**BOOTSTRAP SEMINAR** Nov 30 - Dec 2, 1992

Foil Set I:

**BOOTSTRAPPING** —

HIGH-LEVERAGE INVESTMENT STRATEGY FOR ORGANIZATIONAL IMPROVEMENT

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### BASIC BOOTSTRAP CONCEPTS

Objective: Pursue high-performance org Hypothesis #1: Whole-system Augmentation Hypothesis #2: ABC's of Org Improvement

Hypothesis #3: Bootstrap Strategy

Hypothesis #4: Collab. Knowledge Work (CODIAK) Hypothesis #5: Open Hyperdoc System (OHS) Hypothesis #6: Joining forces in a C Community

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(assumes major paradigm shifts throughout)

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## Hypothesis #3: Bootstrap Strategy

Early strategic focus on tools and processes that improve both the product cycle and the improvement cycle offers compounded leverage for bootstrapping organizations into the 21st century.

### Motivating observations

- Going after the improvement capability
- Bootstrapping for compound leverage
- Investment criteria leveraging group knowledge work (CODIAK) as a core capability
- Conclusion

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Assume that the computer-communications revolution is only in its early stages, and that future changes will be very pervasive and very significant!  Then a serious future problem for every large organization (business or gov't) becomes how to accomodate very complex and increasingly rapid changes:  • in the organization's external operating environment; • in the organization's internal operating environment.
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If the scale and pervasiveness of change is to be as great as seems likely,  then a great deal more attention will have to be given to organizational evolution than we have ever before considered necessary!  New approaches will be required, with ample organizational support at very high levels.
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It is likely that many organizations will not adapt quickly enough or appropriately enough to survive these complex and rapid environmental changes.  These rapid environmental changes will be a continuing phenomenon for many decades.  The surviving organizations will likely have established especially energetic and intelligent internal processes to plan and manage their evolution.  Needed: A pragmatic, global, continuing strategy for investing in evolutionary improvement  — The purpose of the Bootstrap Strategy.

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**EVERY ORGANIZATION NEEDS AN EVOLUTIONARY CAPABILITY!** Augmented HUMAN SYSTEM Capabilities TOOL SYSTEM **Paradigms** Media Portray Travel, View Organization -Procedures -Study Customs-Manipulate Methods -Retrieve Language Compute Communicate Attitudes Skills Knowledge Percept. Capability to improve Motor Needs a prominent Training Mental and explicit role!

(From A5 & C28)

IMPROVE YOUR ORGANIZATION
BY IMPROVING ITS AUGMENTATION SYSTEM

Org product
Org Unit
People
H
T
Improvement Capability

Augmentation System
Improvement Project ("ASIP")

Introducing a generic label for an organizational activity that is charged with improving the augmentation system (improving the capability) of another org activity.

In the ABC Model, B is A's ASIP, and C is B's ASIP.

For a well-developed Bootstrap
Strategy, there will be many ways to
shape the over-all improvement
process so as to create and
capitalize upon options of this sort.

STRATEGIC INVESTMENT LEVERAGE — BOOSTING BOTH JOB AND EVOLUTIONARY CAPABILITIES

The essence of Bootstrapping:

Suppose for the same cost you have two options for improving your augmentation system.

Investment Q yields a leveraged, compound return.

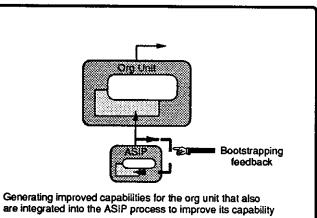
The bootstrap strategy searches for such choices in planning improvement investments. Gain ———— in Improvement Capability

Gain ---------- in Job Capability

This is an engineer's way of showing the effect of the vertical component in the I9 chart — that the product of the ASIP's work (improvements for its client's augmentation system) are suitable to a significant extent to be installed in its own augmentation system.

Regarding elevating its capability to do its job, the ASIP is "lifting itself up by its bootstraps."

ASIP WITH BOOTSTRAP LEVERAGE



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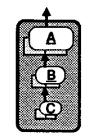
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# HERE ARE TWO IMPORTANT STRATEGIC ISSUES THAT SHOULD BE CONSIDERED:



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- 1. How to distribute the org's resources appropriately between A, B & C.
- 2. How to get highest A-improvement returns on investments in B and C.

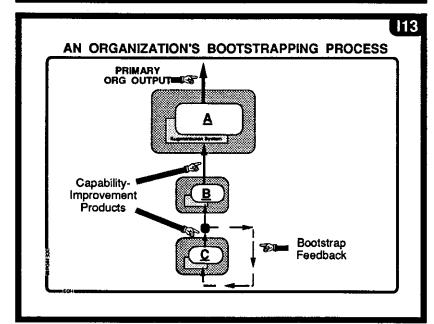
Both issues are served by new capabilities that have significant value within each of the three domains: A, B & C.

(Same as D19)

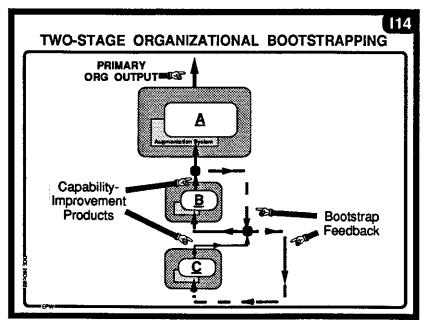
"Bootstrapping" is a strategic approach to the continuous evolutionary improvement of organizations.

The idea is to get maximum longterm return on the improvement investments.

Foil D19 poses the investmentstrategy question in terms of the A-B-C model and presents the essence of the bootstrapping concept.



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M5 AN	INFO-SYS VENDOR'S BOOT	STRAP LEVERAGE
	PRIMARY VENDOR OUTPUT	Those Info-Sys Products that can support vendor's own internal work processes.
	B	1
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# BOOTSTRAPPING STRATEGY

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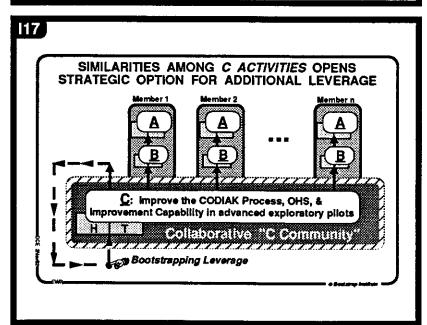
Improvement Return on Investment (ROI) —

On A Activity: Step increment On B Activity: 1st derivative On C Activity: 2nd derivative

(From A11 & D23)

This presented a strategic option that, while not in itself an example of bootstrapping, sets the stage for developing the basic components of the bootstrap strategy.

Note that the member "org units" could be small functional units within a division, or divisions within a company (within which are communities of small units) — or independent organizations in a cooperative community.



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## Hypothesis #3: Bootstrap Strategy

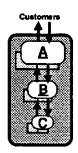
Early strategic focus on tools and processes that improve both the product cycle and the improvement cycle offers compounded leverage for bootstrapping organizations into the 21st century.

- Motivating observations
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### **BOOTSTRAPPING:** STRATEGIC INVESTMENT CRITERIA



Selecting capabilities for C to improve that serve A and C, as well as B, offers special investment leverage. Start with these 3 most-basic capabilities:

- 1. doing group knowledge work;
- 2. transfer results "up the line" to respective "customers" (4);
- 3. integrate information coming "down the line" from respective "customers" (♦).

(note that capabilities 2 and 3 depend on 1)

(Same as D20 & E3)

This provides a very solid entry into the whole story of the bootstrap strategy — and also directly sets the stage for the "Bootstrap Launch" approach developed in Section L of this binder.

We'll outline below the approach to augmenting the CCom's group work and transfer processes, employing selected augmented capabilities that are also direct candidates to improve both B and A.

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# THIS EMERGES AS THE HIGHEST-LEVERAGE BASIC ORGANIZATIONAL CAPABILITY

The <u>CO</u>ncurrent <u>Development</u>, Integration, and Application of Knowledge (CODIAK)



Developing an evolving knowledge base that integrates the concurrent contributions of many distributed participants, operating from the many (nested) knowledge domains involved within and among our enterprises, and concurrently supporting their application of the included knowledge.

**←** (Same as E8)

Since the concept of a bootstrapping strategy for augmenting organizational capability first emerged in 1961, this core capability has consistently out-pointed every other candidate for being the "bootstrap launching target."

1.

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	Motivating observations     Going effor the improvement concluding
	Going after the improvement capability     Bootstrapping for compound leverage
	Investment criteria — leveraging group     knowledge work (CODIAK) as a core capability     Conclusion
(Same as A7)	122
Notes	
	Investment criteria:  Going after the point of greatest leverage — a high-performance knowledge-work capability launched by C boosts C, B, and A with compounded leverage.
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