonuses based on support they give to successful deals. Let's say a \$5 billion sales company can attribute 3 percent of its sales to having better intelligence. The benefit here is \$150 million.

Value in Context

It's important to keep in mind that the value created by intelligence can vary depending on how—and where—the intelligence is focused. Intelligence is most effective where it's located within, or at least close to, the “value centers”—those functions that provides the greatest competitive value to the enterprise.

In other words, intelligence should “follow the money”. The most competitive companies often have an almost instinctive feel for this. For example, the intelligence processes of a major pharmaceuticals company are focused almost exclusively on new product development—because in that company, in that industry, finding new drugs is the paramount driver of value. (And the thing that top management worries most about.)

At another company, the intelligence unit is located within Human Resources. Why? This is a major information technology firm whose competitiveness depends on getting the best and brightest engineering and sales talent. Here again, intelligence follows the money.

It’s important to note that intelligence is often positioned as a *defensive* activity—early warning and *threat mitigation* to prevent “bad things” from happening. Benefits derived from threat avoidance are doubly hypothetical—even if they are realized, they (by definition) do not occur.

To the extent, on the other hand, that intelligence is *offensive* and focused on *opportunity generation*, the resulting benefits are in the positive column. For example, sales intelligence can help the sales force win greater revenues. Though these benefits are still hard to attribute (as in the Rob Garber story below), they do not require so much of an exercise of the imagination.

“Jackpot” Benefits

There is another kind of benefit for intelligence that sometimes can be useful—if applied prudently. These are those rare events where an intelligence unit has a clear “win” that can be unambiguously attributed to intelligence. For example, the intelligence function at Merck conducted some patent analysis. Because of the team’s adept analysis and good relations with the firm’s senior management, the results of the research were eventually used to delay a market entry by a rival firm into a market where Merck had a presence. The former Merck CI

director claims that the benefit was worth about \$200 million to Merck's top line^{viii} He did not specify what, if any, incremental costs were incurred to achieve these results.

Stories like this are inspiring, and they become part of the "folklore" of intelligence. And things like this can, and do, happen.

But not often. And there may be a certain amount of luck involved. For this reason, we call them "jackpot" benefits.

Doing intelligence because you're hoping to engineer some kind of save-the-company event, is like practicing medicine because you're hoping to discover a cure for cancer. It could happen, but it's really not a realistic reason to pursue the discipline.

And it's certainly not credible as an argument for why intelligence should be conducted at the enterprise or business unit level. Intelligence is an ongoing process whose gains individually may be relatively small, but there are many of them—and collectively they can add up to significant value added.

Anecdotal Evidence of Value

ROI measurements that are based on anecdotal evidence, while not as convincing as the more rigorous approach we've proposed here, are still better than "trust us". A recent survey conducted by SCIP's Competitive Intelligence Foundation found that fully 40 percent of firms with intelligence programs have no formal process for assessing the effectiveness or value of that intelligence.^{ix}

That same article summarizes some of the publicly-documented evidence that "intelligence works." Table 5 summarizes and analyzes the evidence presented.

COMPANY	INTELLIGENCE INITIATIVE	COST	BENEFIT	TIME PERIOD	INTERNAL RATE OF RETURN
High-tech manufacturing firm	Purchase end-product technology	\$175,000	\$2.5 million savings	One-time	1328%
NutraSweet	Entire intelligence program	\$1 million/year	\$50+ million/year savings and incremental revenues	Recurring over five years	5000%
Procter & Gamble	Competitive benchmarking	N/A	\$40 million savings	N/A	N/A
Motorola	Acquisition of firm	N/A	\$10 million incremental profits	N/A	N/A
General Motors	Competitive benchmarking	N/A	"Hundreds of millions" in savings	N/A	N/A

Table 5: Value Generated by Intelligence Programs

Most of these figures were estimates of the value of intelligence made by senior management who were directly involved as users of that intelligence. Though several clearly are “round number” estimates, and do not have costs attached—nevertheless they are indicative of the potential scale and scope of intelligence returns.

If you’re thinking like a business person, you’ll be thinking, *Are results like these scalable?* In other words, let’s assume for a minute these numbers are accurate. What if, in the NutraSweet example above, they doubled their intelligence spending to \$2 million—would they then have a \$100 million gain to show for it?

The answer is, it’s possible. In fact it’s even possible the additional gain would be greater, so they’d have a gain of, say \$110 million.

Intelligence returns may be scalable to some extent, and for each organization or business unit there is an optimal scale up to which the value added (what economist call “marginal utility”)

goes up, and after which it goes down. This is the “sweet spot” where your intelligence returns are greatest.

Benchmarks

When you get done all the calculations, it’s also good to have a second way to arrive at the answer, so you can “triangulate” between the two. This will validate and strengthen your case.

One of the best benchmarks to have is at least some idea of what your rivals are spending on intelligence. If you are being largely overpowered on a comparative resources-to-resources basis, it’s likely this will impact your ability to do an effective job.

The U.S. as a nation is said to spend a little more 1/3 of 1% of its GDP on intelligence. Let’s say, for the sake of argument, that a company should consider half that same benchmark. This would mean a company with \$10 billion in sales would be spending about \$15-20 million on intelligence.

In fact, most companies of that size spend less than this, sometimes far less. Why? Because the value is unproven. In civil and military affairs, intelligence is long-accepted and assumed to have value. In business, on the other hand, intelligence is seen as an option—and consequently must prove its ROI, “earn its keep”, day in and day out.

Key Challenges

Intelligence projects are especially vulnerable to “death by ROI” for several reasons: intelligence is an overhead function; its benefits may be hard to measure; and as a result, the intelligence function is often viewed as expendable.

1. **Intelligence is overhead.** Intelligence rarely by itself generates revenues, nor is that its primary mission. It is an overhead, or staff, function—the benefits of which are necessarily indirect. Therefore any benefits from intelligence, even its financial ones, are necessarily subject to estimation and biases.
2. **Intelligence benefits are hard to measure.** The benefits of intelligence are more uncertain and subject to volatility than are many other corporate initiatives. Even when intelligence plays a direct supporting role in generating revenues—for example in support of the sales process—its benefits may be unclear.

Rob Garber worked at a global software firm developing intelligence for their sales force. “Part of our role was to create sell-against sheets —what our products offer in the way of feature sets, what our rivals have, and how we stack up—so our sales teams worldwide would have a consistent, powerful story. Sales people and managers loved our reports, and we always got great user feedback on our effectiveness.” But there are many factors, including intelligence, that contribute to making a sale—and the impact of intelligence could not be measured in isolation. The company significantly reduced the sales intelligence program.^x

3. **Intelligence is seen as expendable.** Corporate intelligence is a leading-edge practice and is not assumed to be necessary by all companies. Compared to other corporate functions, intelligence is relatively new and is not assumed to “work” in all enterprises. If things get tough and something must be sacrificed, intelligence too often is on the table.

Joe Tadrick works in the New York region of the Office of Infrastructure Protection, U.S. Department of Homeland Security. Joe’s job is to help businesses become aware of various threats to their business infrastructure. “When we go into a new company,” Joe

says, “we always ask to see the corporate Security people and the Intelligence people. The Security people always come to the meeting, but with Intelligence, sometimes there is a department, sometimes there isn’t...and even when there is, the decision-making level at which they are plugged in varies a lot.”^{xi}

Conclusion

The key “take-away” points from this chapter are the following:

1. **Position intelligence as an investment.** Proving a business case consists of creating a reasonable expectation among investors—in this case, your management team—that value will be created.
2. **Let the numbers do the talking.** Value in a business context is best measured economically – with hard numbers. Numbers are the language of modern business, and without them, you might as well be speaking classical Greek.
3. **Work hard on your business case.** While assigning hard numbers to intelligence may be challenging, it is by no means impossible. You may have to sharpen your pencil and put your thinking cap on.
4. **Don’t reinvent the wheel.** There are existing models “out there” (like the discounted cash flow project financing model we’ve proposed here) that your management will already understand. You can use these to build your case for intelligence.
5. **Focus on the benefits.** If you really get stuck on the hard benefits, make sure you do a *really* thorough job on thinking through the soft ones.
6. **Practice thinking like a business person.** Intelligence professionals are usually very good at finding information—but not always so good at realizing what it means for the value of the business.
7. **Don’t make promises you can’t keep.** Absurdly high claims for value will catch up to you, and will tarnish your credibility.

T.W. (Tim) Powell

Tim Powell is president of **The Knowledge Agency**® (TKA), a financial and economic research, consulting, and training firm. His work integrates business strategy and information management. During a career that spans more than four decades, he has served over 100 global corporations, professional and financial services firms, entrepreneurial companies, and government agencies, among them **Abbott Laboratories, American Express, GE, Petrobras, Sony, Traveler's Group, the US Navy, and Xerox.**

Prior to founding TKA in 1996, he was Managing Director of the Strategic Research Division of FIND/SVP (now **ORC Guideline**), a global business research network. There he founded and led a practice that executed more than 250 successful assignments in evidence-based marketing and strategy, primarily for financial services and information clients. His specializations included customer satisfaction research and business process benchmarking.

He previously served as a Business Development Manager with **PricewaterhouseCoopers** responsible for the firm's new services and technologies development. He led the planning and development of several new lines of business in the financial services and retail sectors. He co-founded the firm's market intelligence function, and helped pioneer a firmwide knowledge management system. He created and led an initiative to apply information technologies and business analytics to the firm's sales, marketing, and strategy processes.

He began his consulting career with **KPMG**, where he specialized in predictive analytics and quantitative forecasting. Among client projects, he led the development of a 150-sector interactive financial model of the **New York State** economy that was used in evaluating tax rate scenarios. He also led firmwide initiatives in new product development and strategic planning.

Tim has been a leader in the corporate intelligence field since its early days. He is a Fellow of the **Society for Competitive Intelligence Professionals** (SCIP), where he held a series of leadership positions. He co-founded the **Business Threat Awareness Council** (BTAC), a joint public-private corporate security initiative, and serves as its corporate secretary.

He previously worked professionally as a medical research assistant, insurance underwriter, radio broadcaster and executive, urban ethnographer, technology journalist, musician, and sound recording engineer. He also served in the public and not-for-profit sectors, specializing in government productivity, financial accountability, and social entrepreneurship.

EDUCATION

Tim holds a BA in pre-medical science, psychology, and philosophy from **Yale College**, where he received a full scholarship from CIGNA Corporation. He holds an MBA from the **Yale School of Management**, and also conducted graduate studies at New York University's Stern School of Business and The New School.

PUBLISHING AND SPEAKING

Tim is a published expert in corporate intelligence, knowledge management, marketing, information technology, and financial econometrics. He has authored three books and made substantial contributions to several others.

- **Analyzing Your Competition – Third Edition** (1992, FIND/SVP) is a manual of competitive analysis techniques and sources
- **The High Tech Marketing Machine** (1993, McGraw-Hill/ Probus), a *Fortune* Book Club selection, is an early survey of technologies to support marketing and sales
- **The Knowledge Value Chain® Workbook** (2008, TKA Eyes and Ears) outlines TKA's intelligence methodology of the same name

He developed and taught a graduate course in competitive intelligence at **Long Island University**, and has lectured at NYU's Stern School, Rutgers, the Hartford Graduate Center, and the Yale School of Management. He speaks frequently at business and professional forums worldwide.

Notes

- ⁱ “How Much Information? 2003”, study conducted by the School of Information, University of California, Berkeley.
- ⁱⁱ Study conducted by Accenture and reported in “Managers Have Too Much Information, Do Too Little Sharing, Says Study”, Marianne Kolbasuk McGee, *InformationWeek*, January 3, 2007.
- ⁱⁱⁱ Jeffrey Pfeffer and Robert I. Sutton, *The Knowing-Doing Gap*, Harvard Business School Press, 2000.
- ^{iv} Intelligence roles are based partly on a personal conversation between the author and Jan Herring.
- ^v *Cash flow* is quite different from *earnings* as defined by generally accepted accounting principles (GAAP), which all U. S. listed corporations currently must use for reporting. For example, for financial reporting purposes the cost of a piece of purchased capital equipment is charged in stages over a period of, say, three to five years as depreciation. In an ROI analysis, the entire purchase outlay is treated as a single initial cash outflow.
- ^{vi} We apologize for any culture-centricity, here and elsewhere in this chapter. Of course, the same is true for any currency.
- ^{vii} There is something to be said for the certainty of “a bird in the hand”, versus the uncertainty of “two in the bush” – but presumably this uncertainty is factored into the expected rate of return.
- ^{viii} Steven H. Miller, “Boosting Merck’s Bottom Line”, *Competitive Intelligence Magazine*, January-February 2002.
- ^{ix} Jan P. Herring, “How Much Is Your Competitive Intelligence Worth”, *Competitive Intelligence Magazine*, March-April 2007.
- ^x Rob Garber, personal conversation with the author.
- ^{xi} Joe Tadrick, personal conversation with the author.