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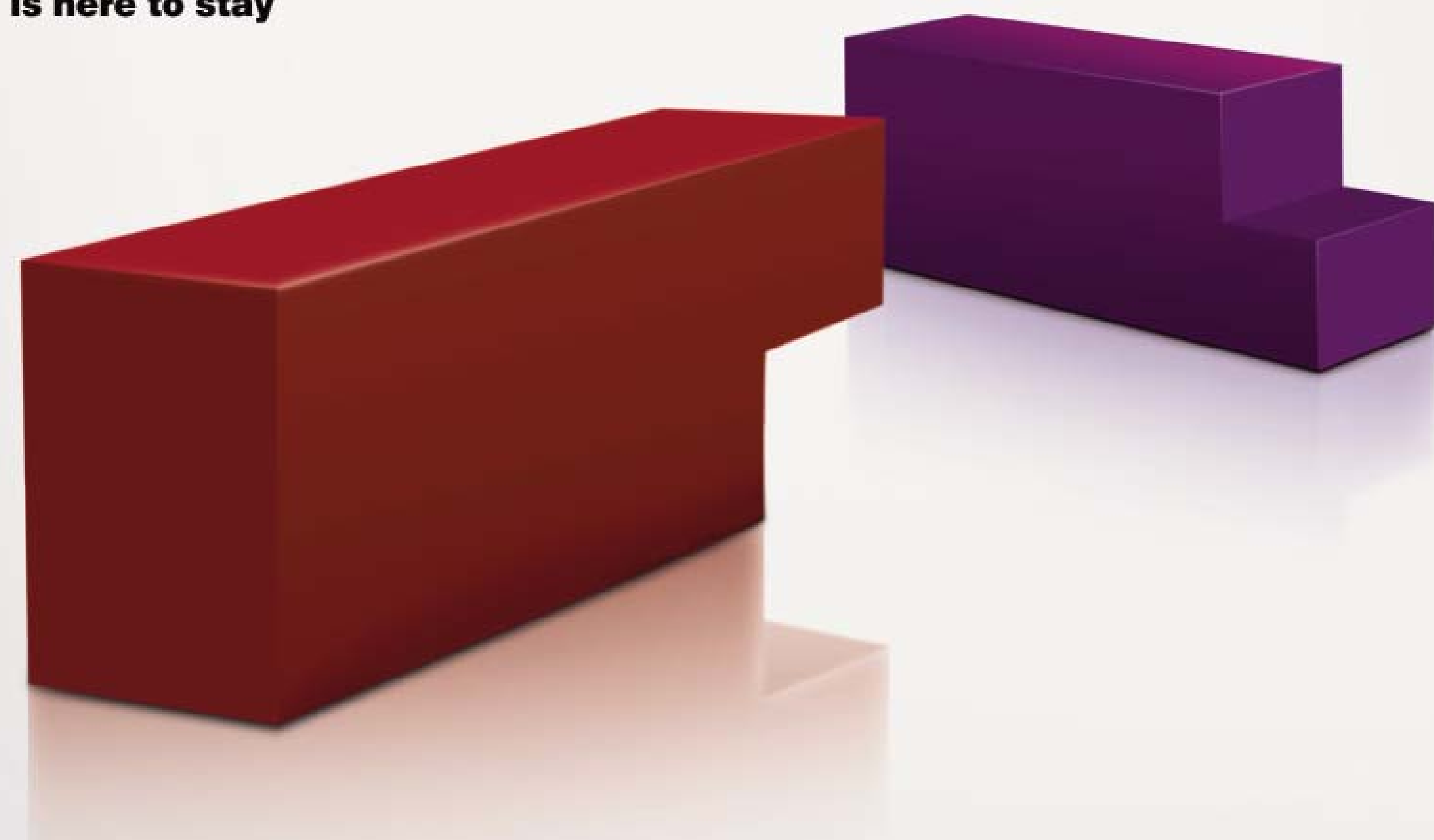

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PRODUCTIVITY IN THE NETWORK ERA: NOT YOUR FATHER'S ROI

Today's networked era demands new ways to understand value that go beyond traditional methods: 'The ROI is dead. Long live the ROII!' Jay Cross and John Husband explain.

The industrial age has run out of steam. Look at General Motors. Look at Chrysler. We are witnessing the death throes of management models that have outlived their usefulness.

The network era now replacing the industrial age holds great promise. Networked organisations are reaping rewards for connecting people, know-how and ideas at an ever-faster pace. Value creation has migrated from what we can see (physical assets) to intangibles (ideas). Look at Google and Cisco.

Understandably, seasoned executives, chief learning officers among them, are having a devil of a time shifting from the industrial age mindset of logic, certainty and bounded constraints to the network gestalt of interaction, self-organisation, unpredictability and fewer limits to potential. The pressure is constantly on to meet quarter-to-quarter revenue and earnings targets that in turn accentuate the need to take decisions that support achieving those targets. At the same time, we are shifting into an era in which knowledge work and learning occur where re-engineered business processes collide with a participative and interactive ecology of information flows.

How can a chief learning officer hope to make informed judgments in this continually expanding networked environment that's flowing ever faster, spreading power among its members and producing outsized impacts in unpredictable ways? What to do?

One cherished industrial age concept that is proving particularly difficult to let go of is return on investment (ROI). But like Pontiacs and Oldsmobiles, old-school ROI's day in the sun is waning. In an environment of continuous flow and interaction, there's a need to consider an emerging metric: return on investment in interaction (ROII). The working definition of ROII is the observable development of capacity and capability to create economic values out of intangibles.

Consultants and smart-aleck MBAs will tell you if you want to sell a big project internally, you've got to talk ROI. It's the language senior managers understand. Being fluent in ROI talk addresses the 'hard' tangible returns stemming from an investment in a specific project or capacity. It is supposedly the secret handshake that

gets you to the inner circle of those who control budget dollars.

Let's look at what ROI was, how it needs to be changed and how to recapture its original intent in the network era, in which continuous learning and knowledge work are becoming inseparable. As Steven Forth of the LeveragePoint division of the Monitor Group puts it, "Too many people who talk about the ROI of learning are focused on being precisely wrong rather than directionally correct."

TRADITIONAL ROI

ROI is an accounting and financial management concept businesses use to decide where to make investments and to assess the success of investment decisions after the fact. ROI reduces both return — R, what you expect back — and investment — I, what you expect to put into numbers — making it possible to compare one investment opportunity to another. The numbers tie back to categories on the balance sheet and income statement, (ie tangible assets and hard-dollar returns).

ROI is what you get for your money, divided by what you spent to get it. It's R/I expressed as a percentage. In a business culture that is sceptical of non-numerical reasoning, ROI implies disciplined, mathematical rigor. It ties actions to intended results. It shows the logic of how results will be achieved.

Companies set up ROI hurdle rates to gauge whether there will be sufficient payback over a reasonable and defined period of time to justify the capital invested to acquire additional capacity or produce a defined result. Companies also use ROI to evaluate past performance. In retrospect, what was spent and what benefits were received? This simplifies making the case for similar projects in the future.

WHAT YOU CAN'T SEE

In the network era, things you can't see are more valuable than things you can. Thomas Stewart sounded a clarion call in his book *The Wealth of Knowledge* with his exhortation that building the capacity to create economic value through things such as innovating and enhancing brand reputation is as important, or more important, than generating specific results from a specific initiative. Twenty-five years ago, intangibles accounted for less than a third of the value of the S&P 500. Today, intangibles can make up more than 80 per cent of that value.

On paper, Google's net worth was about $30 billion at the end of 2008. That's what it paid for computers, buildings and stuff you can see, minus debts and the expense of wear and tear. Stock market investors value Google at $125 billion. Where does the extra $95 billion come from? Intangibles.

"Intangible assets — a skilled workforce, patents and know-how, software, strong customer relationships, brands, unique organisational designs and processes, and the like — generate most of corporate growth and shareholder value," wrote NYU Professor Baruch Lev in *Harvard Business Review* in June 2004.

Corporate decision makers say their goal is to increase shareholder value. In a networked, information-based environment, shareholders value brand, reputation, ideas, relationships and know-how. These assets don't appear on the balance sheet, but more and more often they provide a corporation's competitive edge. These most important aspects of the business aren't recognised by old-school accounting and therefore aren't factored into ROI calculations.

Organisations that make decisions based solely on things that are sufficiently tangible to be counted directly might as well consult a ouija board to set their goals. Leaving the most important sources of value out of the ROI equation is not conservative — it's foolish.

Measuring intangibles involves making judgment calls, so managers often exclude intangibles from their ROI calculations. Several purported authorities on calculating ROI suggest taking intangibles into account by putting them on a list but refusing to estimate their value. This leads you to comparing numbers to words, apples to oranges.

MANAGEMENT AND MEASUREMENT

"You can't manage what you can't measure" was a mantra of industrial age management. Adopting F.W. Taylor's brilliant research and models, generations of managers have carried stopwatches and pored over measurements in a continual quest to make things work better. Efficiency was the road to riches in the slower-moving, predictable industrial age, and measurement was the proof of the pudding.

While the measurement meme works when your goal is to tweak the way you've been doing things and other operational decisions, it doesn't apply to making judgment calls, strategic choices or disruptive innovations.

Executives manage immeasurable things all the time. The more powerful the executive, the more likely he or she is involved in effectiveness — doing the right things rather than doing things right. Intuition, judgment and gut feelings guide these more important decisions. Qualitative assessment often can make up for a concrete numeric result.

Make a hypothesis of cause and effect. Interview a statistically significant sample of the workforce to see if the hypothesis holds up. Often, results obtained from social science research methods will produce more meaningful feedback than solid counts of the wrong thing.

The old "can't measure, can't manage" dodge doesn't free businesspeople from making decisions under conditions of uncertainty, and the network era ushers in uncertainty in spades.

DECISION MAKING TODAY

A business network is a group of individuals or organisations that are linked together by factors such as values, visions, ideas, financial exchange and collaboration to further the ends of the corporation. Business networks share common characteristics with all networks:

• They multiply like rabbits because the value of a network increases exponentially with each additional connection.

• They naturally become faster and faster because the denser the interconnections, the faster its cycle time.

• They subvert hierarchy because previously scarce resources such as information are available to all.

• Network interactions yield volatile results because echo effects amplify signals.

• Networks connect with other networks to form complex adaptive systems whose outcomes are inherently unpredictable.

Intangibles travel via networks, and networks are the infrastructure for doing business in the future. An overarching caveat here: strategist and practitioner Stuart Henshall said trust is critical. "It's the one qualitative factor all networks depend upon."

ROI, the tool we once used to evaluate projects in stable times, clearly is not up to the task. The impacts of collaboration-based knowledge work are accelerating. In the Western world executives are under constant pressure to perform. It's difficult for them to give up models they understand well.

In the future, organisational effectiveness will be defined by the interaction of workers in a networked environment. Exchanges of information and knowledge are what make peoples' brains work on a purpose and what gets the imagination going to formulate pertinent responses.

However, the return on networked collaboration is less tangible than the results generated from stable and ordered sequential tasks that dominate the efficiency-oriented industrial era.

So we face the problem of convincing managers to adopt new mental models that incorporate the intangibles generated by a whole system, the organisation and its interconnected networks. Making a business decision to invest in new ways of working is a complex process involving many factors and intricate tradeoffs, such as:

• Risks must be weighed against rewards.

• Short-term vs. long-term aims.

• Alignment with strategic initiatives.

• Scarce resources call for shrewd horse trading.

IDENTIFYING AND MEASURING ROII

The focus in this new world of work is to do what's important and involve those who know what's important, why it's important and what they know (or know how to find out) about a problem or issue. To begin measuring increases in productivity and value in a networked social computing environment, we propose return on investment in interaction (ROII), derived from the principles of Metcalfe's law of networks, which states that the value of a telecommunications network is proportional to the square of the number of connected users of the system.

> Increases in network connectivity involve the degree, frequency, density and concentration of information flows between nodes in a social network.

Some core assumptions about ROII:

• Continuous flows of information are the raw material of an organisation's value creation and overall performance.

• Information flows are carried by links, alerts, RSS feeds, search engines, aggregation and filtering of content.

• All leading vendors' productivity platforms now feature collaborative social networking and computing.

• These platforms' architectures facilitate purposeful cross-silo communications and exchange.

In a June 2008 *The Network Thinker* blog post, social networking pioneer Valdis Krebs outlined four generic metrics that are becoming widely accepted as leading to observable, tangible measurable outputs:

• Increase in size of network.

• Increase in internal network connectivity.

• Increase in connection to valuable third parties.

• Increase in number of projects formed from all three factors above.

It's important to note here that we are not proposing a definitive answer, but rather the need to debate and clarify the issues. Each of the principles outlined above proposed by Krebs addresses the productivity of network activity. Unpacking them can help us understand how to begin to assess ROII.

INCREASE IN NETWORK SIZE

If we follow the logic of two heads being better than one, and therefore x heads being better than two, in social- and knowledge-building networks, we can expect to find:

• More engagement with an issue

• More analysis by more people

• More input from more people

• More possibilities that may have been overlooked

• Quicker and more comprehensive analysis

CapGemini's relaunch of its knowledge management initiatives offers a great example. Its initial programme wasn't working: 20 per cent year-on-year usage decline, three and a half year average document age and an average of seven years to refresh current knowledge. It relaunched informally via word of mouth and within six months had 27,000 of 83,000 employees using it, involved in 900 communities exchanging information and pertinent knowledge on a daily basis. All that activity came without spending a single dollar on formal internal communications or training.

INCREASE IN INTERNAL NETWORK CONNECTIVITY

Increases in network connectivity involve the degree, frequency, density and concentration of information flows between nodes in a social network. The organisation is able to define better business and market intelligence, more frequent and tangible customer centricity and responsiveness, and clear instances in which cross-silo knowledge exchanges lead to tangible results.

At CapGemini, six months after the informal launch, the 900 communities of practice were using 500 forums, 500 wikis and more than 250 expertise- or project-focused blogs. Business results as defined in the previous paragraph are not long behind.

INCREASE IN CONNECTION TO VALUABLE THIRD PARTIES

In today's increasingly interconnected environment, ignoring external parties that have an interest in products or services is a guaranteed recipe for trouble. These interested parties talk about brands or offer up opportunities, and organisations that respond rapidly and effectively to issues gain competitive advantage.

Ford Motor Co. opened up its launch of the new Sync service to customer input and conversation. With 1 million page views in less than 12 months, the company experienced a significant reduction in customer-service support costs as 10,000 customers began to offer each other tips, pointers and answers. Further, it began to receive significant tangible market intelligence as engaged users began to share product integration and compatibility experiences, tips and tricks.

INCREASE IN NUMBER OF PROJECTS

ROII is obvious when the scope, degree and intensity of interaction increase due to

implementation of the three above principles. An increase in the number of projects creates value as people learn to work together effectively in networks, putting informal learning to work on resolving issues, creating opportunities and generating activity that enhances an organisation's reputation for listening and responding effectively.

Fast Company recently published an article on Cisco Systems' large-scale adoption of social computing as the main means of working with information and knowledge. CEO John Chambers said that as a result, Cisco has gone from being able to focus on three to five strategic initiatives at a time, to now working on 26-27 strategic initiatives in parallel.

INFORMED JUDGMENT

The heart of the matter is providing decision makers with an informed business case that ties investment to the results that it brings. A solid case describes results in business terms, such as increased revenue, better customer service, reduced cost or speedier time to performance.

Network returns are asymmetric, so simplistic count-'em-up approaches are no longer viable. But how can one make a solid network-era case to an executive who is still playing by yesterday's rules?

The answer is to improve the corporate network as a continuous process, not as a project with a hurdle rate. Improving network performance need not be all-or-nothing. It can be implemented in small stages. Break major decisions into numerous low-risk incremental decisions. Instead of making one major decision a year, CLOs might look at boosting network results as a series of monthly decisions. Continuous monitoring of the statistics of ROII would guide mid-course corrections.

Life was simpler when you could measure performance by counting the number of widgets produced, shipped or sold. Given that the networked workplace and markets are here to stay, how can managers begin to adapt and refocus long-standing mental models about what and where to invest precious energy and time? An effective response to this conundrum is qualitative assessment.

Create a hypothesis and use existing techniques — surveys, focus groups, facilitated brainstorming — to find out what employees and customers are doing and how they want to work together. Then, check it out with a wider sample of the workforce to see if it holds up. It's clear we are moving rapidly into a networked world in which responsiveness, innovation, gaining competitive advantage through learning faster and embedding knowledge into products and services are all important.

In a world of intangibles, we need to contribute to the productivity, viability and profitability of any given enterprise. We should rethink and expand our methods for making judgments about where, when and how we invest in the ongoing interaction between our employees and customers. That is the return on investment in interaction.

This is an extract from The Working Smarter Fieldbook by Jay Cross, Jane Hart, Jon Husband, Harold Jarche, Charles Jennings & Clark Quinn. Learn more about the authors and the book at http://bit.ly/ILTM32d

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