Positioning the Bootstrap Alliance

A Discussion Paper

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http://www.enosis.com/services/BA/baposition.pdf
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I invite your comments. Any for-public commentary sent to the author will be appended to this document (by inclusion or by reference to a supplied URL).

For the Uninitiated

The Bootstrap Alliance is a new broad-based cooperative dedicated to the improvement of individual, team, and organizational performance in collaborative settings. It was formed by Douglas and Christina Engelbart. The Bootstrap Alliance is planned as a joining of forces of major stakeholders in business, government, universities, R&D labs, information technology, vendors, consultants, consortia, initiatives, and other communities and non-profit institutions. The Bootstrap Alliance now includes as participants leading organizations such as Sun Microsystems, Netscape Communications, Educational Testing Service, and Patricia Seybold Group. (*from Bootstrap Alliance literature*).

Writing about anything to which Douglas Engelbart has turned his attention is an activity fraught with risks of repetition and "not quite getting it". To safeguard yourself against my failures of this sort, please see the original texts about the Bootstrap Alliance and the underlying concepts (which comprise the larger part of this derivative text!):

- **Bootstrap Alliance Home Page**
  http://www.bootstrap.org/alliance.htm
- **About the Bootstrap Alliance**
  http://www.bootstrap.org/alliance-about.htm
- **Boosting Collective IQ — 1/96**
  http://www.bootstrap.org/vision.htm
- **Boosting Collective IQ:** For Quantum-Leap Improvement in Productivity, Effectiveness, Competitiveness — A New Grand Challenge (BOOTSTRAP INSTITUTE Douglas Engelbart, Ph.D., Christina Engelbart, September 5, 1996)
  http://www.bootstrap.org/presbciq/index.htm
- **Toward High-Performance Organizations:** A Strategic Role for Groupware (Bootstrap Institute, June 1992 (AUGMENT,132811,))
  http://www.bootstrap.org/augment-132811.htm

This discussion paper is a result of my recent participation in two Bootstrap Alliance meetings. One primary goal of these meetings was to crystallize the strategic, service, and operational aspects of the Bootstrap Alliance (BA, or Alliance). It was particularly during the meeting of June 16 and 17, 1997, where our attention turned primarily to the design of the BA's service offering.

Questions and Indicators

These were some of the questions we undertook to refine:

- What is it, specifically, that the BA offers Alliance members?
- What is it that an Alliance member contributes to the Alliance?
- In what ways might the Alliance speak about this?

These were some of the indicators we used to gauge our success:

- Does “it” get consensus support among the attending professionals?
- Might “it” attract new members; possibly to join immediately?
- Would “it” appeal to the attending organizations?
- Does “it” provide the structure needed to allow the Alliance begin some “real” work?

I hope this speculative and preliminary discussion paper will help to advance that discussion.

I. The Alliance Service Offering

If we were designing a service offering for a commodity-like service, our tasks (when we set aside the questions of development, production and delivery, among others) might have been reduced to:

- Identifying a specific constituency, and then
- Defining a specific and verifiable value proposition.

In turn, communicating such a service offering might have reduced to

- Identifying a specific prospective subscriber,
- Assisting this prospect in identifying the specific challenges that apply to the defined service, and then
- Directing this prospect's discovery of the logic for making immediate specific investments in order to realize the specific and verifiable current and future returns.

Our Design Challenge

We undertook a much more difficult challenge. We were trying to design a service that asks a universal constituency to make investments now and into the future to gain a general systemic benefit meant to prepare them for future categorical, but not specific, challenges. To top that, the future returns (in type and extent) would be nearly entirely dependent on their own, individual discovery, exploration, refinement, and execution of the experiences available to them through subscription to the service. As a consequence specific and verifiable returns become difficult to predict and assign.

Simplified Comparison of Service Offering Attributes

	Simple Service	Our Challenges
Constituency	* Specific constituency, defined by specific shared attributes	* Universal, each member likely to have entirely different agenda
Value Proposition	* Specific * Verifiable	* General, Systemic * Ontological
The Targeted Challenges	* Near-term, now * Specific * Tactical	* Future, far-future * Global, Fundamental, Categorical * Strategic
Investment Levels	* To fully realize * Specific * Knowable now	* Just to begin, Get in game * Only basics are specific ("Join") * Open-ended
Returns	* Projectable * Verifiable	* "Exercise left to the student"

In other words: we are suggesting a known immediate and unknown future investment to gain an unknown future and uncertain return. It's no wonder, then, that we didn't just whip up some quick solution to our service offering design challenge.

II. The Case for Focusing on Concepts

Difficulties and Distractions

Delivering a service offering that satisfies this higher challenge is difficult to do, as the months of discussion on this subject attest. I suggest that two behaviors in our recent meetings are symptoms that we have broken faith with this difficult goal:

- The often mentioned refreshment from "getting specific", and
- The drive to get "real", to get one or two "pilots" underway.

Although these behaviors are valid and important in the conduct of the Alliance's business, I believe they are distractions from the more difficult work we have taken up.

Our difficulties might lead us to think there's no way to talk to prospective Alliance members, in the terms of the Alliance, about what the Alliance is really trying to do. We might, therefore, fall back to the usual soft-against-hard stratagems:

- "Just come and see"
- "You have to experience it to know it"
- "I believe in it, let's just try it".

Or we could visit another common resort — addressing a prospect's current specific projects or the Alliance's ready-to-run pilots. In this approach we inventory our tools and capabilities, and we look for targets of opportunity. We operate much like consultants or systems integrators with a solution kit—always ready to diagnose and prescribe.

Our confusion here can lead to confusion among prospective members that one joins the Alliance to, essentially, "buy" a pilot to get, as a first-order-result, an implementation of some part of an OHS or to "be instructed" on how to become a CoDIAK-practicing organization.

But isn't it possible that, if we rely on the foregoing or other rationalizations, we can predetermine significant detrimental consequences on the work of the Alliance and the long-term satisfaction of Alliance members?

Beginnings Beget Endings

I believe it is possible to sculpt a service definition whose primary value proposition is based (in short) on becoming prepared for the unknown but certainly challenging future. We can, I believe, demonstrate to potential Alliance members, even in these early days, that participation in the Alliance:

1. Is necessary for enlarging the long-term strategic capabilities of their organization, especially if they wish to gain fundamental competitive and coopetitive advantages, and
2. Is unlike any other investment available to them (internally or externally) towards that end.

Sculpting such a service definition is critical to achieving the Alliance's intrinsic goals, even to establishing and maintaining its competitive position.

And I think that it is possible (possibly even preferred) to do this within the constraints imposed by the Alliance's fiscal requirements.

"We want to crystallize the Alliance's purpose" was a phrase often mentioned at the meeting. Indeed. Yet, it should be crystallization with, say, the nature of a diamond (in a reference Doug's n-way connected network diagram of the collective work environment in a CoDIAK-adherent organization): strong in the lattice axes or planes which are fundamental to its nature.

Another Framework for Our Efforts?

Perhaps we can establish a framework and agenda for doing this work. Here is a shot at one:

Through iterative refinement (starting with abbreviated and restricted, even inaccurate, stubs):

1. Define a mission and the high-level value propositions. Start from principles. Categorize the big and small collections of concepts, and their related objectives. Make concrete these principles, concepts, and objectives. Array them in grids and associations that support participation by the larger team in the further steps.

   (The existing Alliance descriptions are, obviously, the root source for these principles and concepts. But the existing attempts to create a message suitable for promotion exhibit, within a couple of paragraphs, a reduction of the principles, concepts, and objectives to activities; driving down to the tactical: pilots, meetings, postings, etc. The goal of this step in the framework and agenda is to make concrete the principles, concepts (and their particular or peculiar collections), and objectives. This step is more about making concrete the big picture of what one gets from the Alliance, not, at this point to make concrete the things one does in the Alliance.)

2. Profile prospective members. Consider their business, their value propositions and value chains, their competitive positions, their CoDIAK profiles, their OHS systems, their existing or historical investments in improving human systems, in knowledge systems, in organizational learning, etc. Align them by their expectations, by intrinsic and Alliance-oriented categories, and other associations.

3. Profile alternate investments each prospective member (or their category) might make to gain the same value to which the Alliance aspires. Identify errors, weaknesses, and strengths of each with respect to the other: a prospect's judgment, the alternative investment, the Alliance.

4. Prepare possible service definitions, pricing, operational mechanics, member and Alliance success measures (the Alliance itself; the mission and high-level values — boosting Collective IQ, etc.).

   Now make concrete the things a member might do in an Alliance so conceived. Keep this skeletal and essential.

5. Evaluate these as a whole: strengths and weaknesses on- and off-axes. Consider how each contributes to or detracts from the service or message. (In the off-axes: a weakness may be a great differentiator; a strength, a great confuser.) How well might the story "sell" to prospective members? Possibly test it.

   The exercise in which we were all invited to participate ("Prepare a proposal to your organization for membership in the Alliance") will be an interesting source of material for this step. But not to attempt a kind of "least-squares" fit among them — with the Alliance catering to each found need. Rather, in addition to making specific contributions to the design process, they will also be useful as fodder for a deconstruction and dissection exercise — to discover their underlying, hidden or absent attributes. Later, once the informed service offering is designed, these proposals will again be useful as the comparands, the informers, revealing the strengths and the weaknesses in the candidate service definition.

6. Revise and extend all of the above results. Reconstitute. Repeat.

At some point, we'll need a new framework to guide us in putting the envisioned service definition into pilot presentations to prospective members. That framework will help us understand what works, where, and why; leading to a refined service definition and presentations.

III. Hardening Concepts

Getting Concrete about Concepts

The crux of Step 1. of the framework suggested above is the necessity to "Make concrete these principles, concepts, and objectives." In this and the next few sections I hope to make some contribution to such an effort. My goal is to build a basis for ways of listening, thinking, and talking about the Alliance that will help to shift the balance from the "tactical" view to the "strategic" view.

Earlier I argued that we must eschew the promise of pilots and outposts as part of the primary value proposition. To help in this exercise (of hardening concepts) I suggest that we maintain at least temporarily a vigilance against any thought that such things would be of any value to attracting or serving an Alliance member.

Among our remaining resources would be:

1. Story telling
2. Listening, with intelligent questioning

(Other mechanisms will be important, later, as part of the whole approach.)

Four ways we might employ these resources:

1. **Boosting Collective IQ**
   Doug tells a good, comprehensive story. His writings and the Bootstrap Institute's experiences are an important story, our key story. This vision is the distinguishing characteristic when comparing the BA to other collaborative systems consultancies. Every prospective member should hear it and understand it. But it would be very difficult for each new, prospective member's delegate to translate and communicate this, in whole, to her respective organization. We have to find ways to package this story and provide the tools that will assist in its retelling. I make a first attempt to do that below.

2. **Alliance Members**
   Current Alliance members also have good stories to tell. We should work together to help encapsulate and highlight the specific 'Alliance-conceptual' components of these stories — to turn them from a story about a project, to a proof statement about the principles, concepts, and objectives of the Alliance.

3. **Self-Analysis**
   Every prospective Alliance member also has stories to tell. But here our challenge, in addition to careful, critical listening, is to "intelligently question" the prospect so that she reveals (mostly to herself) the significance of the presence, or absence, of these principles, concepts and objectives in her projects. Two possible approaches have in common an interrogation technique which would accompany such a presentation:

   - **Direct Approach** - Basically a change assessment
     "That was very interesting.
     —Setting aside the specific project details, could you describe the common or distinguishing characteristics of the biggest changes in your organization in the last 3, 5, 8 years?
     —Why were these changes so 'big'? Industry-segment wide? Quantum scope?
     —How did they come about?
     —What prepared your organization for those changes; what intrinsic or developed knowledge, skill, capability made it possible?
     —Were they prepared enough?
     —What basis did that change leave to help with the next big change? (Or to avoid making it a 'big' change?)"

- **Proxy Approach**
  "(this) organization did (some strategic change intended to improve the organization's CoDIAK nature, to boost Collective IQ). Setting aside the project's implementation details, and looking at the Collective IQ aspects:
  —How do you see such a project (or individual concept) in your organization?
  —How prepared would your organization be to do a similar project?
  —How would your organization's CoDIAK nature be changed by the capabilities this project introduced?
  —What new future might that make possible?"

4. **Enough About You, I Have Needs Too**
   Another story the Alliance has to tell is about how and what we want to learn from Alliance members. What is it that we want them to help us discover? This is an enlargement over the idea of participation in a NIC or lending resources and people to a pilot, outpost, etc. By emphasizing the need for the Alliance to learn from them, to gain their experience and expertise and perspective, we insert, by inference, the promise that they will learn from other Alliance members doing the same. We buttress understanding of this dependency by asking prospective members how, in what fashion and with what experience, etc., they will teach and explore with the Alliance. The Alliance asks them to assess their contribution. This story must avoid the "trap of the tactical," and just talk about the learning, the exploring.

   (Notice that this is, essentially, the reverse of the project we undertook to perform at the last Alliance meeting: to write our respective organization's internal justification for joining the Alliance. This is, in harshest terms, "demonstrate your worth to the Alliance".)

These four and other approaches would be mediated through questionnaires, checklists, charts, self-assessment, peer-interviews and reviews, and similar processes internal to prospective member organizations. Their common substructure (their bundling, their scoring, their cross-referencing, etc.) is their linking not to NICs or pilots, etc., but to the overarching Alliance principles, concepts, and objectives.

Reconsidering Fundamentals

Above I mentioned that our primary value proposition is based on becoming prepared for the unknown but certainly challenging future. Below I propose to expand on that. I introduce an interpretation that, I hope, provides a "functional" view for what the Alliance is trying to do. If successful, and after much enhancement by the Alliance itself, such a view would give us a basis for identifying the independent variables, the dependent results, and the associated parameters which comprise our value proposition.

This proposal is an interpretation of our key story: Douglas Engelbart's *Boosting Collective IQ* http://www.bootstrap.org/vision.htm. **Caution!** I have modified Doug's material in several ways—subtle and not-so subtle, and a bit silly—to support this proposal.

1. **Change Happens**
   Organizations are subject to quantum, systemic, global changes. Such change may be self-initiated or externally imposed.

2. **Collective IQ: Be Smart, Be Fast**
   Surviving these changes, even thriving in them, is determined not by cash reserves, or by exclusive, proprietary technology. (Although these are certainly great to have.) It is determined by your organization's Collective IQ. More than a "simple" total of your staff's individual IQs, more than (and more difficult to achieve than) excellence in a technology or process, it is the
   - collective ability of your organization
   - to change
   - rapidly

   that counts.

3. **Learn to CoDIAK: Augment Thyself, Everywhere, Continuously, Collectively**
   How does an organization gain, increase, its Collective IQ? By **Co**ncurrently **D**eveloping, **I**ntegrating, and **A**pplying **K**nowledge (**CoDIAK**). Be careful to note that this is much more dynamic and integrated that the "standard" concepts of knowledge creation and management.

4. **Systems Count — OHS and Beyond**
   Being a CoDIAK-practicing organization is a challenge. Organizations undertaking this challenge employ and benefit from many human systems and the tool systems that support them. One important human-system-enabling system is an **O**pen **H**yperdocument **S**ystem (**OHS**). An OHS is not the only tool system you'll have to develop and look to. There are many more human systems and enabling tool systems to consider. Each require significant effort to apply effectively. An OHS is, however, one of the most fundamental systems, making many other CoDIAK activities possible.

5. **Improve Your Self-Improvement: Know your ABCs**
What is perhaps most important about becoming a CoDIAK-practicing organization, and most important in implementing human and tool systems such as an OHS, is that it gives an organization the ability to improve its ability to improve.

The importance of developing this self-improvement capability might be easily overlooked. "Having" a Collective IQ isn't enough, it must be improving, and improving ever faster. In facing change an organization plays a form of Craps. No ordinary organization can survive long placing a single bet on each change. We must face each change with smart hedges. The intelligence and the resources to take smart hedge positions are the result of focus on improving the ability to improve.

There is a human system that counts in making this happen. This system structures your organization's activities in three categories: A, B, and C.

(**Caution!** Please note that throughout this proposal I have modified Doug's material in several ways. In this case I am attempting to untangle the (true) self-referential nature of this system. To do so, I've presented the ABCs later in the argument. I've inverted the activities. Also I've altered and re-ordered their definitions. Further, I'm not yet satisfied with my mapping: althought I think everything from Doug's model is incorporated in this proposal, although with different emphasis, it isn't a complete domain-to-domain, affine-like, transformation. But in exchange for these losses we gain, I hope, benefits in the telling of the Alliance's story, especially in making clear the singular importance of C-Activities, and benefits in the operation of the Alliance.)

A synergy is generated in the suggested re-ordering of the ABCs by recognizing that in "bootstrapping" of the physical and intellectual kinds the power to do so originates from "above". It is of higher order. This power is (somewhat magically) transmitted below to influence the lower components. This interpretation is a departure from the Alliance's existing story, where bootstrapping is paralleled to computer boot-ups. In considering this change I exchanged the limited knowledge of the boot program (more like a spark that ignites an already prepared combustant; and actually a simple, and simpleminded, loader) for the knowledge about knowledge of conscious thought.

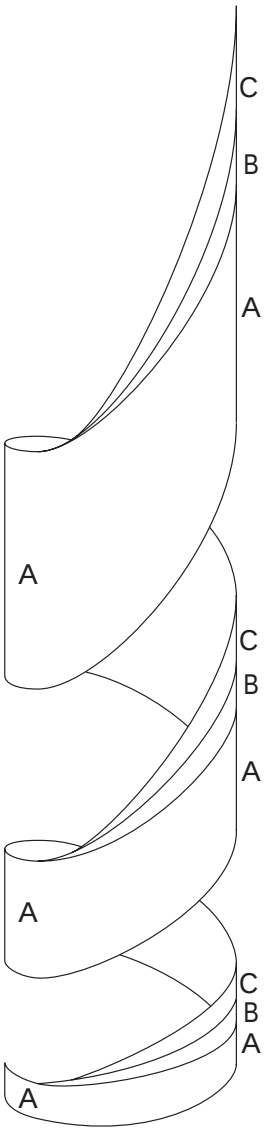
Label	Activity Description		
C			**Systems of Improving Human Systems**
B		**Systems of Improving Production Systems**	Systems of Improving Production Systems
A	**Systems of Production**	Systems of Production	Systems of Production

I will, below, address further the characteristics of these redefined ABCs. There are six particular features requiring a moment of attention here:

- The C-Activities are focused on the systems of improving human systems. This is no "mere" organizational development technique but a focus on the CoDIAK practice itself. The C-Activities encompass the systems on which the human system, and therefore the CoDIAK practice, depends (e.g., an OHS and other tool systems). This is, therefore, the root of gaining and cultivating the ability to improve the ability to improve. This is a transformation of Doug's "HT" symbology, but encapsulates all of the same characteristics.

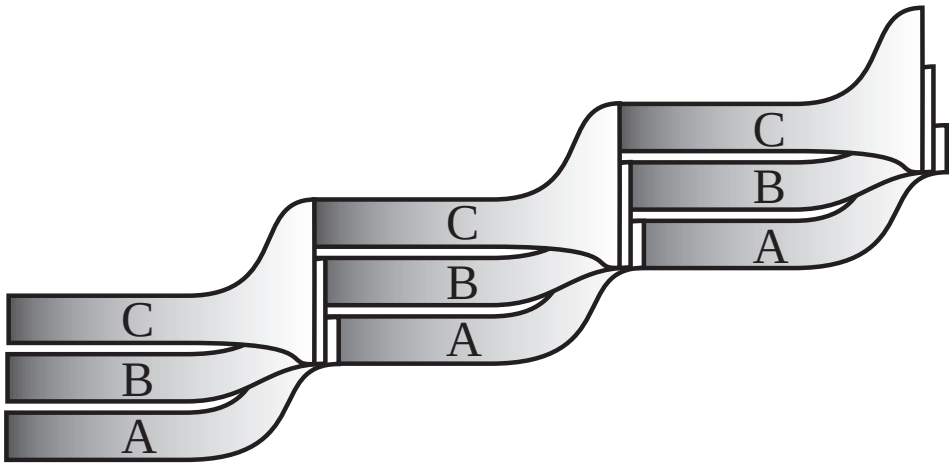
- The ABC-Activities propagate and evolve. Today's B-Activity becomes, tomorrow, integrated into A-Activities. Few modern information services and production systems, or self-managed teams, could function if this weren't so. And likewise with C-Activities. A feature of this slightly changed labeling is this: whereas the "systems that improve systems that improve systems of production" often eventually become indistinguishable from the systems of production themselves, using the "Systems of Improving Human Systems" label allows us to distinguish C-Activities wherever they appear.

  Here is a crude depiction of this evolution:



- This propagation and evolution is not limited to a transitive relationship (i.e., of C-to-B-to-A). A C-Activity, in improving human systems, may immediately and directly improve both the systems of production and the systems of improving production (not to omit improving the systems of improving humans systems itself).

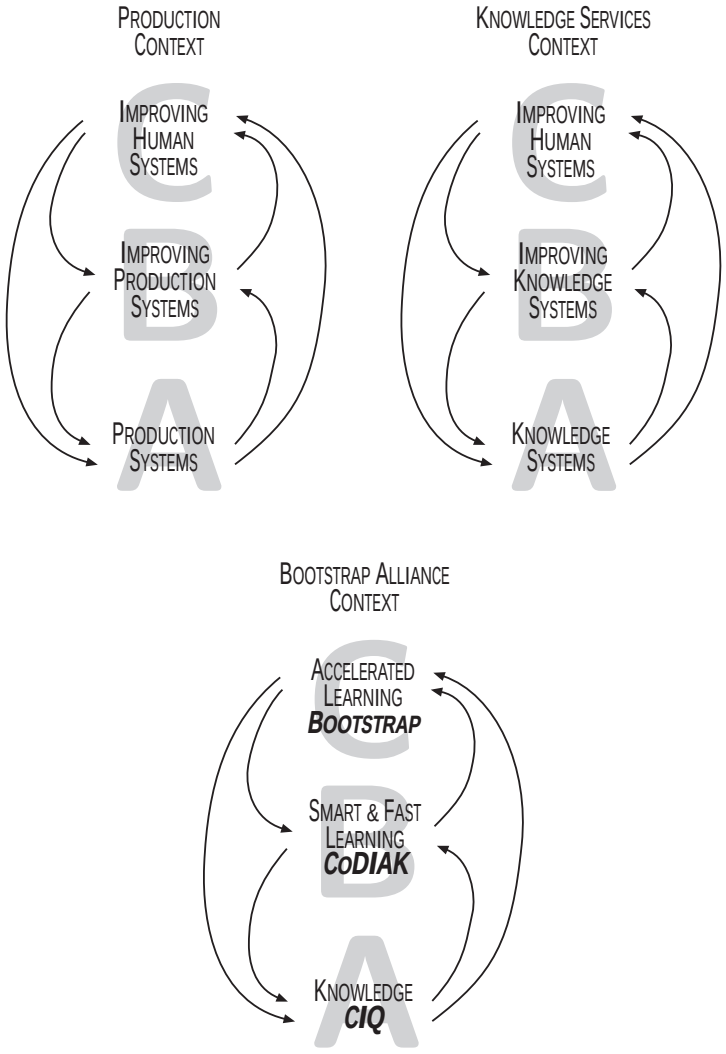
  Here is a crude depiction of the ABC influence:



- The ABC-Activities are self-similar at all scales, and self-propagating. Each A-, B-, and C-Activity has it's own ABCs. At the simplest level this feature posits that a system of production carries with it its own systems of improving production, its own systems of improving human systems. The more distinct this trait, the more successful the system.

- The relabeling provides distinguishable traits across contexts. The C-Activity labeling is essentially equivalent in all three contexts. Consider the knowledge system context. In the "systems that improve systems that improve systems of production" model it is difficult to argue that any valid B-Activity would intentionally omit some aspect of knowledge system improvement. By extension the difficulty extends to a production context too. In this suggested transformation of the ABC labeling, the C-Activity label retains important distinctive traits across contexts.

  Here is a crude depiction of three contexts in the transformed ABC systems model:



- Finally, this relabeling helps us further in our argument that the C-Activity alliances are nearly universal, so sharing information about them is much less likely to involve the release of proprietary information than would be the case with B-Activities.

6. **Hands Across the Cs — Mutual Development Treaties**
   Activities that are focused on the CoDIAK process and the systems on which it depends, i.e., the C-Activities, are difficult to do, with sufficient robustness, on one's own. Through vertical (e.g., supply chain) and horizontal (e.g., coopetitors) association all involved organizations can improve.

   A C-Activity alliance is called a Networked Improvement Community (NIC).

   The robustness and variety of the improvements available by such an association, otherwise difficult or unaffordable on one's own, is one of the attractions that help lower organizational resistance. In another perspective: Sure, it's a great competitive advantage to have a unique CoDIAK capability — but how many can you afford to develop on your own, and what kind of diversity of risk and capability do those (select few) capabilities offer? (In evolutionary terms, many small, and frequent variations offer species improved survivability over single, large (expensive), infrequent variations.)

   Another way to lower organizational resistance is to recognize that much of C-Activities are, at their highest levels, context-less. That is, whereas B-Activities are necessarily in large part cast in the context of a single organization's strategy, C-Activities are, necessarily, free of such casting. Hence, organizations can share in the undertaking of many C-Activities: sharing in their investigation and trial; reporting on general aspects of their own eventual, individual, context-specific implementation of such systems.

   (Note: This is, almost, the same definition the Alliance has been using. The variation, however, is important: it implies that it falls to the member organizations themselves to invent these associations and implement the pilots, not, per se, the Alliance or the NIC. I discuss this in greater detail below in Pilots, Outposts, page 35.)

In the remaining of this section (III. Hardening Concepts, which started on page 6) I investigate various features of a model in which I attempt to combine the notion of change and the operation of the A-, B-, and (redefined) C-Activities. If done successfully, the model will have captured the essence of all six of the reconsidered fundamentals cited above.

Some Definitions—Time, Resources, Efficiency

- **Time Periods**
  For the beginning of the discussion that follows, time is considered in pulses, rather than as a continuum. Additionally, these pulses are rather large chunks of regular time: month, year, multi-year, decade. As we move into more powerful models we shift to a continuous time perspective.

- **Measuring Resources**
  What are we measuring?

  It seems most direct to measure productive capacity. A good starting point, but not appropriate for our discussion. One reason for this is that productive capacity often refers to a consumption process that depletes supplied resources. What we are measuring applies itself in one time period and is refreshed for the next time period. Further, the object of our measurement operates on itself. In this way it has the capability to be "refreshed" at a greater level in each time period.

What we will measure is a resource — the knowledge resource of the organization: the Collective IQ. There are several levels of performance of this resource — each with its own name:

1. At the basic levels, this is the ability to **produce**.
2. At more capable levels, this is the ability to **change**.
3. At its most sophisticated, this is the ability to change how the organization—a kind of "power" change, or **ascendance**.

Note that while our focus is on measuring the knowledge resource, we are simultaneously measuring another continuously refreshing resource: change and change capacity.

- **Efficiency**

What characteristic of these resources are we measuring?

It seems natural to use a simple measure of the "level" of the knowledge resource. Such measurement results in, as we have said in our meetings, all of our favorite curves. We can test their rates of change and the change in the rates of change. But these measures, and the curves themselves, are often misunderstood in the context of large time periods, of "refreshable" resources.

What we wish to explore is how the organization uses a resource to generate even more of that resource: knowledge. We can talk about this without getting into economics, vectors, or differential geometry. Yet a little math will help cement the concepts and will set the foundation for a suggested volumetric illustration of CIQ.

I suggest we think of **efficiency**. Here's the definition that I'll use (*Merriam Webster's Collegiate Dictionary, tenth edition*):

> The ratio of the useful energy delivered by a dynamic system to the energy supplied to it.

In our model, the energy supplied is the capacity (or knowledge) of the current period. And the energy delivered is the resulting capacity (or knowledge) of the next period.

$$\text{Efficiency}_t = \frac{\text{Capacity}_{t+1}}{\text{Capacity}_t}$$

Or, further customized for our measurement of knowledge, that is Collective IQ:

$$\text{Efficiency}_t = \frac{\text{CIQ}_{t+1}}{\text{CIQ}_t}$$

In our analysis, the attraction of the model increases as its ability to become more efficient increases. Be careful to note that this isn't, simply, an increase in the efficiency itself. Our requirements in an acceptable model are:

1. That it exhibit efficiency of greater than 1.0.
   (Assuring that the knowledge resource is always larger next period.)

2. That it exhibit a growing efficiency.
   (Assuring that the growth amount in one period is larger than in the prior period.)

3. That it exhibit an accelerating growth of efficiency.
   (Assuring that the growth amounts get larger at a rate faster than the growth of efficiency itself.)

In our model this growth in efficiency is:

$$growth\left(\text{EFFICIENCY}_{t\rightarrow t+1}\right) = \frac{d}{dt}\text{EFFICIENCY}_{t}$$

and the acceleration in growth in efficiency is:

$$acceleration\left(\text{EFFICIENCY}_{t\rightarrow t+1}\right) = \frac{d}{dt}growth\left(\text{EFFICIENCY}_{t}\right)$$

Here's how these characteristics and requirements fit together:

Production Perspective	Model	Knowledge Perspective	Dominant Factor	Behavior Features	Label
Production capacity	y_t	Applicable knowledge (quality, utility)	A	Utilization of CIQ	CIQ
Efficiency at t	$\text{EFF}_t = \frac{y_{t+1}}{y_t}$	Generation of new knowledge; Learning	B	Using CoDIAK to improve utility of, smarts of, improvement cycles.	CoDIAK
Rate efficiency is changing	$\text{EFF}_t^{'} = \frac{d}{dt}\text{EFF}_t$	Speed of learning	B'	Faster improvement cycles	g CoDIAK
Acceleration in efficiency	$\text{EFF}_t^{''} = \frac{d}{dt}\text{EFF}_t^{'}$	Acceleration in learning	C	Improved improvement cycles; improved utilization of human resources	Bootstrap

Talking About Curves

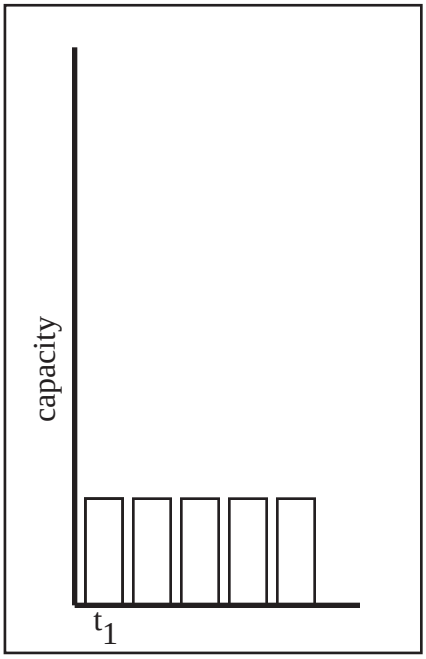
Now we examine five curves. This is not aimed at seeking a certain, precise formula. Its purpose is to help refine the vocabulary we use when talking about the challenges an organization faces when trying to 'bootstrap' itself. In our discussions we've casually tossed around descriptions such as incremental and exponential growth. But like the challenges an organization must undertake to handle (and create) quantum change, to accelerate its growth of Collective IQ, the curve to which we are alluding when we talk about bootstrapping is no ordinary curve. The following tables step through a few common production and change curves. Following that, I suggest a different perspective on visualizing Collective IQ.

	Curve Type	Performance (page 13)	Efficiency Efficiency Growth, (page 14)
1.	Constant (page 17)	Production	1.0 $growth\,(\text{EFFICIENCY}_{t\rightarrow t+1}) = 0$
2.	Incremental (page 18)	Change	≥1.0 $growth\,(\text{EFFICIENCY}_{t\rightarrow t+1}) = \text{Declining, to } 1.0$
3.	Simple Compounded (page 19)	Change	>1.0 $growth\,(\text{EFFICIENCY}_{t\rightarrow t+1}) = \text{Constant}$
4.	Continuously Compounded, Simple Exponential, Power (page 21)	Change	>1.0 $growth\,(\text{EFFICIENCY}_{t\rightarrow t+1}) = \text{Constant}$
5.	Complex Power (page 22)	Ascendance	>1.0 $growth\,(\text{EFFICIENCY}_{t\rightarrow t+1}) = \text{Growing}$

1.

Constant

Bargraph



Curve Formula

$$\mathrm{CIQ}_t = \mathcal{A}$$

Curve Characteristics Once the level of production (or knowledge) is reached it remains constant.

Efficiency

$$\mathrm{CoDIAK}_{t \to t+1} = 1$$

Efficiency Growth

$$g\,\mathrm{CoDIAK}_t = 0$$

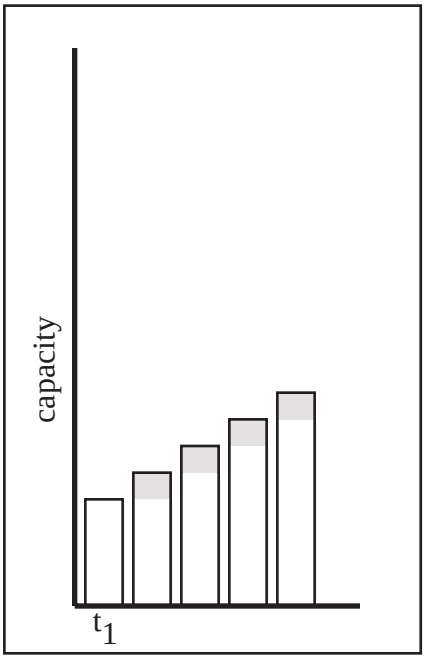
Efficiency Acceleration

$$\mathrm{Bootstrap}_t = 0$$

Notes In this curve formula, as in the others here, “A” refers to the basic knowledge resource of an organization. This is the resource required to run the systems of production. It is our A-Activity level.

2. **Incremental**

Bargraph



Curve Formula

$$\mathrm{CIQ}_t^{'} = \mathcal{B}$$

$$\mathrm{CIQ}_t = \mathcal{A} + \mathcal{B}\, t$$

Curve Characteristics In this model after reaching our "A" level, we add "B" capacity in each period. If the additional amount is fixed, the production levels form an arithmetic progression.

Efficiency

$$\mathrm{CoDIAK}_{t \leftarrow \infty} = \downarrow 1$$

Efficiency Growth

$$g\,\mathrm{CoDIAK}_{t \leftarrow \infty} = 0$$

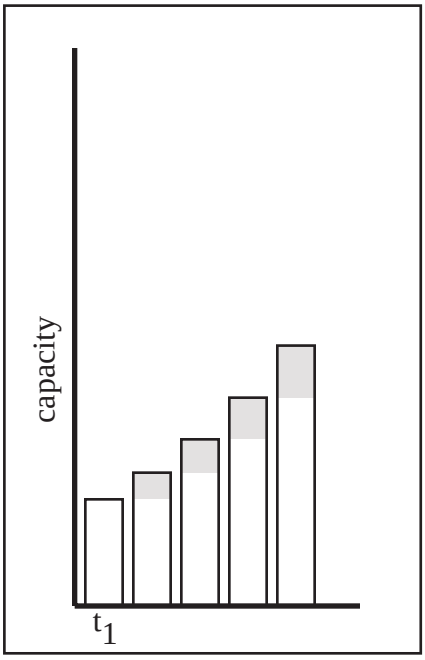
Efficiency Acceleration

$$\textsc{Bootstrap}_{t \leftarrow \infty} = 0$$

Notes In this curve formula, as in the others here, "B" refers to the change in the knowledge resource of an organization. This is the resource required to improve systems of production, to improve the organization's knowledge. It is our B-Activity level (although poorly applied here!).

3. **Simple Compounded**

Bargraph



Curve Formula

$$\mathrm{CIQ}_t = \mathcal{A}\ (1 + \mathcal{B})^t$$

Curve Characteristics

This is compounded growth. It is simple interest. Strictly speaking, a period's capacity is dependent on a parameter representing the initial capacity ("A"), the amount of growth in each period ("B"), and the number of periods elapsed. If undisrupted (i.e., by facing quantum change) the capacity levels form a geometric progression.

Efficiency

$$\mathrm{CoDIAK}_{t \to t+1} = 1 + \mathcal{B}$$

Efficiency Growth

$$g\,\mathrm{CoDIAK}_t = 0$$

Efficiency Acceleration

$$\mathrm{BOOTSTRAP}_t = 0$$

Notes

This model introduces a characteristic we will see in our subsequent models: in each period the ***size*** *of the change in the capacity is increasing.* This seems simple enough — "Of course we already knew this". This, and the next model, represent (in the rough) those ever-popular, seen-everywhere curves.

The opportunity for us in explaining the need for a Bootstrap Alliance comes in understanding that these curves offer only limited hope for someone struggling to meet quantum change. That is because the ***rate*** *at which the capacity increases* is constant: each time period her capacity, her knowledge resource, is (only) 1+B larger. That is, Collective IQ is growing, but only at the rate of underlying challenges.

What's wrong with that? One might argue that what one does, in effect, is to demand superior performance of our B- and C-Activities to deliver a "mega" jump out of the system, upward on this curve. Find, pilot, and implement some great knowledge management system and apply it to the

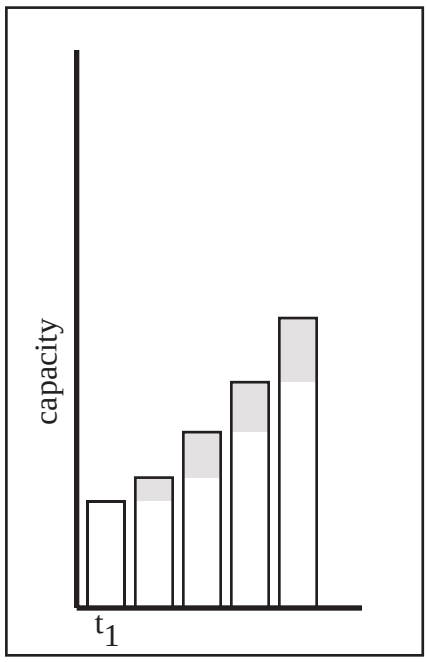
production systems. If this can be done it has a nice benefit in that the level of production (knowledge) immediately jumps. And the size of the next change on the curve is also much greater than the size of changes we were experiencing before.

The problem: once we've settled in at our new place on this curve we are no better prepared to handle the next change the curve delivers to us, let alone make that next "mega" jump out of the system to someplace higher on the curve. In the parable of fishing, by imagining a "mega" jump upward on the curve we are, essentially, magically, filling the lake with more, and maybe hungrier, fish. Although now the newly recapitalized fisherman may catch more fish, and, sustained by the larger quantity of fish, continue to catch even greater amounts of fish, he has gained no new capacity to improve his fishing technique— it is still 1+B.

In comparative terms under the compounded growth models (this and the next model), when one abandons hope for back shifts in the time sequence ("mega" jumps), at each time period on the curve our organization is as ill-prepared to surmount our next hurdle of change as was an organization 50 years ago for its own next hurdle. That is, for example, organizations of today would be only as capable in (or as confused about) implementing a client-server system as was an 1950's organization about implementing early computer systems.

4. Continuously Compounded, Simple Exponential Power

Bargraph



Curve Formula

$$\mathrm{CIQ}_t^{'} = \mathrm{CIQ}_t \, \mathcal{B}$$

$$\mathrm{CIQ}_t = \mathcal{A} \, \mathrm{e}^{\mathcal{B} \, t}$$

Curve Characteristics

This is (the ever popular) continuously compounded growth. A period's capacity is dependent on the prior period's capacity times the amount of growth in each period. This results in exponential growth. If undisrupted, the capacity (knowledge) levels form a simple power series.

Efficiency

$$\mathrm{CoDIAK}_{t \to t+1} = \mathrm{e}^{\mathcal{B}}$$

Efficiency Growth

$$g \, \mathrm{CoDIAK}_t = 0$$

Efficiency Acceleration

$$\mathrm{Bootstrap}_t = 0$$

Notes

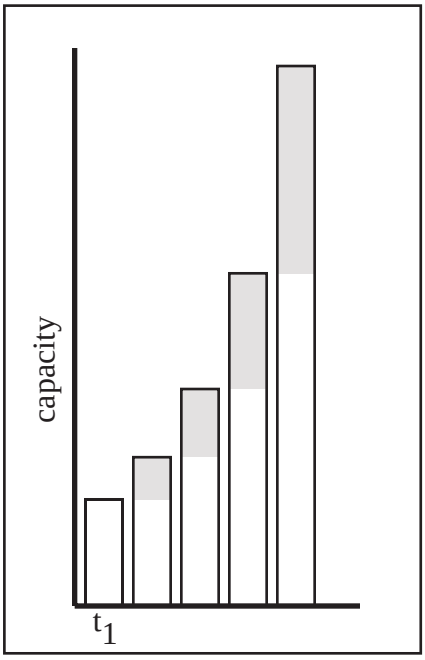
Compare this to the prior curve (Simple Compounded, page 19). Now we've started to see something interesting. The growth in capacity, or Collective IQ, is fueled by the previous period's capacity. That seems similar to CoDIAK type of performance. And the growth is coming in larger spurts.

Yet something is still limiting our ability to grow the rate at which our efficiency grows: we aren't growing that ability, and we aren't accelerating that growth. We must conclude, therefore, that this model is insufficient as a basis for discussions about the Alliance.

5.

Complex Power

Bargraph



Curve Formula

$$\mathrm{CIQ}_t = \mathcal{A}\, \mathrm{e}^{\mathcal{B}\, t}\, \mathcal{C}_t$$

Curve Characteristics

A period's capacity is dependent on the prior period's capacity times the amount of growth in each period times a new, unspecified function, C(t). This is a standard power function.

Efficiency

$$\mathrm{CoDIAK}_{t \to t+1} = \mathrm{e}^{\mathcal{B}} \cdot (\mathrm{CoDIAK\ of}\ \mathcal{C}_t)$$

Efficiency Growth

$$g\,\mathrm{CoDIAK}_t = \mathrm{e}^{\mathcal{B}} \cdot (g\,\mathrm{CoDIAK}_t\ \mathrm{of}\ \mathcal{C}_t)$$

Efficiency Acceleration

$$\mathrm{Bootstrap}_t = \mathrm{e}^{\mathcal{B}} \cdot (\mathrm{Bootstrap\ of}\ \mathcal{C}_t)$$

Notes

With the addition of a factor representing our C-Activities, we've found a way to grow our ability to grow. In operation this appearance of C(t) represents our improvements (presumably continuous) in our systems of improving human systems, and all of the systems on which they depend, such as an OHS.

Our efficiency increases exponentially at each time period as we accumulate the rewards of our improvements to these systems. Collective IQ is growing faster than the underlying challenges.

In this model we don't require a magical back-shift in the time series—we climb the curve by virtue of implementing and expanding our C-Activities.

This is most like the "double-compounding" to which Doug eluded. It is, however, an unusual curve, not often found in ordinary systems.

But there's a trap here. The bootstrapping capabilities depend entirely on the characteristics of the C(t) function. Obviously. But, this dependency

isn't so simple to dismiss. When we "simply" magnify our A- and B-Activities, even with a healthy dedication to C-Activities, this model still fails to generate bootstrapping.

$$\begin{array}{rrl} \text{If} & \mathcal{C}_t & = \quad \alpha\, \mathrm{e}^{(\beta\, t)} \text{ or similar} \\ & \text{then} & g\, \textsc{CoDIAK}_{t \to t+1} = 0 \\ & & \textsc{Bootstrap}_t = 0 \end{array}$$

This feature can become an important part of our story — even working hard at your C-Activities isn't sufficient: you need to incorporate them in powerful ways with the rest of your activities.

Choosing Formula

Having reached this point, many of you (those of you still awake) might be relieved. Some of you, however, may want the further challenge of finding a formula that encapsulates or represents the Alliance's vision. Below I briefly explore a few models and their determinants.

Our real purpose for undertaking this challenge (as I mentioned at Talking About Curves, page 16, and elsewhere) is to help make concrete the conceptual basis of the Alliance without requiring us to immediately resort to tactical concrete artefacts; such as pilots, etc. In addition to our (developing) story I think it might be helpful in this purpose to have a way to visualize the accumulation of knowledge and its dependence on A-, B-, and, especially, C-Activities. Building on the short exploration of alternative curve models, I explore some possible visualizations.

These are all, of course, variations of complex power models, page 22. With each I discuss, briefly, a few of the features which make them more, or less, interesting than the alternate curves.

6.

Compounded Compounded Change

Curve Formula

$$\mathcal{C}_t = f\left[\, t \mid a_1, \ldots, a_n \,\right]$$

$$\mathrm{CIQ}_t^{'} = \mathrm{CIQ}_t \; \mathcal{B}\, \mathcal{C}_t$$

$$\mathrm{CIQ}_t = \mathcal{A}\; \mathrm{e}^{\mathcal{B} \int_0^t \mathcal{C}_t \, dt}$$

Curve Characteristics

The C(t) is, possibly, a parametric formula, dependent on time. The basis of the formula is a description of the change of change. And our production (knowledge) in each period is bootstrapped in each period by the whole of our C-Activity's productivity. If we can reduce anxiety from the notation, the concepts embodied here are very interesting.

Efficiency

$$\mathrm{CoDIAK}_{t \to t+1} = \mathrm{e}^{\mathcal{B} \int_0^{t+1} \mathcal{C}_t \, dt - \int_0^t \mathcal{C}_t \, dt}$$

Efficiency Growth

$$g\,\mathrm{CoDIAK}_t = \mathcal{B} \cdot \mathrm{CoDIAK}_{t \to t+1} \cdot \Delta\mathcal{C}_{t \to t+1}$$

Efficiency Acceleration

$$\textsc{Bootstrap}_t = \mathcal{B}\left(g\,\mathrm{CoDIAK}_{t \to t+1} \cdot \Delta\mathcal{C}_{t \to t+1} \;+\; \mathrm{CoDIAK}_{t \to t+1} \cdot \Delta\mathcal{C}_{t \to t+1}^{'} \right)$$

Notes

We can see that we have some significant bootstrapping growth in CIQ. (If we make some assumptions about C(t) we can simplify these formulas while encapsulating their strengths.)

7. **Incrementally Compounded Change**

Curve Formula

$$\mathcal{C}_t^{'} = \mathcal{C}_t\,\beta$$

$$\mathcal{C}_t = \alpha\ \mathrm{e}^{(\beta\,t)}$$

$$\mathrm{CIQ}_t^{'} = \mathrm{CIQ}_t\ \mathcal{B}\ \mathcal{C}_t^{'}$$

$$\mathrm{CIQ}_t = \mathcal{A}\ \mathrm{e}^{\mathcal{B}\,(\mathcal{C}_t - \alpha)}$$

Curve Characteristics This formula is derived in a fashion similar to the others. Its distinction from the immediately prior curve is that the change in the base curve is compounded by the period-to-period change in C(t). Consequently efficiency changes at a lower rate too.

Efficiency

$$\mathrm{CoDIAK}_{t\to t+1} = \mathrm{e}^{\mathcal{B}\ \Delta\mathcal{C}_{t\to t+1}}$$

Efficiency Growth

$$g\,\mathrm{CoDIAK}_t = \mathcal{B}\cdot\mathrm{CoDIAK}_{t\to t+1}\cdot\Delta\mathcal{C}_{t\to t+1}^{'}$$

Efficiency Acceleration

$$\mathrm{Bootstrap}_t = \mathcal{B}\left(g\,\mathrm{CoDIAK}_{t\to t+1}\cdot\Delta\mathcal{C}_{t\to t+1}^{'}\ +\ \mathrm{CoDIAK}_{t\to t+1}\cdot\Delta\mathcal{C}_{t\to t+1}^{''}\right)$$

Notes This is probably a more realistic model, though perhaps not so powerful for assisting our explanations.

8. **Exponentially Compounded Change**

Curve Formula

$$\mathrm{CIQ}_t = \mathcal{A}\ \mathrm{e}^{\mathcal{B}\,t\,\mathcal{C}_t}$$

Curve Characteristics This is also a high-growth model.

Efficiency

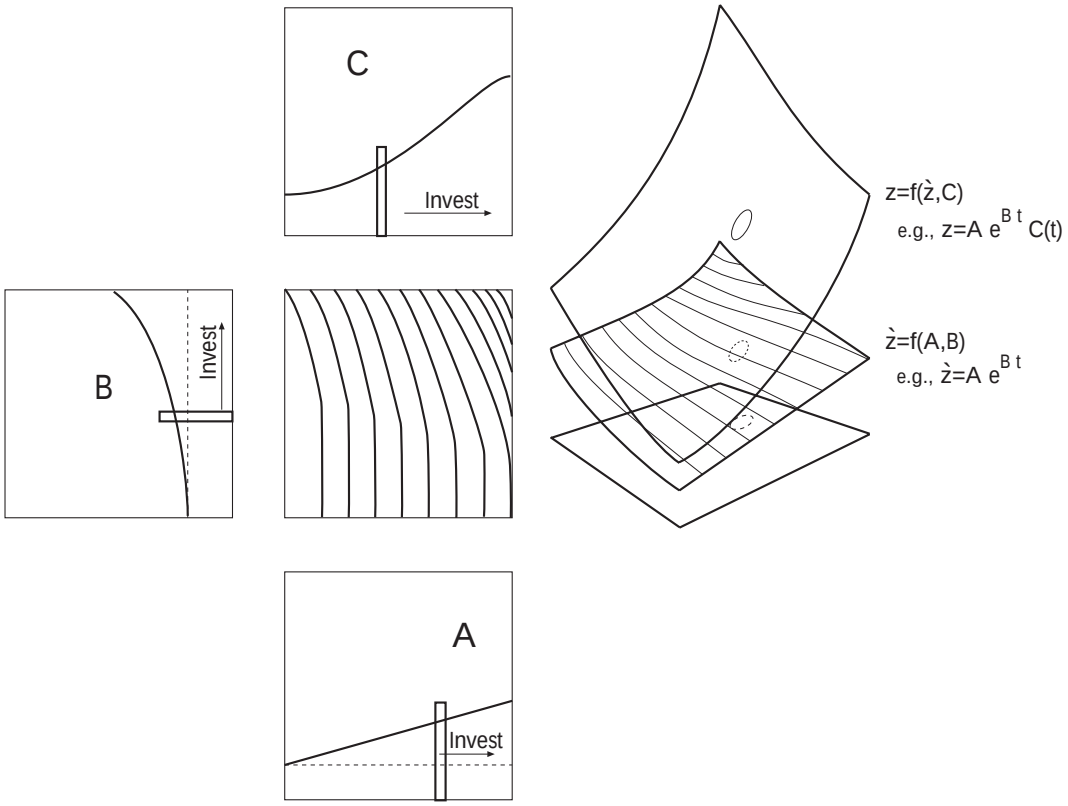
$$\mathrm{CoDIAK}_{t\to t+1} = \mathrm{e}^{\mathcal{B}\,(\Delta\mathcal{C}_{t\to t+1}\,+\,\mathcal{C}_{t+1})}$$

Notes This model has significant g CoDIAK and Bootstrap values too.

One clear conclusion from all of this is that an organization's investment in A-, B-, and C-Activities will completely determine their level of results. At any point of time, the chosen investment levels will dictate one's development of knowledge assets. And the highest returns on those investments come from investment in C-Activities. The implication is that, separate from technology, product or market strategies or tactics (and the investments

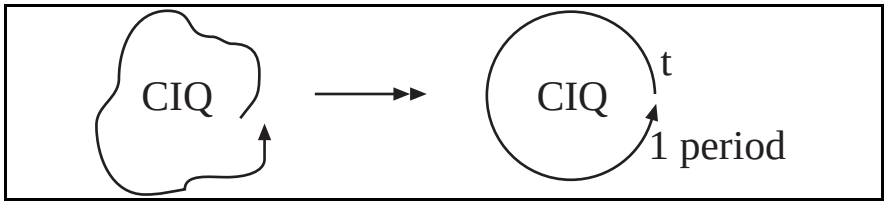
necessary to realize them), an organization should **always** be making more, and more effective, C-Activity investments.

This diagram attempts to capture these **determinants of yield** in a rather abstract notation. In it I attempt to demonstrate, among other things, that at just about any level of investment in A-, and B-Activities, an investment in C-Activities will determine significantly higher returns. And that moderate increases in C-Activity investments will even more quickly generate even more significant returns.



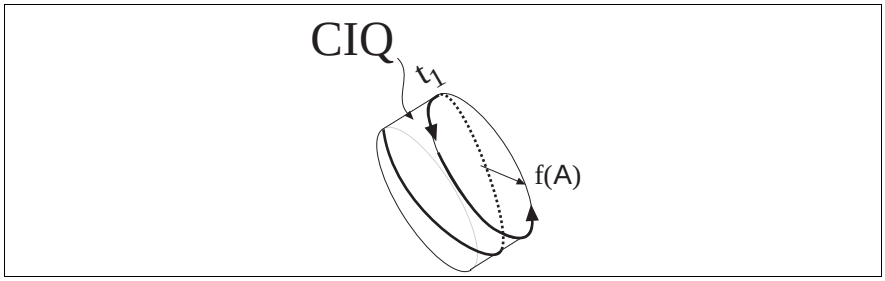
All of this formula nonsense has, for all its specificity, been rather abstracted from our central challenge. In what follows I hope to capture some of the powerful intangible aspects of this investigation into a visual architecture.

We can think of the exercise and therefore development of an organization's knowledge resource as a path followed, swept or marked out, by the organization itself, as if on a bicycle. Here we see this in an informal and more formal representation.



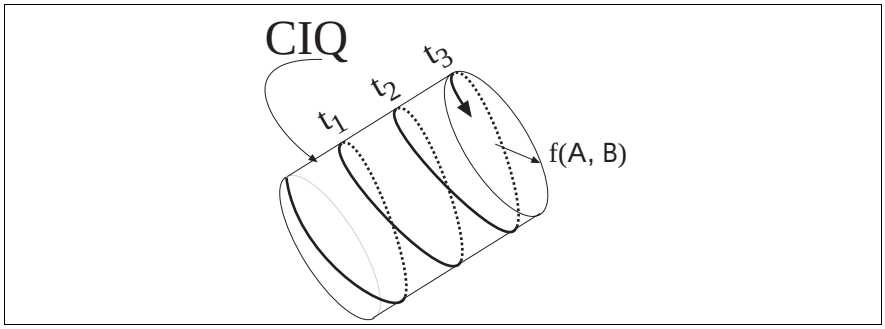
In the preceeding CIQ is depicted as an area we encompass. The curvature is a function of A (i.e., f(A)) over one time period. If there were learning we could show a spiral. If, however, we want to depict more richly how an organization creates CIQ we should move to a 3R representation. Now we're on the Alliance Spacebike.

Below we see an organization's CIQ with a period (here one period) of learning (CoDIAK behaviors) followed by future constant CIQ level. (The spacebike— or organization— reaches the new level and, exhausted, circles there.)



In the figure above the curvature remains the same - f(A). We see much more clearly the volumetric expression of CIQ=f(A,t). The learning is captured, somehow, in the increased rise in the trajectory of the spacebike's path, with the grade of the slope being somehow proportional to the rate of learning.

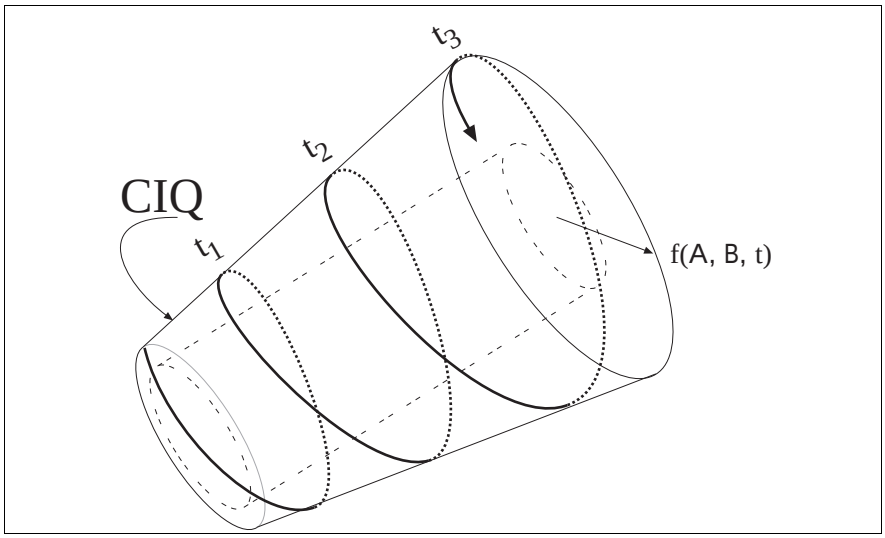
If, instead of stopping, the organization continues to learn at the same rate, they will add the same quantity of CIQ in each time period.



We should be a bit more concrete about the dynamics here:

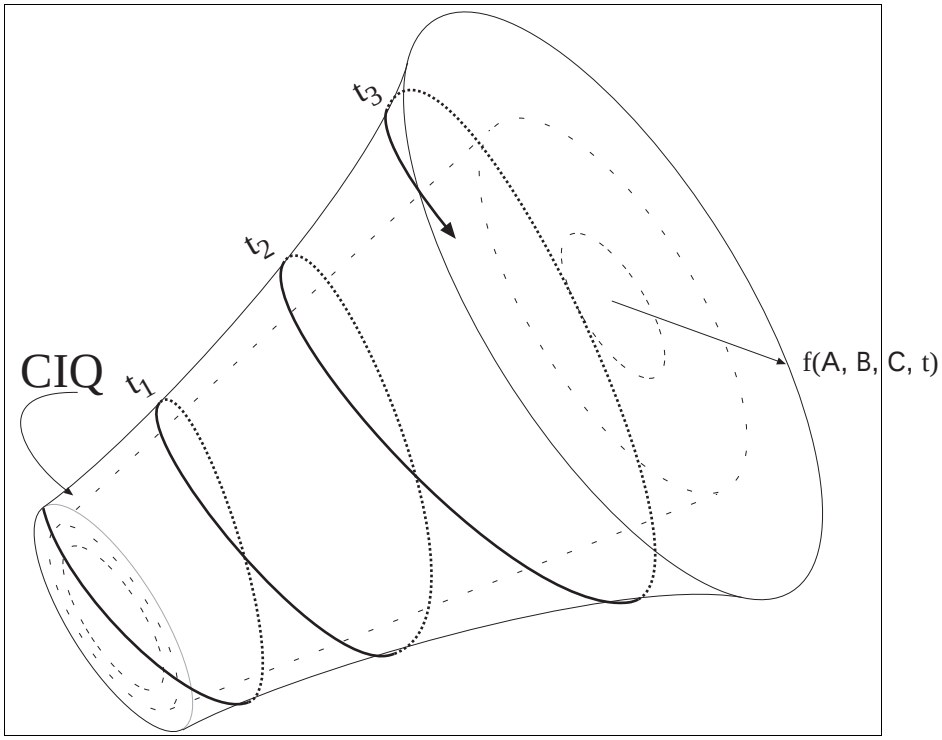
- The curvature is a function of our A-, B-, and C- activities, i.e., f(A, B, C). In the diagrams thus far we haven't seen much evidence of B-, or C-Activities.
- The rate of ascent of the helix, i.e., the torsion, is proportional to the change in the curvature. In the diagrams thus far, the torsion, once beginning its ascent, has remained constant.
- The swept-out volume represents CIQ

With the rate of ascent being held proportional to the change in the curvature the trick we must effect seems clear — the curvature itself must, in some way, depend on time. We will call on our B-Activity investments to fuel this more challenging assult.



Now the curvature is a function of A-Activities plus our B-Activities over time — f(A, B, t). With the curvature increasing constantly so does our trajectory — we learn more and learn faster each period. This expresses both CoDIAK and gCoDIAK aspects — the change in the curvature would just be faster, but constant.

Our idealized model materalizes when we consider that the curvature will change, yes, but change ever faster. For that we appeal to one of our more powerful models from above: now we add the powerful effects of our C-Activities to the curvature formula — f(A, B, C, t). Now the organization's spacebike is following something similar to a hyperbolic helix.



In this illustration we capture the fact that the ascent (the torsion) is not increasing at a constant rate (as in the prior model) but rather increasing at an increasing rate. In every period: learning more and learning it faster, and learning how to learn even faster. The organization is Bootstrapping its Collective IQ.

(Note: Yes, all of the illustrations share the same common base curvatures and torsion.)

IV. Our Sandbox

Whatever the semantics for communicating about the Alliance, we know what it is we want to do—our real work, right?

It is clear enough to say that we are joining in a cooperative exploration of the ways we build Collective IQ. This exploration has at least one clear frontier: the nature of human and tool systems, especially those of a functional open hypertext system. The lineage of the Alliance to Doug's decades-long thinking and work in this area gives this effort a unique credibility.

It seems clear that we believe that certain characteristics of that cooperative exploration will be crucial to its success: the detailed sharing of experiences among a broad group of members, learning-by-doing, many evolving and inter-linked efforts. In other words: NICs, Pilots and Outposts looking at the questions related to increasing CoDIAK practice and, therefore, building CIQ.

I suggested in my opening that we were, in effect, drawn to these islands of certainty. We started to act more like executives trying to identify leverageable capital resources (human, systems, etc.) and as consultants looking for targets of opportunity over which to apply the resources. We tried to bundle these up and give them some momentum "to get something going". This approach is laudable in most of the environments in which we operate. (And it seemed the best path to addressing the Alliance's fiscal issues.) I suggest that this approach was, however, a distraction from the larger objectives we were seeking (see Questions and Indicators, page 2, above in the opener).

Here are three areas where clarity might help us pursue the larger questions:

- Clarity about the frontiers the Alliance might explore: Recognizing a C when we see one.
- Understanding of what a pilot and outpost actually is. (Related to answering the oft-heard question: "what happens if I actually do send people?")
- The expectations, objectives, and responsibilities of the member organizations.

I discuss the first two of these in this section, the last in the following sections.

Recognizing a C When We See One

Jeff Rulifson suggested in an Alliance forum message that we needed to develop better and more analogies. I agree.

They will be useful for many purposes. We need them to help distinguish the various parts of our message, and to help candidate members put a frame of reference around the benefits of being in the Alliance. And we need them to help in our operations to establish strong, common frames of reference for our activities.

Does anybody have any candidates to suggest?

In addition to this general class of analogies and metaphors, I think we might benefit by analogies, metaphors, and examples that help us describe and delineate the characteristics that make something a C-Activity and therefore appropriate for application of NIC-level attention and effort.

We need to establish clarity in this description and delineation as protection against a NIC or an Alliance member beginning a project (pilot, outpost) only to find, later, that they are simply repeating what organizations and consultants the world over already do, or should be doing if they were operating at today's standards of performance. The coupling of the Alliance's principles of learning-by-doing, customer-centering, and results-orientation could make ensnarement all the more possible.

It is, I think, this shifting, amorphous frame of reference — today's standards of performance — that would be most likely to ambush us. It seems clear enough to say that just because a member (or potential member) has a need for some random aspect of, say, a tool to assist in collaboration, this isn't reason enough for the Alliance to become involved, in any way, in its implementation. (I discuss in Pilots and Outposts, below, how the particular implementing Alliance member *does* assume responsibilities to report on her findings, in terms of reference valid for the advancement of NIC activities.)

An example of this that might be among the least controversial might be simple and ubiquitous email. From a perspective of decades past, implementing such a system was an important advance for an organization attempting to advance its CoDIAK-like practices, seeking improvements in CIQ. Yet today, although many organizations make only primitive use of systems of this sort, for the Alliance to be in any way involved or interested, such a project would have to have some unique characteristics. And we needn't look so far back. I suggest the same would be true of a member's implemention of a simple document management system, a simple web server, a simple computer-based forum.

Just as with Artificial Intelligence, where once some aspect of AI finds its way into applications it becomes thought of as predetermined, inevitable, invisible, or "simply" algorithmic, so it has been with CoDIAK-facilitating technology. Especially of late where we see some of the mechanical aspects of OHS appearing (under grand names) "production" communications systems while the true CoDIAK aspects of these tools are ignored (in the technical and social aspects of their conceptualization, development, and implementation).

It isn't that the technology has to be the most advanced (whatever that means). Any project becomes much more interesting to the Alliance if it includes attributes such as an effort to dramatically improve the effectiveness of the implementation in influencing organization strategy and values, the levels of integration, etc. over today's standards.

As I mention above, I think it would be wasteful to dedicate any part of our efforts in simply doing what thousands of organizations and their consultants are already doing, will do shortly, or should be doing. Especially dangerous (to the Alliance and the member) would be expending Alliance resources on the simple integration of components that are otherwise commonly available and are also present in integrated systems—even more so if such an integration would be achieved in some part using a proprietary, non-commercialized, perhaps speculative, technology or technique and the result would be placed into production use in the member's organization. Cavalier, undisciplined involvement and action by the Alliance, could shift an implementation from a so-called outpost acting at the frontier to a massacre in the competitive trenches. (Note: I am not extending these comments to apply to — in the assessment of the appropriate NIC — new, emerging or prototype technologies or integrations, whether they are entirely or only in part unique, or in the research or roll-out stage.)

That is, from the perspective of C-Activities, the specific instance of an implementation by a member (or the need of a current or potential member) of an established commercial technology is, *in itself* uninteresting to the Alliance's efforts to advance C-Activities. Alliance involvement in such projects must be avoided. It is, instead, some attribute of the implementation or organization, or a match with a current NIC's requirements, that must

make the implementation interesting—an attribute otherwise unique or an attribute matching one of those identified as of specific interest of one or more NICs.

What would be such attributes or principles that might qualify a project as a candidate to advance a C-Activity, to be of service to advancing the knowledge of many Alliance members, and therefore a valid candidate for Alliance resources?

In the current ABC model it is, just as with technology itself, difficult to separate what activities might be C, B, or A. The major difficulty is, just as with technology, the shifting framework of reference. In effective organizations today's systems that improve systems of production quickly find themselves embedded within the production systems — yesterday's B-Activities are immediately integrated, embedded, in today's A-Activities. We might hypothesize that, in the modern organization, the more assured and tightly coupled this evolution, the more effective the organization. Such it was, and is, with the evolution of statistical process control, engineering process control or automatic process control systems. Likewise with the evolution from rigid product design stages to continuous redesign systems. And each of the steps moved the collection and capitalization of the knowledge asset closer to the production systems. Few of us could drive our modern auto-tuning, self-adjusting, automobiles, or get something done in today's modern organizations, if this weren't so. C-Activities exhibit the same tendency to become embedded in production systems.

In this shifting landscape, where would we insert the NIC's efforts to produce important Alliance-characteristic results? Especially if these results where to be viewed objectively as truly of "frontier," quantum, character. (This frontier characteristic is both an objective for the Alliance and a protection for the implementing organization.)

In suggesting above that we shift our definitions of the C-Activities from the "systems that improve systems that improve systems of production" model to the "systems that improve human systems" model I have hoped to skirt this difficulty. Now, instead of being squarely placed in this cascade we can look at human systems wherever they exist. (Which, I suggest, is what we wanted to do all along). Now our challenge moves from finding our foothold in the cascade of redefinition of systems (C-to-B-to-A) to the single, strong, platform of the evolution of human and tool systems as they become refined and embedded in production systems.

Below, using the suggested adjusted ABC model, is a look at a few environments and how the frame of reference shifts.

First I'd like to refer to a discussion from the March meetings. There we were exploring various environments and we rejected the possibility that anything the Alliance might do might be applicable to orange pickers. I think we meant, primarily, the human-up-the-ladder kind, as a proxy for all such environments (those without telephones, voice mail, pagers, fax machines, workstations, etc.; the usual manifestation of an OHS). Applicability could indeed come into question in the prior model. In the new mode any glint of possibility in the prior ABC system is now made clear — surely there are many targets of opportunity for (mostly new!) *systems that improve human systems* that might, by leveraging the knowledge these workers could collect and share, effect irrigation, pest control, worker productivity and task structures, and use of society's resources. Both in real time and in the planning of changes to the production system. In other words, we can't dismiss that there is an opportunity to demonstrably improve such workers CoDIAK quotient, and develop the Collective IQ of the organization and even the industry, even if the environment doesn't manifest the usual OHS characteristics. (After years of skepticism, the artefacts of this type of transformation are now readily experienced by anyone who rides in the cab of the plow or the harvester of a modern farming family.)

The knowledge service industry gives us an example of a different sort. Here we can readily see that the very production of their service is dependent on maximum leverage of their information systems: to produce new knowledge and utilize existing knowledge. In such an environment no activity the organization could undertake to improve their information systems, including installing the most advanced OHS, could be considered anything farther removed from a production activity than a B-Activity. The search of the knowledge base for evidence of a new interpretation, new information categorization, refutation of existing assumptions—the very changing of their current A-Activity— is itself an A-Activity. Development of systems that improve their collection, analysis, and extraction of applicable knowledge could, likewise, be no more removed than a B-Activity. Yet improvements are still possible. They may not come through magnificent, glittering, OHS systems, nor through a successive cascade of C-to-B-to-A evolution. Such improvement are improvements to human systems - both at the B- and C-Activities level. Of course, whether they involve learning techniques or other "soft" sciences, in such environments they can certainly be expected eventually to be incorporated in their information systems (through changes in human systems, at either A or B level).

The same is true of an organization's R&D activities. Many R&D organizations would include among the production of their A-Activities all of the benefits, including knowledge, that help them better conduct future R&D. These tacit results are just as important as the innovation under pursuit (especially if that innovation "fails"). Further, successful innovation requires facilitating changes in the greater organization — to "reshape" the organization in ways, including systems and knowledge, that will make the best utility of the innovation. These also are A-Activities to the R&D organization. (And the larger organization may, properly, consider these activities as part of their overall A-Activities.) The B-Activities acting over these might include all non-innovation-specific activities. Reassessing an organization's core competencies, studying the performance of innovation rollout in downstream engineering and the entire organization, improving cross-SBU communications about R&D, improving the systems used in the R&D process, and, yes, improving the performance and core knowledge of the R&D teams (in advances, for example, of agent technologies, or universal design). As most of these B-Activities share significant CoDIAK opportunities we are driven to conclude that most OHS-class improvements would also, therefore, be B-Activities in this organization. The C-Activities, the improvements to human systems, appropriate for this organization would be targeted at improving both A and B-Activities. Among the most likely might be those simultaneously involving the R&D teams and the "external" organization: communicating about R&D, learning from customers, generating and capitalizing on external ideas for innovation, competitive analysis, etc.

A similar pattern exists in engineering organizations. Consider a software engineering organization using CASE tools. Maintaining that CASE system would also be an A-Activity (just as would maintaining a punch press on a manufacturing floor). Such maintenance would necessarily involve adding many improvements to CoDIAK capabilities and might involve pure OHS-type tools. Experimenting, piloting, and eventually implementing a shift from E-R CASE to Semantic-Network CASE (as would shifting a punch press to numerical control) would be a B-Activity. Looking for systemic faults in the software development process, improving communications, etc., would also be B-Activities. C-Activities would include improving the ability of the organization to faster and sooner discover, assess and deploy a shift such as this. That is, improving the human systems and the tools on which their performance depends.

Throughout all of these examples, and many more we can develop to encompass production and service organizations, we can see the frame of reference shifting. For the familiar office setting, innovations targeting CoDIAK behaviors would seem incredibly removed from their production tasks; for R&D organizations they are intimately integrated in their production tasks. What remains constant is that improvements in human systems

have global, high-leverage potential without reference to a specific technological frame of reference or evolution. And without requiring the C-to-B-to-A transitivity.

From all of this we can conclude that we can't recognize a valid C-Activity simply because it contains some OHS-characteristic technology or OHS-leverageable behavior. More importantly, that can't be our only criterion for the Alliance to expend resources to form a NIC around an activity, nor for the Alliance to expend resources to pilot or otherwise implement relevant OHS services.

What is worthy of Alliance NIC activities?

1. The NIC activity is defined in terms of *the intersection of human systems and the tools they use.* This explicitly excludes definitions that address just the tools alone, or just the human systems alone.

   (Adopting this criterion might materially transform the definition of the current NICs and their missions. These transformations might "simply" be perspective shifts. But making these transformations might help resolve one nagging problem we've discussed—the problem of high levels of redundancies (as differentiated from "mutual dependency") between the NICs as currently defined. Likewise the role of Meta-NICs is, at the least, recast.)

2. Our differentiation lies, for now, in requiring that the tools be technology tools, especially tools with OHS characteristics. Beyond requiring that a NIC not be defined as simply pursuing a technology, the *human systems component must direct the investigation and the assessment of the technology results.*

   (This is important in helping to keep clear our differentiation from a more primarily technology-focused alliance— such as, for example, Lotus.)

3. Pure human systems techniques and "technologies" are of high interest, but, to be NICd, must be *coupled with some aspect of a specific or general characteristic of the technologies* candidate for a NIC.

   (This is important in keeping clear our differentiation from an OD/Organizational Behavior alliance. Further, by always setting the definition in terms of the human/tool intersection, we open the door for collaborative relationships with such organizations or alliances. And we act to reduce the wasteful expenditure of Alliance resources in reinvention — we formally force the Alliance to look elsewhere, including into the member's organizations, for best practices, exemplars, etc.)

4. The human/tool intersection can be approached from the action (i.e., making it happen) or reaction (i.e., observing it happening or having happened) perspectives.

5. The NIC activity proposes how its activity will show that the Collective-IQ quotient is advanced. By what common, Alliance-universal, basis will this be reported and assessed?

6. Any assessment of a NIC proposal, or a proposed activity of an active NIC must be subjected to high levels of skepticism concerning its characteristics of combining the human system and tool aspects, of being advanced enough to offer quantum improvements, of being global enough to have value to many (if not all) Alliance members. It might even be appropriate to require a self-justification period at the beginning of the candidate NIC's existence.

(This imposes on the Alliance the need to define common metrics for making an assessment, an evaluation process which applies the metrics (probably within the NIC itself), and thresholds for "blessing" different classes of Alliance action. In addition to the immediate benefits, these measures will also be important in maintaining confidence among members in a way that will contribute to the logic of continuing membership even during those periods where they are mostly inactive.)

7. The need for common and explicit evaluation methods also arises when the NIC defines its work and information products. What tools will it produce? And for what purpose? How do they expect those tools to be made available and be of use to other Alliance members? How does this work advance current Alliance knowledge? What reports, of what types, how frequent? Over what dimensions should such activities and their reports apply? Some examples simply stated: Should the NIC's definition always include recommendations of the type and execution of financial-based assessments of the particular activity's efficacy: knowledge assets, real assets, operations? What are the strategic advantages an organization might expect? What are the "qualifying" criteria or contexts (organizational or technology or otherwise; policies, operations, reward systems, time frames, market structure, etc.) that improve success with the topic under the NIC's consideration? Should they give a measure indicating the effect on each of the (formally defined) CoDIAK dimensions? Should the "reports" have certain forms: demonstrations, OHS-accessible, etc.? More highly leveraged dimensions are open to consideration.

These criteria also have implications on the forming and operation of Pilots and Outposts, as they impact these qualities and the general question of what is an appropriate target of the Alliance's resources.

These criteria also imply that it is not a valid activity of the Alliance to "simply" replicate its own working collaborative system. Doing so would drop us immediately and squarely into the ambush discussed above — that of the shifting technology framework. If we assume (only for this part of the argument) that the Alliance does indeed currently possess an exemplary collaborative system that successfully demonstrates key aspects of an effective OHS that can materially advance the CoDIAK behaviors of an organization, it can be considered thus for only the shortest period. No participant in this audience should need an exposition of the reasons for this conclusion. (And this argument considers as separate the difficulties and limitations of being both a research bed and a production tool.) Further, under the same assumptions, we cannot assume applicability of the entire system or even any part of the system to a member's environment. Finally, the Alliance cannot be seen as an arbiter of excellence among technologies (even if we could afford to license and support one or many such technologies).

But, if we turn our most critical eye towards ourselves, there are many dimensions on which to dismiss this underlying assumption. These include: the poor levels of partication (we must anticipate these line of questions: If it's so great how come there's so little participation?—that's the same problem we had too. Is it the technology? Is it the moderation? Is it the organization itself?) or the poor levels of integration among the components (including the persistence of isolation of email-based forum activity). Further, one needn't look further than components of the Alliance system, or to Lotus, or to Netscape, to find mainstream commercial models (and therefore, by definition, A-Activity-level tools!) for the technology itself. Certainly we have higher hopes for OHS systems than these models (and than the current Alliance system). But, I suggest, we can't engage in advancing the Alliance's system as a paragon to be studied, or replicated, by eager new Alliance members.

Pilots, Outposts

If we were to say that it was our credo or guiding principal to improve human systems throughout an organization (applying C-Activities over B- and A-Activities) in pursuit of more effective CoDIAK behaviors for the objective of advancing Collective IQ, then we'd consider the formation of NICs and the related Pilots and Outposts our means of execution.

The Alliance literature appeals to leveraged, strategic results through a cost-effective, participatory, learning-by-doing program. But surely not every activity is a valid candidate.

One seemingly clear, strong criterion would be the level of adoption. That is, by definition, a frontier must be quite a bit outside the current domain of commercialization and the repertoire of current implementors.

Yet, some organizations will be more advanced than others. Surely the Alliance should be structured to benefit most, or all, organizations. And, while we're at it, many, many, organizations at once.

So, how might Pilots and Outposts be established and run?

1. The Alliance neither runs pilots nor establishes outposts. Neither does a NIC. An Alliance member or collection of members propose, establish, and run pilots and outposts. They are the Pilot (or Outpost) team. They are the project managers. They assume the risks. (Even if it wasn't their idea in the first place— as when choosing from a NIC's standing list of "of interest" projects.)

2. Each Pilot (or Outpost) must operate under the auspices of one primary NIC. When they are adopted by a NIC, they become Alliance Pilots/Outposts. The NIC would follow Alliance-global evaluation guidelines for making such a determination. Part of such qualification might be the inclusion in the Pilot of certain Alliance- or NIC-related testing or information gathering. This is part of the negotiation—and would be important for getting subsequent projects to confirm prior findings.

   The NIC along with the Alliance may request that certain Alliance-standard reports (e.g.: We have learned, Predictors, Indications/Contraindications, Future pilots, CoDIAK measures impact, OHS implications, Uptake/performance we predict) and artefacts be produced. This "primary NIC" requirement leaves open the need of a Pilot to require the establishment of a new NIC (which has its own review and qualification requirements).

3. Such Alliance Pilots (or Outposts) may call on the resources of the Alliance. Such calls might be for interns (from, for example, other members), for tools, for knowledge. They may be requests of other NICs or Alliance Pilots/Outposts for information, guidance, assistance.

4. The Alliance may call on the resources of such Pilots or Outposts. Such calls are for reports, demonstrations, transfer of knowledge. Note: these calls can be quite burdensome and may be the source of (and dependent on) a Pilot calling, in turn, for more Alliance resources. Such burdens might include the request by a "distant" NIC for a specially-focused report or for a critique (from the Pilot's perspective) of the "distant" NIC's activities or concepts. This burden will certainly involve regular in-person reports.

5. These conditions operate in parallel to assure that although the "doing" organizations (as in learning-by-doing) are receiving the most benefit (both from the hands-in experience, and from the draw from Alliance knowledge and resources)

the benefits from their work, even benefits that don't directly advance their particular Pilot, are available to the Alliance.

6. A member's proposal for a pilot, which that member is responsible for executing, may be outwardly focused. That is, the Pilot team may have something they wish to apply (including their own, possibly, commercialized or proprietary product) to one or more environments. The member who becomes the subject of this effort is responsible for the execution of the pilot in her environment.

7. The Alliance-relevant findings and results of any Pilot are available for any member to apply, without attribution. The Pilot team is responsible to urgently facilitate this availability and applicability; to process and distribute findings fully and with dispatch. (Through, for example, use of the Alliance collaboration systems.) No Alliance member will impede or interfere with such activities.

8. Because the Pilot team and subject are operating within their own environments their findings may contain artefacts of their confidential or proprietary assets. Such assets will be clearly identified in any findings made available or conveyed to the Alliance. Unlike the case of findings, all members agree that such identified assets are not available for dissemination or application outside of the conditions set by the asset's owners. Each member is responsible for rigorously identifying and avoiding dissemination or application of these identified assets.

   (Note: It falls to the owning member to realize that if their contribution to the Alliance is in some part based on information about their methods or processes, then it serves the Alliance little if that information is provided as a restricted asset. Such a release can still be useful — as in the case where a NIC is learning about best practices and understands that any material inclusion of information would require specific approval.)

9. No Alliance member providing information, services, or staff to an Alliance pilot assumes any responsibilities for continued participation or for quality of execution.

10. The members of a Pilot team may establish their own cooperative venture under which to execute the pilot. Such agreement might be appropriate in cases where licenses are involved, or support services are needed, or proprietary assets might be exposed. To be considered part of the Alliance's activities, and therefore eligible for Alliance resources and for consideration as a contribution to the Alliance, such agreements must provide for sharing of Alliance-relevant information to the Alliance (i.e., through reports). The terms of such agreements must be made available on request to the Alliance's executive organizations, or those it duly appoints.

11. At this point we have the groundwork for Bootstrap Institute involvement and the involvement of individual Alliance members as implementing "consultants" in other Alliance member organizations. (Indeed, the Alliance might be, through an accepted Pilot, an ideal channel for a member to implement a high-performance test of its products or services.) It establishes a duty, as an Alliance member, to advance Alliance knowledge while separating the Alliance from the risks of such projects.

12. Although this structure allows for the same pilot to be executed in many environments, it calls on each proposal for execution to identify how it advances the Alliance's knowledge base. If the hurdle created by this extra burden isn't cleared (if no NIC will adopt the Pilot proposal as the primary NIC for the pilot) the pilot may operate outside the Alliance's domain.

13. No member will cause the knowledge base of the Alliance to be distributed to non-Alliance members. So, although a member may apply the results to her organization

and her product designs, she won't simply reprint, or give access to, the Alliance's knowledge systems. Similarly, when a pilot is executed outside of the Alliance's domain, or when an Alliance member applies its capabilities to a non-Alliance member, or when an Alliance member brings in a non-Alliance member to execute aspects of the project, the Alliance member will not transmit Alliance knowledge to the non-Alliance member.

14. In light of the foregoing it is now very possible that any bona fide Alliance pilot may operate directly at the A-Activity level in an organization. That is, with the Alliance insulated from the operation risks and information dissemination and utilization exposures, we no longer have to restrict Pilots to projects that are "way out there, away from today's challenges". This freedom is a great benefit to both the Alliance and potential members.

15. In combination these items also clear the way for the Alliance to establish its own "sandbox" for experimentation. As such the visiting members are not so much guests, who must be directed or hosted, but rather more like independent investigators who undertake as their own mission to do and find the things most useful to them and the Alliance. Indeed, we could expect them to contact individual Alliance members and request office space, staff time, information, reviews, etc.

16. By extension, NICs themselves aren't Alliance functions as much as they are the function of a group of allied members. It still operates much as already had been contemplated. An Alliance member proposes a NIC, indicating how it expects to increase Alliance knowledge about the human systems and tools that will improve the productivity of CoDIAK behaviors and, therefore, Collective IQ. On Alliance approval, according to some (to be defined) criterion, the approved NIC establishes its own leadership structure. It defines lead and support roles for its various efforts. It begins and continues to recruit other members. It establishes its own information structure, identifies active moderators and cultivators of online participation. It determines how it will produce the (Alliance defined) single and periodic/annual state-of-the-art/best practice surveys, benchmarks, analysis, reports — knowledge — expected by the Alliance of any NIC operating under its auspices. It determines what Pilots and Outposts it would like to have proposed (targets of opportunity as well as those requiring detailed definition), the criterion for accepting them and the methods for staging them and harvesting the knowledge from them, including provisions for the long-term (beyond single-member involvement) oversight or observation of pilot effects. And, for operating over time, it develops tactics for staging or evolving member participation in the NIC—observing, pre-active, active, post-active, observing.

To whatever extent this list of characteristics has any validity, its power (or its replacement's power) should be sought in considering not the Alliance, the NIC, and the members who are directly involved in a specific NIC or pilot activity, but rather in consideration of how it works to assure the other members that they will receive significant value from every other Alliance activity.

V. What a Member Can Expect

From **About the Bootstrap Alliance** http://www.bootstrap.org/alliance-about.htm:
The Bootstrap Alliance *is a broad-based cooperative dedicated to the improvement of individual, team, and organizational performance in collaborative settings. Participants in the Alliance will find a forum to test new concepts and learn with and from peers and leading innovators who span across industry, government, academic, and public interest sectors. As active participants, members will enhance their own capabilities in knowledge management, collaboration, virtual teaming, and the processes for continuous improvement and learning.* ***2A***

Members will not only benefit from other's experiences, but they will also add to the Alliance's intellectual capital. Participants will learn best practices from thought leaders and collaborate on common issues, challenges, and strategies, while sharing and improving upon the lessons learned. Programs will be designed from the start to gain from synergy with evolving information technologies. Alliance activities will benefit from jointly developed knowledge bases, active online discussions, as well as face-to-face and virtual meetings. ***2B***

"Yes, fine, but what do I get for my $thousands?"

The Alliance's first response might be: "What do you want to get from it?"

This response isn't as flippant as it might at first seem. In the first place it establishes that it isn't the Alliance per se that generates value, but the members themselves. Jointly, and severally.

In beginning this evaluation, a potential member might do best, for themselves and the Alliance, to look into their own organization and assess how well they can contribute to the Alliance.

Once a basis for understanding this contribution is established, it can be used as a point of perspective to assess the current and planned contributions by the other current members.

Hopefully (and with some help from the Alliance) this analysis will lead to a conclusion that, in each member's own unique fashion she may benefit sooner, and better, in advancing her own Collective IQ through the allied action in the Alliance.

This conclusion will require a good deal of strategic perspective. The Alliance isn't offering to fix an organization's production or any other problems; that remains the challenge of the member. Further, as is the nature of exploration, much of what the Alliance's activities produce will not immediately fit every member. Some of it will fail in its immediate goal, with the benefits appearing in tacit knowledge.

In this way we've started to give some shape to the general perspectives an organization might adapt when considering joining the Alliance, and the returns available to them through that membership:

- R & D
- Advanced Organizational Development projects (e.g., change initiatives, self-managed teams)
- Fundamental market research and testing
- Customer involvement initiatives
- Competitive research

- Training (management, knowledge creation, etc.)
- Field experience
- Vertical integration partnerships
- Learning initiatives
- Any project using outside expertise (consultants)

Not only are these items (the start of) a list of general perspectives from which a potential member might view Alliance membership, membership in the Alliance could be viewed as an integral part of increasing the effectiveness of any such initiative. An artful organization might see the Alliance as an important forum through which to get to know its potential partners in such initiatives — "Let's start this project by participating together in the Bootstrap Alliance; I think it will help us begin and will continue to offer benefits throughout our project." The Alliance might be a great stage on which to actually conduct the execution of certain projects — pilots both to the organization and to the Alliance. And it need not be a pilot which the organization "brings" to the Alliance, but simply a plan, or a sticky problem.

Now if this isn't quite attractive enough in convincing the potential member, we should not turn away from additional, supporting, appeals to similarities with other investments an organization might make. That is, in addition to deciding on the real benefits which you might be able to create for yourself, consider how you decide to make these other investments, and the levels at which you do invest in them:

- Participation in joint initiatives
- Standards initiatives
- Trade shows: as exhibitors and as delegates
- Travel to other organizations to see, for example, ISO9000 or Balderidge sites
- Membership in professional organizations
- Subscriptions to research organizations, reports

Clearly, an organization will get from the Alliance what they put into their participation in the Alliance. Part of that participation results in making contributions to the Alliance, and this makes the Alliance more capable at helping that organization with its current, and future, challenges.

It is worth noting that the Alliance is defined, ultimately, by its members. Its definition, structure and capabilities, its very mission, will be driven by the members. The implication is that, truly, the members get from the Alliance what they put into it.

VI. Signing Up, What Happens

"Okay, I want to join, now what happens?"

Several Alliance documents address this question. The answers offered there are varied and flexible. Demonstrating clearly, again, that a new member will, truly, will get from the Alliance what they put into it.

As structure often does, it might benefit prospective members, and the Alliance too, if we provide a little guidance in this area. Especially if we want to create and maintain effective integration of a large, growing, and varied membership.

Here's a list of ideas — speculative, in the extreme, and certainly not one-size-fits-all. It incorporates the idea of staging members into active roles, the possibility of different classes of members. The list also speculates about self-management and legislative processes in the Alliance. For the most part, no information is given about the policy-making and decision-making processes (consensus; simple, senior and super majorities) or about assessment criteria and methods (open voting, secret ballots, multiple-choice), and how these operate over a changing membership.

1. Attend the Bootstrap Management Seminar. Every active delegate from every member should attend this seminar. I'd suggest raising the price to better signal its value as compared to other management seminars. Give discounts, possibly to $0, for existing members sending their own representatives prior to their active participation as delegates to the Alliance. (This implies that a prospective member might do better to join and then come!) Give a (sizable) discount for organizations sending 3 or more representatives.

2. Organization business unit joins and becomes an "Information" member: $12,000 to $20,000 annually. (The idea: compete for same information dollars that a business unit will already have budgeted and at the level at which these fees are often set. The higher number *might* be appropriate if an 'Information' member were to be able to call for assistance from other members.)

3. Separate business units join separately. Each gets an (unknown) number of delegate slots (e.g., userid/passwords), etc. Possibly offer add-on pricing for bringing in additional delegates (for example, a whole team) or special programs for bringing in their vertical business partners (customers, vendors, etc.).

4. The Information member does a survey of the knowledge base of the Alliance: the membership profiles; the collaboration forums; the NIC missions and knowledge bases; NIC annual reports; the possible, active, and past pilots; the decision making processes and business practices.

5. Perform a self-assessment of the organization's position using Alliance-developed tools: Collective IQ/Knowledge asset assessment; CoDIAK practices; NIC-based perspectives using various NIC instruments; improvement/augmentation infrastructure. (A happy circumstance might befall certain new Information members if some NIC has outstanding an interest to see performed a pilot that includes these types of assessments. In this case, the pilot team may approach the Information member to become a participant in its pilot (just as the team may approach non-Alliance-members for the same thing.)

6. Attend (there is a fee, say, $1,200 per delegate) Alliance's (contemplated) annual (or more frequent) general business and membership meetings, which include NIC seminars, featured pilot reports and selected member presentations.

7. To get the most benefits, every Information member is, it is assumed here, working towards becoming a "Participating" member. If they just want to lurk, they'll simply remain an Information member. At any re-subscription period a Participating member may project that for the next period they wouldn't be as active as in previous periods and wish to drop back to Information member levels. (If we follow this multi-stage approach we'll need a pro rata mechanism for upgrading mid-period, but not necessarily for the reverse).

8. In preparation for becoming a Participating member, the Information member prepares a "what we want to contribute, what we want as results" report. This report includes a breakdown of this information in NIC-by-NIC form. This report includes: Pilots we want to lead/perform, and to which we might contribute — covering both the current NIC target lists as well as the member's own ideas. The report is presented at an Alliance Participating member meeting (quarterly?). (The Information member will also prepare this report for inclusion among others in the Alliance's knowledge base.) This step is, also, a pre-condition to becoming a candidate for a pilot implementation site (such members join the pool of candidates in which another member proposing a pilot might look for environments — Information members would be a good source for "instrument" testing).

9. Of course at any time the Information member, or any member, may choose to enter into a separate services arrangement with the Bootstrap Institute or one of the other Alliance members. Each of the participants to such a deal, by nature of their Information or Participating membership, agree to report to the Alliance on the Alliance-relevant findings of such a project. (This is part of the "payment" to the Alliance for making possible the discoveries of these arrangements. Or is the subscription fee enough?)

10. Now eligible to become a 'Participating' member - $20,000 to $30,000 additional annually (for a total of $30,000 to $50,000 annually). Requires approval of some Alliance body, based on review of the above information, especially the contribution "plan." Now the member receives (an unknown number of) "slots" on (an unknown number of, or better, percentage of) each or all NICs. Here, again, possibly offer add-on pricing to allow (encourage) Participating members to bring in, in some way, whole teams, vertical partners (customers, vendors), and have them also participating on the same (or selected) NICs.

11. All Participating members participate, at some level, in the self-governing of the Alliance. Part of that self-governance is the on-going review of member participation. This open peer-review process is meant to create and maintain a high-quality knowledge base. Each Participating member's contributions are assessed: level of activity, quality, knowledge advancement, etc. The accomplishments of each NIC is also reviewed. An annual self-review of each member, presented to the Alliance, is probably appropriate (probably includes: How we benefited from the Alliance, How we contributed to Alliance knowledge base, What we suggest be changed in the Alliance). Note that overall, apart from the peer-review process, very little of individual member actions in the Alliance is subject to any review — it is a community resource with a dynamic, flexible nature.

12. The Alliance may hire, retain, or enter into preferential arrangements with professional organizations, with the purpose of making resources available to Participating members ('Service' members?). These organizations and their practitioners agree to act within the Alliance according to the same principles as do Participating members and their delegates. The Alliance has discretion to waive part or all of membership fees to such an organization, according to contemplated and

actual contributions to the Alliance (above the for-fee work, accounting for discounted rates, performed in the fulfillment of such arrangement).

13. Participating members identify to other Participating members their staff who will coordinate, and answer, other Participating member questions, requests for assistance, ideas, opinions of proposed actions, etc. This includes notice of any pre-identified opportunities for site-located internships. It includes any products or services that might be available to the Alliance or the individual Alliance Participating members. They publish the general form under which that assistance will be made available. This might include fees, or methods by which member-provided funding might be committed (e.g., how the member might support certain pilots).

14. Participating members may propose and become active in pilots — either as one of the pilot leaders, as a pilot member, or as a pilot site. Such pilots compete for use of Alliance-created or Alliance-retained/hired resources and providers.

15. Participating members may use, directly, any of the Alliance-hosted collaboration tools — that is: create their own, protected, business unit forum on the Alliance's systems.

16. Participating members take on an additional responsibility to report to the Alliance their findings of any implementations they make of Alliance knowledge products. This may simply be the "registration" that they've used a certain piece of knowledge (so that a NIC could, later, know who to survey). But, more helpfully, it would include a full assessment of the effectiveness, and maybe even actual results.

VII. We Have Competitors

Certainly the Alliance hopes to present itself as a new opportunity — one that offers unique returns in a unique fashion. But, there can be no doubt, we do compete for the commitment of an organization's funds and resources. It would be worthwhile for us to develop a representative analysis of what those competing commitments might be. Then we can help potential members determine how an investment in the Alliance would be a smart investment, one that leverages many others.

The list of perspectives listed in What a Member Can Expect, page 38, gives us the germ of a list. Some of those items have attached to them outside providers. Although these providers are, by definition, our competitors for the commitment of these funds and resources, we have the opportunity to make them coopetitors.

The Lotus effort is an example. A Lotus Notes-implementing organization may find important reasons to dedicate their funds and resources to that initiative. The Alliance cannot undertake to promise the same things. Yet the Alliance does offer several very important additions — the focus on the intersection of human systems and technology, and the participation in a knowledge-creation process. The Alliance may find it possible to compete directly for these same candidates — since the candidates can "simply" purchase the Lotus tools knowledge. It would be preferred, however, if we created some mutual, joint, membership capability. (And a reciprocal arrangement with the Lotus effort and the Alliance.)

Another example is that of commercial information data sources. I think it possible to demonstrate to a candidate member the value-added of the Alliance in comparison to such sources. One cornerstone is the fundamental way that Alliance membership makes it possible to acquire knowledge and put it to work in one's organization. Yet, many organizations will want both. An opportunity might exist here for the Alliance to attract these information providers as members. Certainly these providers are candidates for creating and using the knowledge-generating processes the Alliance will be seeking. And, if we can negotiate a reasonable global rate for all Alliance members, or reduced rates for Alliance members (perhaps it is a listed $-additional membership benefit), then members get both. This arrangement would also give these information providers a unique base for studying the effectiveness of their service products. (Again, a reciprocal arrangement seems to have potential for the Alliance and its members.)

Another example is the large category of outside resources — consultants. We've now established that the Alliance itself doesn't implement pilots, the members do that, and do it at a distance from the Alliance. And that members don't just "buy" pilots, or "get" pilots. Even so a potential member might still ask, "What's the benefit over just hiring a consulting organization to do our project?" We do offer distinct advantages over such an arrangement — but the "project" may remain a separate problem, still to be implemented by the member. It is true, however, that the reverse is true: Hire the consulting organization and you get their knowledge for the duration of the contract. Their knowledge, according to their own perspective. And, being project focused, you may absorb some of the project-specific knowledge, but you have little opportunity to send your teams into their knowledge-creation process, where your teams will learn how to learn, and learn to accelerate that learning. Here is one perspective we can offer such an organization: do both. The Alliance component might assist you in selecting the consultant, understanding how to structure the collaborative environment with the consultant, accelerate your absorption of the consultant's knowledge, and prepare you for heightened success and return from the project (including replicating it throughout your organization, possibly without the additional consulting fees). For the Alliance, we offer the same advantage to these consulting organizations — making it possible that as a packaged deal consultants may suggest that a prospective client join them as Alliance members as a way to maximize the prospective client's return on the project investment.