

Leaning Intellectual Products – There is a Difference

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The most important products in any organization are products of the mind. They are intellectual rather than tangible. Intellectual products can range from ideas to full blown plans, from concepts to global strategies. Decisions, policies, advice, concepts, guidelines and even budgets are intellectual products.

Tangible products also start out as concepts, thoughts, plans and ideas. Everything your organization produces or delivers, is a product of thought before it is transformed into a service or a manufactured product. All begin as individual ideas that are then shaped and formed as the result of human interaction.

The Differences Matter

There are similarities but there are also compelling differences between the web of transactions through which an intellectual product is developed and the more straightforward process through which tangible products and services are produced. An intellectual product, for example, is vulnerable to the quality of human relationships. It depends on language for its transport. It accesses its supplies of ideas and contributions through social networks. Each contribution changes the requirements for the next. These qualities are of only minor import to the success of tangible products and services.

The gold standard for the development of intellectual products requires that they operate in flow. This means that each transaction is connected to the next with seamless continuity. As we generate and develop ideas, *breaks in continuity* not only waste time, they also break the flow of thought. The phrase, “Where were we on this?” is uttered so often that it has become a *cliché*. Lost are the richness and context as well as the subtle nuances of an idea that is in flow as it is being formed.

If you want to achieve the gold standard in the intellectual products developed by your organization, you have to master the basics. Think about it this way. It doesn't matter whether you are a golfer, musician, race car driver, chef, engineer, physician or a plumber. Your success depends on understanding the basics and being good at *all* of them. It is nice to have a good drive but if you are a poor putter you will kill your score.

Seeing Intellectual Products in a New Way

Lean thinking principles provide a useful but limited set of eyes when applied to intellectual products. However, the real basics are embedded in six core factors that, together, determine the quality of intellectual products. These six factors are:

- The quality of social networks.
- The degree of social capital within those networks.
- The sources of pull that influence self-organization.
- The language and conversational competence applied to each transaction.
- The degree to which interactive processes add value.
- The quality of the processes of individual contributors.

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These factors are individually and collectively critical. Ineffectiveness at any of them will not only degrade the effectiveness of the others, it will also, in its own right, create waste, degrade the product and limit the recognition of new opportunities. Each is described below beginning with the first factor- the quality of social networks.

The Quality of Social Networks

Both tangible and intellectual products depend on the quality of suppliers. The suppliers for tangible products are stable. Because of this, suppliers can redesign and continuously improve their own processes over time so that the product they supply precisely meets requirements and is delivered exactly when needed. In contrast, the suppliers for intellectual products are constantly changing as the product evolves. Since an intellectual product's requirements are constantly changing and evolving, *if we do not master the basics required to create effective social networks*, the emerging product will be quickly degraded when the right information is not supplied at the right time.

A social network is the web of potential contributors to an intellectual product
We use social networks to find out who has the information, experience or wisdom, assess the quality of information and determine whether it can be supplied when it's needed.

We pull contributions from the network of people that we trust, respect and with whom we have rapport. The choice is guided not only by expertise and experience but also by the history of relationships we have with each person. This history is captured in the term *social capital*.

The Degree of Social Capital within the Social Network

Social capital is the residual value that is created when relationships include trust, rapport and openness. We trust the people that we can rely on, whom we know are sincere and who have the capability to deliver on their promises. Rapport refers to the sense of affinity, harmony and mutuality in a relationship. Openness is a natural outcome of trust and rapport.

We all instinctively understand the importance of social capital. This is why, in addition to information about projects, people give each other updates on the health of the organization and insights about personal relationships. We build social capital with conversations not only because we seek community although this is an invaluable end in itself. We build it because we know that high quality relationships measurably enhance our ability to produce superior intellectual products and to do it without the waste that always accompanies social deficit.

These social deficit costs go directly to the bottom line. Add to this the fact that social deficit increases the likelihood of lost opportunity. Ideas that are already polished can survive a hostile competitive environment. Lost are the undeveloped ideas ... those that need to be teased out and clarified. The bottom line is that a culture of suspicion or intimidation is expensive. The waste that accrues from social deficit is money lost.

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The Sources of Pull that Influence Self-Organization

Self-organization refers to influences that cause people to seek the optimal relationships, communication channels and processes as they develop an intellectual product.

The phrase, “self-organizing” refers to the fact that what you care about determines what you do and what you think about. Those things that matter to you pull your actions and your ideas. To the degree that the requirements of an intellectual product matter, they will influence everything you do. Unless they are skewed or impeded, the requirements of the product will reliably pull the optimal choice of ideas, contributors and processes. This pull is the engine of self-organization.

A core requirement of self-organization is that the intellectual product itself determines the pull that influences optimal relationships, communication channels and processes. Anything that interferes with or competes with this pull causes waste, can degrade quality thinking or even take the product in a tangential direction.

These sources of interference can include blocks and constraints such as formal structures, and processes that are non-value added, or any restrictions to the free flow of information or even power struggles. They can include unnecessarily proscribed and bureaucratic processes or lines of authority. They can also include attitudes and norms that permit the withholding of information, triangulating, using information in manipulative ways or any form of non-transparency. *Mastery at creating free flowing self organizing intellectual processes is critical to the development of gold standard intellectual products.*

The Language and Conversational Competence Applied to each Transaction

Social networks are the methods by which we find the right people for our conversations. Social capital influences not only who we will talk to, but also the effectiveness of the interchange. The pull of self-organization keeps us on message with the right people. But it is our competence at conversation that makes intellectual products happen.

Conversations are the heart of an organization. They pump the information through which we create both our intellectual products and our human relationships.

The processes through which we put language to ideas occur in a whole series of continua. They can range from optimal to destructive, from being clear, focused and purposeful to being complicated and confusing. They can generate breakthroughs or breakdowns. They can nurture solid relationships or feed suspicion and mistrust. They can waste people’s time or leverage it; delve into deeper meanings or skim the surface. They can fill an organization with discovery, invention, vitality and resilience or sap its energy.

Every conversation requires either the sharing and understanding of information (hand-off and coordination) or an interchange that results in the mutual development of a new understanding (collaboration).

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Interactive competence refers to the degree to which the quality of conversation supports effective hand-off, coordination and collaborative transactions. These three types of transactions (hand-off, coordination and collaboration) each require different conversational skills.

Both *hand-off* and *coordination* transactions are completed when the intended message is understood. I share information with you so that you can take it the next step or we exchange information so that we both can move forward. Even the most simple hand-offs of information require the participation of both parties. Both the sender and the receiver participate in the delivery of the product. Both play a role in conveying and in understanding the meaning that constitutes the delivery of the product. Everyday misunderstandings that detract from or subvert or even sabotage intellectual products, no matter what the cause, are all incomplete transactions because they have not accomplished their purpose as defined by the requirements of the product.

A *collaborative* transaction requires not only that each understand the other but also that all contributors interact in a way that enables them to create a new understanding. Whereas, in a hand-off, the transaction is completed when the message is effectively conveyed, in collaboration a next step is required. Participants jointly work with the information to develop new understanding. Collaborative transactions are completed when new common ground is achieved. We stretch our individual thinking and together develop a new joint understanding.

In addition to these two skills of language and listening, collaboration requires the willingness and ability to enable intellectual constructs to evolve. Individual differences of opinion, beliefs and other intellectual constructs are resolved as the subsystems of thought are reordered into a new understanding.

Waste, degraded outcomes and lost opportunity will all occur unless we develop mastery at interactive competence.

The Degree to which Interactive Processes Add Value

Interactive processes include not only the tools that are used to promote group consensus and decision-making but also the sequence of activities through which the seamless unbroken forward movement of an intellectual product occurs.

It is in the design of interactive processes that a comparison between the value streams for intellectual products and those for tangible products are particularly telling.

Sources of waste such as wait time (time waiting for someone to take the next step), unnecessarily complex processes (such as back and forth activity as often happens with approval processes) and storage or warehousing (as often happens when people sit in meetings “just in case”) are all obvious examples of the way in which process issues in the value streams of tangible products transfer to those for intellectual products.

A well-designed intellectual value stream flows seamlessly across multiple venues with no breaks in continuity. The transparency and continuous access eliminates the waste that occurs

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when emails are broadcast and when people attend meetings *just-in-case*. It leverages the use of all venues to ensure that a developing product moves forward with seamless flow. All contributions are offered *just-in-time* and waste is continuously identified and eliminated.

Without mastery of both interactive processes and technology, intellectual process cannot operate in flow.

The Quality of the Processes of Individual Contributors

As is true with the manufacture of tangible products, if the suppliers do not *lean* their own processes, the entire value stream is degraded. The suppliers in intellectual value streams are individual contributors. This leads us to the sixth factor: the quality of the processes of individual contributors.

Individual processes are the engine of contributions that are *just-in-time* and that represent the best thinking of each contributor. Individual processes include everything from how to structure time and organize work to how to attend to each subject without the bleed-through of distractions

Notice for a moment how your work proceeds in a typical day. In all likelihood you enter, and contribute to, many intellectual streams - most of them with people who are geographically distributed. The challenge is to complete each transaction by providing a thoughtful, timely contribution or response. From the context of the developing intellectual products themselves, the challenge is to find each potential contributor and pull a contribution that adds value precisely when it is needed in order to advance its development.

The very technology that has enabled people to interact across time zones has created far greater interactive complexity. It has accomplished this by providing an environment in which you can potentially contribute to a far wider array of subjects, each of which has its own set of contributors. Instead of sustained interaction that moves a thought process forward in the presence of others, you may participate in multiple conversations in which face to face interaction is a sporadic part of a larger process.

Each contribution must be timely so that the topic moves forward without interruption. You not only have to contribute thoughtfully but you may have to do it now ... most probably about multiple subjects during a typical day. And in the overwhelming majority of the cases, people are not in the same room.

In short, on most days potential contributors are moving in and out of multiple conversations using a variety of venues. Each conversation should add value to a developing intellectual product. Each intellectual value stream has a life of its own with its own requirements. Therefore they must develop the capacity to maintain mental continuity from subject to subject. Lean individual processes enable people to deal with that complexity, contributing to the multiple value streams to which they are suppliers.

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There is no magic to these processes. It requires that individuals: 1) lean their workspaces, 2) develop personal operating policies to deal with the flow of work and respond to the pull; and 3) give focused attention to ensuring that the value is always moving forward.

Because of these realities, intellectual value streams can only operate in flow if the suppliers ... the individuals who must contribute to them ... develop mastery at applying lean principles to their own thinking and work processes.

A Holistic Approach

Each of the six factors: *social networks, social capital, self organization, interactive competence, interactive processes and individual processes*, plays a pivotal role in its own right. Mastery in each supports the effectiveness of the others. Together, they determine the quality of intellectual products as well as the ability of contributors to both recognize and seize opportunity. The frequency and quality of innovation rests squarely on the degree to which the basics for all of these factors are executed with mastery.

There is a better way to produce superior intellectual products – a less wasteful and time-consuming way, a way that creates lasting benefits for the organization, for its teams and for the men and women who work there.

It is time to untangle the maze of practices, skills, processes and support systems that are currently in use in developing intellectual products, and to re-order them into a mutually reinforcing system. This shift requires a change in the way each individual thinks about intellectual products, as well a change in the principles, practices and competencies through which they are developed. It requires an uncompromising commitment to mastery at each of the six factors.

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