

# The Natural Hierarchy of Industrial Information

*What, When, and Why to Share Your Knowledge*

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Have you ever wondered what the inventor of the wheel did to protect the idea when he or she came up with the first prototype? I picture a heavy load of stones rolling down a path, the entire load, including wheel(s), completely covered with animal skins so nobody could see how this difficult task was being performed so easily. He moved the loads at night to try and keep the idea to himself for as long as possible but after some time passed, he took the wheel idea and shared it with his closest group of friends so they could have an easier life as well. Some of them paid him in food for the idea, while others simply became part of his group of idea makers. Because the idea was shared within this close and trusted group, the axle was invented by another person inspired by the original invention within the same group of people. Cloaked in secrecy, he and his friends could now go further and faster than anyone else in the village and they prospered because of it. This sharing, stacking, and building of ideas upon one another is the basis for technological and social advancement whether it be for a wheel, a new teaching technique, or an advanced material. It is one of the most exciting and complicated activities we can focus on in our businesses.

GE (General Electric, a USA based mega-corporation) uses the tagline “Imagination at Work.” BMW (the German Luxury car maker) says in their advertising “At BMW ideas are everything.”



Having great ideas is sexy and not only are these companies working to capitalize on it in their marketing strategies, they are working hard internally at finding these new ideas and innovations. Google (the World's leading internet search engine), seeing such enormous value in this concept, has built an intranet site specifically to bring in new ideas from all employees. Each employee, no matter their position within the company's hierarchy, or their level of expertise, is encouraged to spend time each day in the R&D function of assembling their ideas and thoughts for improvement. They then place the ideas onto the Google internal site. All employees are then able to enter into discussions and debates around the ideas and a buzz of activity starts to surround the ideas with the best legs. The person in charge of moving new ideas forward is then able to

categorize, review, and bring to group brainstorming sessions these new ideas. By bringing everyone into an interactive process of thinking out-loud, more ideas are born creating an ever growing system of new ideas.

I would like to focus on one very strong basic feeling or concept in this paper. It's the same, very simple, concept your parents probably taught you at a very young age, with a small twist at the end. That concept is; **Sharing is good - as long as everyone involved is aware of what is being shared.**

One of the first things I tell potential clients is that I am really good at keeping my mouth shut. In the business I'm in I have to be.... I recently went through the process of signing a NDA (Non-Disclosure Agreement) with a potential client. This was a medical device manufacturer and they knew my company already had clients in this market. They wanted some protection against me possibly taking their ideas and sharing them with the competition. This was fair enough, and I have done this enough times in the past that I have a file full of NDA's. They are an important part of many new relationships and should be treated with respect. Off we went into sharing information, most of it not very new to anyone involved, some of it reminding us of ideas we hadn't thought of for quite some time, and a few hints of fresh tracks here and there. This talking process led to a meeting at their facility and a full-blown tour of what they do and how they do it. It was informative and enlightening, yet, besides a few details on quantities of parts and forecasts for usage, etc... there hadn't been a great deal of new idea sharing in either direction. Going into the tour, the one particular process I was curious to learn about was a special material that this company is world renowned for being able to make. I had assumed that the NDA was mostly there to protect this sensitive area of their shop. As we hovered around that production area door with the large "Restricted Area" signs, and saw the finished goods warehouse, and discussed the complexity of building the material, I asked if I could be brought in to see how it is manufactured. The two people giving the tour both shook their heads "no way." The head of R&D who has been there for many years said nothing more, but the junior engineer seemed to feel that an explanation was in order. He said, "you know, I have been working here for seven months now and they won't even let me in to see that operation." It was a valuable moment for me. **Here is a company that is a World leader in a very specific niche market and not only were they experts in building what they build, but they were experts at controlling the information that makes that product and their business possible. They know exactly what they have and exactly who they can and will share it with.** We continued with the tour and did end up sharing some information that proved to be valuable to both companies.

### **Knowing What Kind Of Information You Have Is Essential To Knowing What You Can Share**

*When have you shared too much?* Everyone has had that feeling of wanting to pull back information that just spilled out of their mouths. Maybe you talked about something you have talked about with many people, but this person was not the person to tell. Maybe part of your new idea came out and it shouldn't have. There's not much you can do once it's out and it's not a great feeling when it happens. Reducing this to as close to zero occurrences as possible is an important goal. *When have you not shared enough?* Most information people have at their disposal is not only known by them but is known by many or most in their industry. When you don't share this kind of information you make it more difficult to sell what you know and you make it harder for others to want to share with you. That mutual giving is one of the basic concepts in good sharing.

### **Let's define this TYPE OF INFORMATION IDEA a bit better.**

Information and ideas break down, in their simplest form, into one of four sequential categories or stages. Each stage goes through a time cycle that can be very short, as in minutes, or very long, as in many years. All four stages are forever linked and are interdependent much of the time. All new ideas/concepts start at Stage 1 and most ideas will reach Stage 4 at some point. In some cases, ideas may never make it to Stage 4. They are truly best in the business ideas and may remain at Stage 3 for thousands of years. Let me explain.....



### **TOP SECRET**

- A brand new idea, technique, product or method.
- Valuable to inventor.
- Top Secret, Confidential, Proprietary.
- Used & known by very few people / companies. (perhaps just one)

Some examples may include; That new technique I can't talk about in this type of situation! Perhaps your gravy train idea for die cutting that nobody else has figured out how to do yet. It could be an idea, a technique, or an invention, but the one thing it surely is, is new.

This is my favorite Stage to be involved with! It is where things are moving fast, are invigorating, and very exciting. It is also the most important Stage to know you are dealing with from a confidentiality standpoint. Both the sharer and the sharee must feel comfortable talking about these ideas and must know what is expected of them in dealing with this type of information. These concepts are what puts you ahead of the competition, allows you to bring something special to the table with your clients, and stimulates a culture of innovation in your organization. It's very difficult to share this type of idea with someone you don't know.



### **JUST RELEASED**

- A just released to the public idea, technique, product or method.
- Very valuable to those selling it and using it.
- Cutting Edge Technology, a valuable sales tool.
- Used & known by only the most informed people.

Some examples may include; fuel cells, automatic benders, high speed blanking innovations, galvo laser cutting systems, hybrid cars, and the internet. (yes, you are familiar with these ideas, but millions of people are not)

Stage 2 information has just been released to the public. The timeline and sharing in this stage can be interesting to deal with because what some people have known about for only a little while, others that are more on top of new products and ideas may have known about for much longer. Also presenting a challenge are people needing services from outside their industry that involve your industry to help them. They may consider what you bring to the table Stage 1 ideas, when in reality they are not. Your competition knows this but your client may not. Knowing what to share and when is a key to keeping customers, and from your competition's standpoint – landing new customers. It's difficult to share this type of idea with someone you don't know, but much easier than sharing a Stage 1 idea.



- Common Knowledge idea, technique, product or method.
- Valuable to everyone using and selling it.
- Level playing field technology, as everyone has it or knows it exists. If you don't have it you may be falling behind. It's mainstream.
- Used by most people and/or companies.

### **COMMON KNOWLEDGE**

Some examples may include; language, cell phones, laser dieboard cutters, counterplates, cars, bicycles, computers, dancing, use of tools, electricity.

Most of us work in this area everyday in nearly everything we do. From sending an e-mail to washing your car – you are in Stage 3. The same situation exists as it does in Stage 2 ideas in regards to other industries or cultures coming to your industry or your culture. The ideas and ways of doing things that you take for granted are new to them. That creates an ideal mixing point for new ideas to be born. It's easy to share this type of idea with someone you don't know.



- Obsolete idea, technique, product or method.
- No longer being used or sold by most people.
- Old technology, in some cases forgotten by most in the industry.
- Antique status. Old timers may find comfort and knowledge in knowing the roots of the idea but new comers have a faster and better way.

### **OBSOLETE**

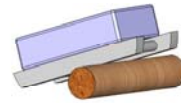
Some examples may include; the horse and buggy, leather boots for skiing, letter presses, nicking dies with a screw driver and hammer, maybe even film for cameras is heading this way?

Can you think of any more examples here? I'm betting you can as we are surrounded by new inventions that have made what we used to do seem slow and outdated. The beauty of knowing about and remembering these outdated concepts becomes evident when we can take that old idea and combine it with another idea to build a brand new concept. It's very easy to share this type of idea with someone you don't know.

## THE WHEEL IN VARIOUS STAGES



In the invention of the wheel cycle, this Stage 4 idea, used now by some riggers, was at one time a brand new idea – a Stage 1 idea.

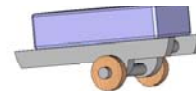


Adding a sledge to the first wheel was truly an innovation. It stabilized the load, allowed controlled moves to the next wheel, made it easier to drag, and led to grooves in the wheel that led to the next stage of the wheel. The grooves made for a smaller inner circumference that the sledge was riding on. This meant that the load could go further before the next wheel/roller was needed.

With a little innovation and perhaps a lot of grease, Stage 2 of the wheel concept was born. No transfers to more wheels and moving things became a little easier still.



A Stage 1 wheel and axle led to longer distances being covered with less energy used. At its Stage 1 point in time it was Brilliant! Absolutely Brilliant! And nearly timeless in that even today, more than five thousand years later, this is the concept we use. It is no longer a Stage 1 concept, but by bringing in other ideas we continue to create Stage 1 innovations.



Perhaps a wheel-related Stage 1 concept today involves a unique way of removing a new tire from its mold, or a high-performance steel that a bearing can be made of that will withstand a 747 Jet landing on it. Perhaps an ultra-accurate feed roll system that helps paper move faster through a

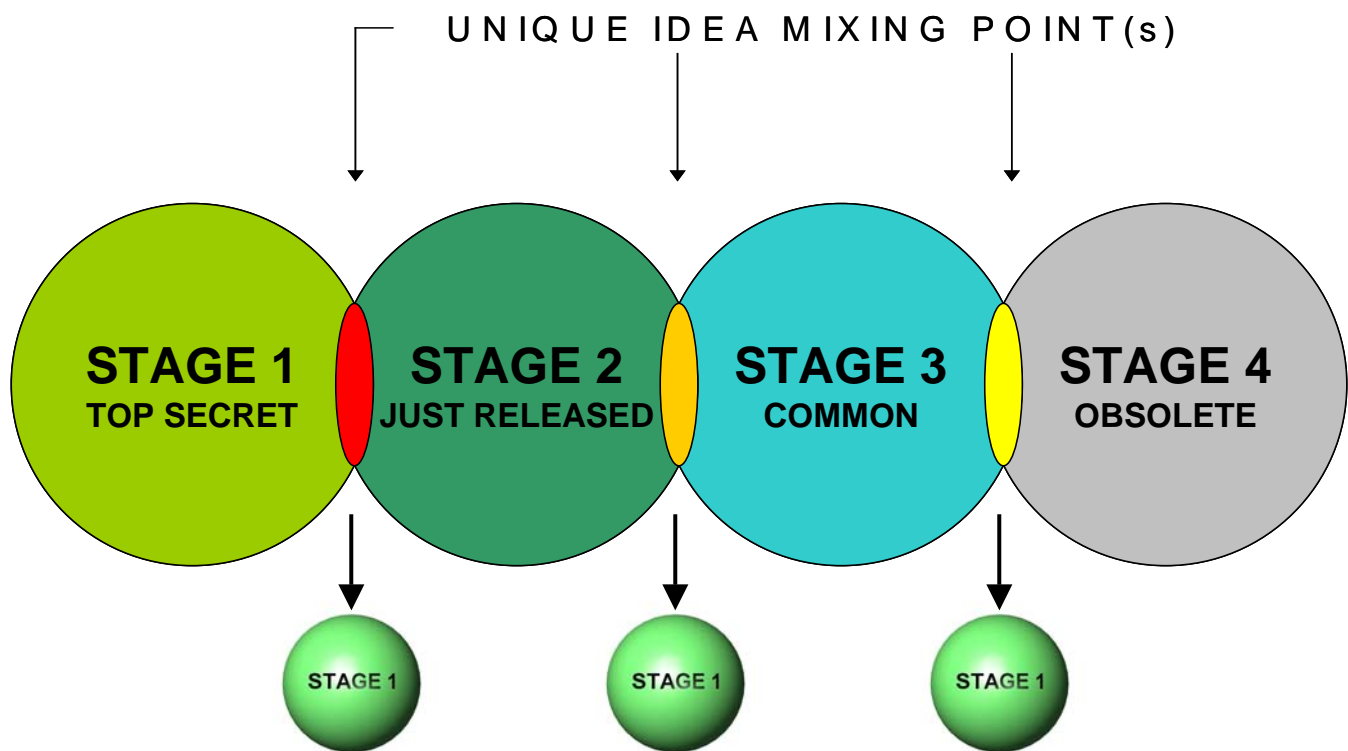
So Again – What Is My Point?

**Sharing is good as long as everyone involved is aware of what is being shared and knowing what kind of information you have is essential to knowing what you can share** especially when you as the sharer intend to share Stage 1 information. What kind of information do you have in your business? Who are you going to share it with and who are you going to keep it from? In order to move up in the information food chain you must be willing to share Stage 2, 3, and 4 information openly. Openly doesn't mean carelessly but it does mean that you are at least open to the idea of sharing most of the time with later than Stage 1 ideas. In order to build trust within your circle of peers you must be willing to give. The openness created by stating what you are sharing and then sharing it, without reservation, is a stimulating, relationship building, trust building, and sometimes a trying exercise for all of us especially when we are sharing with potential rivals. The problem with not sharing Stage 2, 3, and 4 information, is that if you don't someone else will and when they do you will have sacrificed an opportunity.

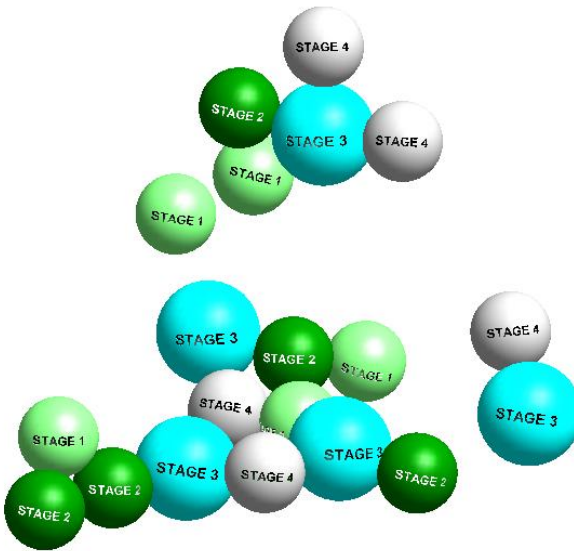
That lost opportunity was to learn something new from them. You will have driven away a potential new idea someone else may have shared with you. The sharing of information opportunity you may have received from that person is gone and you have handed that opportunity to someone else. Knowing where to draw the line is the key to sharing well and moving up your circle of peers to as close to Stage 1 information as possible. It makes you stronger as a person, and as a company. **By not sharing non-confidential information we isolate ourselves and make it harder for our organizations to grow and prosper.**

Let's Put It All Together;

Between each idea stage there is a mixing point. That mixing point is what intimidates us when sharing because we may be sharing our higher stage information with someone that doesn't know it yet. We may help the competition. We may help a customer do it themselves. There are all sorts of reasons to not share but unless you are working with Stage 1 or very early stage 2 information, that person is going to find out from somebody else. By not sharing, that relationship opportunity will be lost and you will lose in the long run as you will not be exposed to the potential benefits that the mixing point inherently provides – New Ideas....



TOTAL TIME LINE MAY RANGE FROM JUST A FEW DAYS TO MANY YEARS →  
 The intersection of very new ideas and recently new ideas is where the best action is to be found.



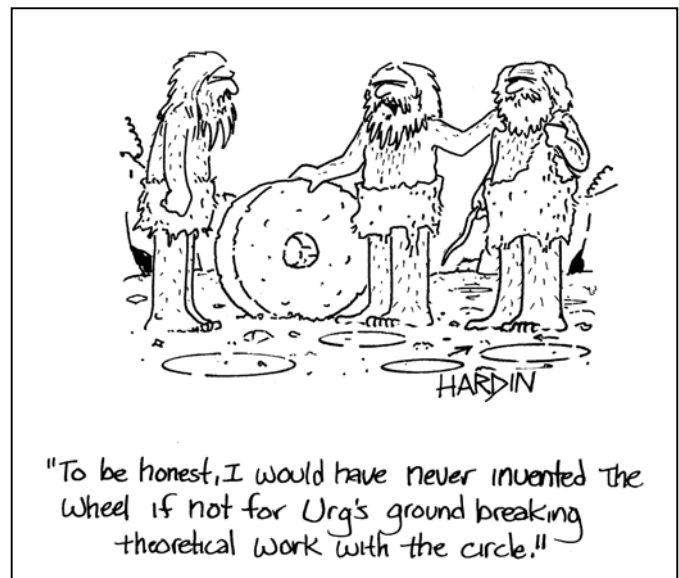
The reality of these mixing points may look more like this model, multiplied out to cover the Earth, where many industries and many ideas all mix together at various times within the lifecycle of each stage creating an infinite number of possibilities for innovation.

**There Are Several Factors That Have Developed And Continue To Develop Quickly That Make This Base Concept Of Sharing An Urgent One To Understand, Set Policy For, And Embrace.**

The first is that the days of people staying in one job for their entire working life are gone. People change jobs frequently and are willing to uproot for many different reasons. This change in business reality has led to information and ideas moving with them. In many cases this is good for the company receiving the new employee and bad for the company losing the employee. Confidential information, Stage 1 ideas, can walk right out the door with them. Some companies deal with this with non-compete agreements or other legal documents that cover information secrecy for a term that seems safe and fair, while other shops protect information so tightly that new internal ideas cannot form as easily as they would if the culture was more open. Whatever the case may be there must be an understanding of the root idea of sharing and what it can lead to both with internal and external information. Risks must be assessed and a plan must be in place to move forward.

The second is that technology has made it incredibly easy for us to share our information. The pace of new ideas forming has never been greater in all of human

history. Concepts that used to take months or years to filter out into the public domain can be made understandable and available nearly instantly. CAD and graphics programs have become easier to use and more available to the masses for easy explanations and the advent of the world wide web of information access via the internet has pushed the exchange of this information right into the fast lane. If we understand what we have and want to share, this



speed-up can work greatly to our advantage but if we are unsure of, or have no clue as to, what we have and want to share, then this speed-up can work against us.

The third relates to competition and exchanges both on a local and international level. Sharing with the local competition, if you are a local area service provider, is seen by some as self-defeating. I would say, for all the reasons outlined in this paper so far, that this can be true if you don't know what you are sharing. If you do know what you are willing to share and are not will to share, then again for all the reasons outlined so far in this paper, you are making a wrong move by not sharing, even with the local competition. Taken to the next level of international competition that word "self-defeating" can rise to the term "treason" via feelings of patriotism and cultural superiority. How often do we complain about anyone caught sharing ideas or helping a start-up shop in a competitive country? It doesn't matter if it's an idea or concept being shared from Europe to China or an idea moving from India to the USA, the people in both giving information countries feel as though they are losing something that will eventually hurt them because they are helping the competition. They are taking jobs away. In reality, if they are sharing open information in an organized manner, they can gain more in the exchange than they give. They will build those relationships that provide fast, up-to-date, and fresh ideas that will help them survive both the local and international competition. If the new ideas in the industry have the current or future potential of emanating from outside your sphere of peers, whether that is local or international potential, then you will need to move your focus on sharing to a wider circle of peers. That may include the competition both near and far. It may also include the guy sitting in the office right next to yours!

So I admit it, I'm addicted to sharing. I love the giving part and I love the getting part as well. Most of all though I'm addicted to the mixing part caught between my ideas and someone else's. That's where the action is! I highly recommend putting the sharing information process way up on your list of things to do as often as possible. Whether it be with your best customer, your most loyal co-worker, your best supplier, or your biggest rival, the rewards can be terrific.

*Mark Batson Baril of Cut Smart Engineering & Manufacturing, Inc. grew up as a steel rule die maker and has been involved in die making and die cutting since 1976. His company provides vital component engineering & manufacturing for complex specialty products, medical devices, filtration, life sciences, and aerospace products. Mark is a member of the IADD TECHTEAM.*

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