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Capturing Ideas

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Insight and Ideas*, February 2008*

Abstract

Ideas, of themselves, are not necessarily hard to come by. Good ideas, on the other hand, are not so common. In fact, they are rare enough that whole businesses have grown up around increasing innovative productivity. From Alex Osborn's "brainstorming" in the advertising world of the 1930's to more modern Internet idea generating systems, the belief that idea production can be stimulated has resulted in serious efforts to generate and capture good ideas.

A good idea is well articulated and thoroughly thought through. This means all three phases of generation, articulation and transcription. Conventional innovative efforts tend to concentrate on generating and transcribing, leaving the articulation phase unattended. To truly capture an idea, it's not so much how you capture it, it's what you capture.

A good way to capture ideas is to use a format that cues the innovator to think along the most productive articulation model. Structured Planning uses a Solution element format that asks for (1) a short overall description, (2) properties—what it is, and (3) features—what it does. These three sets of descriptors cover the bases, elaborate the concept, and provide the articulation that take it from an idea to a good idea.

For fun, I recently googled the aphorism, "Good ideas are a dime a dozen". There were over 3,400 hits. This old cliche is on too many people's minds! Most of the occurrences I looked at were fairly recent, from business or marketing articles, and most continued on with a "but ..." line that suggested that what is *really* rare and valuable is the agency or person who can bring an idea to realization.

Clearly, there is recognition that getting a glimmer of an idea is not enough. The implication is that any corrective effort to be put into idea development should be weighted toward "how to do it", rather than "what to do". Perhaps. But I have the suspicion that there is neither an oversupply of good ideas nor an undersupply of determined implementation. More likely, what needs attention is the way in which ideas are captured. It's not that there are lots of good ideas. There aren't; there are many *glimmers* of good ideas. The failure of ideas to be thoroughly thought through, articulated and described—captured—means they are destined be thought shallow and will not be acted upon or even remembered. Ideas may be a dime a dozen, but *good* ideas still aren't so common. We see them so rarely that, when we do, we take note.

As an example, several years ago at the Institute of Design we did a Structured Planning project for the National Parks Foundation, a private-sector institution supporting our National Park Service. The problem was to look ahead to the 21st century and what the Parks would be facing—both problems and opportunities. Our system proposal contained scores of ideas. One that seemed potentially good came out of planning for a "Park-Net", a sort of pre-Internet that we were envisioning. We gave the idea the title *WindowWall* and described it as continuous video feed from the Parks that could be made available to individuals and institutions on a subscription basis. When the idea was fully articulated, its potential was stunning. The idea depended on the fact that probably the most awe-inspiring views of nature in the U.S. are all in the national parks. As we described it, permanently-mounted high definition video cameras would face particularly beautiful views (think Yosemite or Yellowstone), record the view continuously (day and night) with a wide-angle lens, beam it up to a satellite and then down to subscribers' TV screens, anything from computer screensavers to wall-mounted flat screens from picture-frame size to full walls. Software at individual TV sets would allow zooming and panning within the wide-angle picture to establish a personal favorite window—perhaps a stream or waterfall frequented by bears and elk.

The idea as a glimmer was interesting. Articulated, it was fantastic! Our National Park Service is chronically underfunded. Congress continually awards NPS more parks, monuments, etc. to steward, but never comes up with what is needed to provide the stewardship. WindowWall all by itself could help dramatically. There are over 110 million households in the U.S.—over 3.8 million of them millionaire households! If we were able to sell nominal $100 per year subscriptions to just 4 million (less than 4%), that would raise $400 million per year. In the U.S., there are over 7500 hospitals, 115,000 libraries, 5 million corporations and many

more public and private institutions that might very much like a full-time live "window on the Parks" for their conference rooms, board rooms, cafeterias and other special spaces. Assume just 1 million of them took $200 subscriptions. That would add another $200 million. The National Park Service budget is about $2.3 billion. WindowWall could alone raise one-fourth of the NPS budget—and the numbers are conservative.

Some History

The need for good ideas is so strong that whole businesses have grown up around methods for stimulating idea production. One of the best known in the U.S. is Brainstorming, the creation of advertising executive Alex Osborn at BBDO in the 1930's. Popularized in his book, ***Applied Imagination***, his work inspired a continuing evolution of more specialized brainstorming variants, including: the Nominal Group Technique, Group Passing, Team Idea Mapping, Electronic Brainstorming and Directed Brainstorming, among the more widely known. Structured Planning, the process loosely underlying this series of articles, has its own specialized version. I will talk about that—Ends/Means Synthesis—in a later article.

In the 1940's, a group of researchers on the east coast led by William J. J. Gordon and later, George Prince began a study of how successful artists and inventors create. Years of inquiry led to the formulation of a set of guidelines for creative thinking that coalesced into a teachable process and a company called Synectics. Gordon, Prince and their associates successfully taught the process to thousands in industry and institutions.

Other extensive processes supporting creative thinking include TRIZ, a process developed in Russia and brought to Europe and the west after the cold war; USIT, a version of TRIZ modified by Ed Sickagus; Lateral Thinking, a set of techniques developed by Edward DeBono; Goldfire Innovator, another adaptation and extension of TRIZ; and Mind Mapping, a technique by Tony Buzan widely popular today. All are concerned primarily with idea generation.

Idea Capture

Good ideas are well articulated and thoroughly thought through. Part of what makes them seem so good is the elegance with which they solve problems, meet objectives and anticipate tests raised to challenge their virtues.

To achieve that level of elegance, idea capture needs to focus on articulation, not generation or transcription. Experts on creativity too often miss this. It is important to have a means for capturing fleeting ideas, but that is of much less value than knowing what to capture. Any query of the Internet for how to capture ideas will find endless discussions of the merits of computer versus paper, pda's versus audio-recording, notecards versus notebooks, and so forth. That misses the mark; it's not *how* you capture; it's *what* you capture.

Capturing an idea is actually a three-part operation. First, is getting the germ of the idea. That's where the various creativity tools play their main role. Second, is thinking it through. Enhancement takes place here; the idea is elaborated and matured through consideration from many viewpoints. Third, is getting it down. Important aspects of the idea are recorded in a format that keys attention to properties, qualities and features; maximizes coverage; and assures retention.

Conventional thinking emphasizes (1) and (3), seeking volume through (1) (perhaps the source of "dime a dozen" disdain) and, under (3), prioritizing ready access to recording media to prevent the loss of ideas. Stage two gets little or no attention, and stage three is trivialized to issues of ease in note-taking.

A Format for Capture

Because most projects are now systems projects and require many ideas—well-described good ones—it is worthwhile to seek a fast, effective way to capture both essence and nuance. Ideas that will be used to develop system concepts need to take advantage of insights that reveal the subtlety of system organization and operations—and the problems that surface in making operations run smoothly. To meet these challenges, a good descriptive format must:

- be easy to use. It shouldn't take much time; it shouldn't slow the flow of ideas in a good creative session. It must quickly focus thinking toward the kinds of information required for good idea description.
- be standardized. Once a rule system is learned,

Solution Element

Status: ☐ Existing ☐ Modified ◉ Speculative

Title: *Short title (one to three words):* **Silent Answer**

Number identifier **2**

Project
Name of the project: **Empowerment Tools**

Mode
Mode of operation or behavior: **Use**

Activity
Activity under the Mode: **Meeting**

Originator
Original producer (sponsor) of this document **John Smith**

Contributors
Contributors of additions and/or changes

23 April, 2000 **C. Owen**

Description:

*Summary description of the idea/s for this Solution Element (Solution Elements are preliminary, potential elements of a final system concept—final versions will be called System Elements). Should describe general characteristics; details should be given as bullets in the **Properties** section.*

Example:

A special "hold" button for a cell phone that initiates a special answering option. When "on", the phone answers a call automatically and relays a canned message to the caller requesting that the caller stay on the line while the person called moves to a location convenient to receiving the call.

Source *(if existing or modified)*

Information necessary to identify and locate existing concepts or concepts modified to create the Solution Element. Use "New concept" if Solution Element is speculative (i.e., wholly new).

New concept.

Properties — *what it is:*

*Short "bullet" statements highlighting specific characteristics possessed by the Solution Element. Should extend the description above by describing special functional or formal elements of the design. Distinguished from **Features** by the emphasis on "what it is" rather than "what it does". Use noun phrase format : <optional modifier/s> <noun>.*

Examples:

- Vibrator and/or flashing signal light
- Button to initiate silent answer mode
- Stored message

Features — *what it does:*

*Short "bullet" statements expressing what the Solution Element does or what characteristics of the Solution Element do. Should bring out the functions performed by the element (with direct application for product description in manuals and advertising). Distinguished from **Properties** by the emphasis on "what it does" rather than "what it is". If feature is tied to a specific property, list the property at the end. Use verb phrase format: <verb> <optional modifier> <object> <optional descriptive phrase> <(optional reference to specific **Property**)>*

Examples:

- Confirms for caller that call has reached the person called.
- Keeps caller on line while person called moves to a location suitable for taking the call.
- Allows time for a person called to find an appropriate place to receive the call (side of the road, out of the rain, etc.)
- Includes provision for delayed return: "If you don't hear from me within 2 minutes, I am unavoidably detained right now".
- Prevents incoming calls from interrupting ongoing activities.
- Avoids embarrassment to person called when setting is inappropriate for receiving calls.

Associated Function/s

Function/s fulfilled by this Solution Element (from original Design Factor/s inspiring the idea).

Present information
Take notes
Discuss proposals/problems
Share concerns/ideas remotely
Make and confirm decisions
Clarify and schedule actions

Source Design Factor/s

Title of Design Factor/s whose insights contributed to this idea (original source/s for this Solution Element).

Call Interrupts Activity

Form: 3/18/2008

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it is much easier to create descriptions, compare them with related concepts, and communicate them to others. Rules shape the form; authors can concentrate on substance.

• focus description. Entry topics must be limited. Most importantly, they must optimize the kinds of information required so that ideas can be described in the fewest, most encompassing categories possible.

As is the case for the issues of Defining Statements and the insights of Design Factors (see articles earlier in this series: ***Goals and Definition*** and ***Insights and Ideas***), description takes place on a form, the Solution Element document (see the figure).

A Solution Element has just three important parts: Description, Properties and Features. All are allocated space on a letter-sized sheet of

paper along with other entries for storage and retrieval (see ***Insights and Ideas***). An idea can be quickly and substantively captured by giving it a memorable, evocative title and definitive notes under the three special categories:

Description: A Description is a high-level summary of what the concept is with a focus on purpose. The Description from the Solution Element of the figure describes "Silent Answer" minimally with a little about what it is and a little about what it does, just enough to sketch out the idea; the details are in the Properties and Features. One or two statements are usually enough for a description, and they don't have to be sentences.

Properties: Properties are *what it is*. This is the static part of the description given in bullet *noun* phrases because we visualize form most easily from nouns. In this section the component parts of the idea are listed. It is also the place where qualities of the components that should be special can be given. If, for example, it were thought important that the Silent Answer message have a personalized quality, the Property might be stated: "Stored message created personally by cell phone owner." Properties are what the engineering department wants to know.

Features: Features are *what it does*. For similar linguistic reasons, these are best written as bullet *verb* phrases. We tend to think of actions (what things do) dynamically. Features, precisely because they express what the concept does, also are usually the best descriptors for judging the appropriateness of the idea in a particular setting or its potential success for a given purpose. Well stated, they help a purchaser to make a decision. They are what marketing and sales want.

Solution Elements are easy to use. A stack of blanks can be readily at hand in a meeting. The three categories focus questions for needed detail and the standardized formats make ideas easy to share, compare and integrate. In Structured Planning, they are used to organize the synthesizing process (subject of a future article). In Structured Planning or in any project, they may be modified or elaborated over the life of the project to become System Element components of the final proposal.