Learning Organizations
Open net=WORKing Organizations

Co-generating Knowledge and Innovation

We understand the challenge net=WORKing provides but content both individuals and organizations must adopt “And Both” thinking and operating. While core functions may continue to rely on familiar, maximally efficient processes and capability—intellectual, organizational, and technology—must be added to tap and leverage the value creating potential of net=WORK.

In a March 2007 “Long Live KM” online discussion through the AOK Group, Robert H Buckman, founder Buckman Laboratories (described by Infoworld as “KM’s father figure”) wrote:

“Jerry, thank you for the kind words, but I never did try to manage knowledge. What I really tried to manage and mature was a culture that would encourage and expand the flow of knowledge. It was because economic value could only be obtained in our environment when knowledge moved across the organization in response to a need.”

—Rob Buckman
March 6, 2007 AOK Yahoo Group Post

Two decades since Buckman’s pioneering work to encourage and expand knowledge flow and innovation in his organization, creating an open culture is still “the key element”.

In writing this article, we determined to explore how numbers of our extended network thought about “open networks for co-generating knowledge”, and how today’s fast-paced technology enabled interconnected business environment makes a difference. What has changed since Buckman’s process of knowledge sharing set the high standard? We had the good fortune of gathering insights from many talented people, including less than 10 of Rob Buckman.

An Action Research Initiative
Practicing what we preach—action research—we began with an initial post to our blog describing the first article premise, a network view of organizations. We reached out to trusted colleagues with deep knowledge on the topic, connecting to others not in our network through their blogs, email, Facebook and phone. The result was a treasure trove of real world experience that validated our second article thesis, that value is created through relationships, sharing and knowledge flow—cooperation.

10 Critical Dimensions
Sifting through the collected wisdom, 10 Critical Dimensions emerged as essential to shifting thinking, language


[Image]
and action of businesses now operate
interconnected globally and loc-
ally, at the speed of computer net-
works. While in each domain there is
information and as many questions,
ptive of companies large and small,
and network (from the European Union
to individual Facebook groups), each
our insights into the new ways of
required.

1. Organizations Function as Complex Network Vests
networking begins with under-
standing organizations as an ecosys-

We’re using “net”WORK to em-
body the importance of seeing net-
works as resources to be leveraged
and put to WORK to create value for
organizations. Moore’s Law continues en-
abling digital computer networks to in-
creasingly connect people and distrib-
ute information faster than computer-
based humans can absorb. The ten
net=WORK dimensions below are of-
ered as essential for effective execu-
tives to adapt organizational cultures to
unite knowledge flows for economic
value creation—Robert L. Buckman’s
original goal—in this environment.

1. Organizations Function as Complex Network Vests
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Exhibit 1 shows the ecosystem
of networks radiating out from the
core to the periphery, the marketplace.
Internal to the organization is the
familiar formal structure, the backbone,
like the road system. But the work
gets done through the network of
relationships and interactions taking
place in the informal. The organiza-
tion can control its organizational
structures but must constantly innovate
and adapt to the marketplace through
interactions with, and exchanges be-
tween and among customers, suppli-
ers, partners, regulatory bodies and
in the context of macroeconomic con-
tingencies.

IBM is an organization that deter-
mines understands and adapts oper-
ating in complex human networks.
From Lou Gerstner’s 1993 arrival,
two “e-business” and services, pio-

7. Hurt Gets Done Through
Individuals

“Intentional networks are the per-
sonal social networks workers draw
upon and collaborate with to get work

done. Into-nets existential networks
exhibit aspects of both emergence,
being called into existence to accomplish
some particular work, and history,
drawn on known relationships and
shaped experience.”

Nardil Whitaker Schwartzenberg

“Intentional”, Bonnie Nardil and
colleagues, explain in “Networkers
and their Activity is Social Intentional

Legend: Martin (2003) Crosnier: Humanizing Change in Non-de-
tailed Organizations. Organizational Dynamics, 32(1), 35-46. From http://

Arid Whitaker Schwartzenberg (2002) Networkers and their activity is

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effectiveness in a Non-Linear World. In Effective Executives Equity in

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International networks. Computer Supported Co-
Networks is not a typing error. It is derived from individuals who find a tension or stress in their network to try to remember who is doing what, to whom they can reach out and what best media for contact to enlist them for work. Tension, strength, another aspect depicts the fortitude one needs in pursuit of collaborative work and largely, “intentional logic” in frameworks for many “possible worlds” or “variations.” What word better convey the complex aspects of an individual’s work?

Very few 21st century jobs are truly work done in isolation from others. Still hitting practices in most organizations focus primarily on an individual’s talent. Imagine asking your next job candidate, “When do you reach out to your network to seek solutions? What’s the TENSION or INTEREST that makes them collaborate?” as FAS Research Vice President, Doris Spithizer suggests. Models developed by “Value Network Analysis” creator Vern Allee emphasize the “interlang" exchanged in the process of tangible work. Many of these interlanges are embodied in the individuals performing the work in the network. Mapping and interlanges provides a richer picture of the overall network value, what we call “Network Capital Value,” as it ultimately equates to “economic value.”

3. Knowledge is Created Through Individual Interactions
Creating value through interactions is not a new concept but with computer connectedness fueling the potential and organizations moving from industrial to services businesses, researchers focused on understanding it. The inaugural Fast Company Magazine, 1995, featured John Seely Brown and Edward Kolomoy Gray's report of Xerox PARC research explaining how computer technicians worked. Outside the traditional hierarchical structures, they speeded repair times by informally solving each other's problems in warehouse and after hours of conversation.

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4. Patterns of Participation: Impact Knowledge Flows

By August 2006, pioneering wiki company SocialText’s CEO, Ross Mayfield, captured the complexity of participation and challenge of engaging people in a connected world, in his “Power Law of Participation.”

5. Organizational Network analysis (ONA) Reveals Current Knowledge Flows and Individual’s Roles

...if the objective is to achieve a snapshot of how the organization is functioning at the moment and who the key players are, then organizational network analysis has some merit. But I do not think it has much to do with building the culture of work for the future. What I am talking about is how you choose what the organizational network is currently to something very different in the future.

Bob Brekelman 2008

ONA is a diagnostic approach used to make visible the connections an individual has to another within the boundaries of an organization and beyond. These relationships are discovered through a variety of means: Interview questions such as “who do you go to for ideas about your technical work?” analyzing e-mail boxes, and document tracking. The discipline dates to the 1980s and found resurgence when software-enabled platforms allowed investigating large data sets and depicting the results through network maps. While the discipline of organizational network analysis has significantly evolved since its pioneering ONA practitioners Valdis Krebs and others at IBM zelf faceted (also known as “social network analysis” did not resurface with executives.

Visualization of network relationships and knowledge flows among individuals is powerful data. However, it is only as strong as the questions
Flow provides the highest flexibility and require precise sophistication to use. FAS Research represents a third category: consultative firms with proprietary software.

6. Network Maps Visualize Network Analysis

"I have never seen anyone in the last 10 years who didn't react to the network maps," remarks Denis Spiothenner. Network maps make the invisible visible and FAS has a unique ability with data visualization. Portraying network as landscapes is particularly compelling if one thinks of the mountains as rich hubs of activity, and distant peripheries and valleys as uncharted territories where new network connections are to be found, as shown in Exhibit IV.

Network visualization provides a common view for individuals and groups to discuss the revealed patterns of information flows. Significantly, Denis reminds us that "the network doesn't look the same to everyone. It depends on the goal and who you ask in the landscape."

7. Network Analysis Provides New Measurement Tools

Net Work author Patti Ankland explains how network analysis gives fresh insight into how well the organizations are operating.

"On network measures, I always make these three distinctions: Structure. These are the about the network as a whole. Density (how well connected overall). Distance (degrees of separation), and cross-boundary densities. The overall density is a good benchmark if you are mapping from year to year. The cross-boundary densities pinpoint the effectiveness of group-to-group interaction.

Centrality. Finding the key people. It's easy to spot the really central (indegree) people in a chart, but you need the metrics (like betweenness) to really see the people who are on the most paths and on the critical paths.

Personal. How diverse is your individual network? How much of your network consists of people in your own organizational unit? At your level in the hierarchy? In your geography? Networked people are higher performers and tend to stay in organizations longer so there is a correlation between "networked" and organizational performance."
And in his breakthrough book Structural Hole (1995) Ronald Burt3 applies network analysis to help companies create competitive advantage by understanding marketplace dis- connects (information access, timing, referrals and control) that provide entre- preneurial opportunities.

8. Knowledge is in NetWORQ’s innovation. The Result of Action being economic value could only be ob- tained if our environment when knowledge moved across the organization in response to a need. — Bob Buckman 2008

Quackmark Venture-Feb
Bob Buckman’s summary “knowledge flows in response to a need,” is a great example of network economics. It is a key to understanding how companies can create value by leveraging their network of relationships.

1. Generate: Allow everyone to be in- volved to increase number and di- versity of possibilities.
2. Select: Let the masses highlight the better ideas, tagging, rating, and now prediction markets.
3. Develop: Initiatives have to retain ownership.
4. Implement: Continued ownership by using the collective wisdom, even the con- tributing crowd.
5. The key to innovation – empower- ed employees, not a series of com- mand and control budget approval meetings. Just do it with coordination, collaboration and feedback and without a need for approval levels.

Bob Qualcomm and IBM emphasize the network space, the edge of the network, where the diversity, the opportuni- ties, the power of the crowd and the individual and their network. Knowledge lives in the network where it is created.

Regional Networks Increase Competitiveness
The most macro-level networks are those that reach across sectors of pri- vate industry, government and academia, each with different motiva- tions—the triple helix approach of Arvada described by Robin Trigell.3

Innovation improves with bringing in people with different ideas and competiveness — time to market improves as more approaches are looked into a network of regional and firm networks.

Innovation moves from “closed” to “open.”

9. Technologies Shape Work
In a provocative October 2007 blog post, Steve Boyd (who is credited in the term “social tools”) as- serted: “We Build Our Tools And They Shape Us: How Lifescreening Is Shaping Web Culture.”

But no discussion the intersection of technology and organizational culture is more complex. According to Bob Buckman:

If you look at it [culture] from the standpoint of how much effort it takes to achieve and effect knowledge shar- ing across an organization, you will see a different picture.
everybody is time compressed.

2. Knowledge will not flow unless there is trust between the partners that the knowledge will be used in an appropriate manner. And, that the knowledge given will not be accepted unless there is trust that it is the best that can be given at that moment.

3. Trust is built on the fundamental values of the organization. What the people believe is important for them to trust communication with people that they have never met. Think about how you determine the fundamental values of the organization. And, how you make those fundamental values on which trust is built as the backdrop of the organization. That is what we did when we determined the values that make up our Code of Ethics.

Culture unifies all of the above.

The end is the beginning and the values, beliefs, norms that are modeled and enacted daily in all aspects of work—openness, support in sharing and acting. These are all values.

What do the behavior look like to support these values?

What does action in your firm look like?

Involves organizational members in developing your values in action with integrated metrics and rewards. Policies are an artifact of culture as are incentives, rewards and acknowledgements. Motivation is not by force. One can only create the conditions for individual motivation to be expressed as we have described here, as the executives represented here have created networked cultures to balance intention and control.

Call to Action

We understand the challenge netWORKing provides but contend both individuals and organizations must adopt "And Both" thinking and operating. While core functions may continue to rely on familiar, maximally efficient processes and capability—intellectual, organizational, and technological—must be added to tap and leverage the value creating potential of netWORKing.

Consciously operating organizations as interconnected human networks are challenging to traditional organizations. When value is created through interactions, sharing and being open to ensure knowledge flows are essential for innovation at its pace 21st century business demands. To promote innovation and increase value creation, organizations must adopt a new, trusting approach to employees, recognizing the power each can increasingly contribute through their connected personal networks.

From Socio-linguistic dialogues to Segers' "fifth Discipline" we're aware of the power of conversation and challenging dialogues to refine thinking and let new ideas emerge. Talking our networks for this article, with the resulting conversation and idea flow brought home how essential it is to listen to time to listen closely, reflect on what is truly being said, further conversations with existing participants and engage new contributors for understanding and synthesis.

We end with deep gratitude to all those who helped shape our thinking, and especially Robert H Buckman, who inspired this article. To quote him: "Need always has to be there as the driving force that causes knowledge to be sought, and iftrust exists, then it will move in response to the need."