

# 21st Century HRIS — The Network is the Employee

By Valdis Krebs



## THE KNOWLEDGE MATRIX

As the economy moves from refining existing products and services for mass audiences to innovating and personalizing new products and services, the knowledge used, and how it is used, changes. Business knowledge can be sorted into one of the four quadrants of the Knowledge Matrix<sup>1</sup> below. Complexity and uncertainty increase as we move from the first quadrant (Q1) to the last quadrant (Q4).

<b>Q1.</b> We know what we know	<b>Q2.</b> We know what we don't know
<b>Q3.</b> We don't know what we know	<b>Q4.</b> We don't know what we don't know

Figure 1. Knowledge Matrix.

Q1 is easy — it is what we know that we know. We can easily access this knowledge within ourselves or our groups and share it with others. Q2 is almost as straightforward. Q2 contains what we are aware of that we do not know. Some of what we do not know we may wish to learn through education, training or apprenticeship and job experience. Others things we may wish to leave in the “don't know” pile. Q3 becomes a little tricky. In individuals, it is things we know but are not totally aware that we know. These are either hidden skills or knowledge you have temporarily forgotten. In groups, this is knowledge and skills that part of the group has but another part of the group does not — nor is this other part of the group aware that this knowledge and skill exists elsewhere in the group. Subgroup A knows; Subgroup B does not know; nor does B know that A knows. Q4 is the blind spot for individuals and groups. We can't answer the question “What is in Q4 for you?” We don't know! Q4 is almost always involved with businesses that fail to adapt to changes in their environment. This is from where unseen and unknown competition arises.

## 20TH CENTURY KNOWLEDGE PROCESSING

It is obvious that knowledge will drive the value chains of businesses in the future. In many ways, knowledge was a competitive advantage in the old industrial economy also. All inventions from the steam engine to the light bulb were the result of knowledge processes. Henry Ford's assembly line was the result of a knowledge process that provided the Ford organization a competitive advantage for many years. The focus was on the select individual — the solitary genius — the lone ranger. Inputs and learning from the group were not rewarded.

In fact, participants on the assembly line were actively encouraged to leave their brains at home. The manager knew what was right — no one else need contribute feedback. In the industrial era our focus in the knowledge matrix was on Quadrants 1 and 2.

In the information economy of 1970-2000, knowledge processes were pushed out from genius inventors to a growing population of college educated knowledge workers. Rather than toiling without thinking on assembly lines like their parents, a new generation was asked to bring their brains to work and use them. Unfortunately, there was no Henry Ford who could build an assembly line of knowledge work — though some tried. It soon became obvious that many similar projects were all being done without utilizing what had been learned on previous projects. The wheel was constantly being reinvented. The smart thinkers of the later part of the 20th century noticed that learning and knowledge were not shared — many of us don't know what others already know. Quadrant 3 in the matrix was revealed. Soon, knowledge management (KM) was born to capture and store “what we know” and make it available to those that need to know. Unfortunately, applying Henry Ford style thinking, which many short-sighted KM efforts tried, did not work with knowledge processes that demanded adaption, learning and innovation.

The Internet economy started quickly in the mid 1990s and was in full steam at the turn of the century. Many smart, profitable companies were slow to adapt to the changes of this new connectivity amongst business players. Many of these companies were blind-sided by new competitors “coming out of nowhere.” Players like Amazon and Wal Mart created whole new ways of doing business using the power of information and network connectivity. Executives and managers started to sense the existence of Quadrant 4. “Why didn't we see it coming?” was the common conundrum in boardrooms as we entered the new millennium.

Some companies stumbled onto Q4 and profited from their serendipitous discovery. Thanks to a few vocal and persistent employees with the ear of key executives, one company — Microsoft, learned very quickly what it didn't know it didn't know. As a result of this “aha,” the whole mission of the organization was refocused on the Internet. The ability to access Q4 probably saved Microsoft and their market-leading position. All of the formal strategic planning and business intelligence processes failed to illuminate what was happening in Q4. These formal processes were most likely focused on Q2, with some attention to Q3. It was serendipity and the informal

networks that exposed what was happening in Q4 to Bill Gates and other key decision-makers within Microsoft. Once Q4 was discovered the knowledge moved into Q2, and Microsoft could focus on learning everything it could about Internet technology and dynamics.

By the turn of the millennium all successful organizations were expert at developing knowledge in Q1 and Q2. Many were working out the kinks in Q3 and only the cutting edge firms were even aware of Q4.

### **THE NETWORK IS THE EMPLOYEE**

In the 21st century, we have to keep our gains in Q1 and Q2 knowledge processing, improve our ability for including Q3 knowledge, and develop new skills and methods for discovering and mining Q4 knowledge. Both Q3 and Q4 knowledge processing will be improved with the power of the network.

Everyone will be on the interconnected Web. Internal webs will be present in each company, while business partners will have connections between their respective internal webs. The trick for finding Q3 knowledge will be the ability to surf the network and know what each sub-web contains. Parts of the web will know what knowledge and experience is available in other parts of the web. Projects will be composed of many sub-webs usually spanning the formal borders of individual organizations.

The ability to quickly assemble and disassemble many component webs into a larger networked whole will be the competitive advantage one project team has over others. Connected teams will compete with connected teams. Agility of connecting, disconnecting, and reconnecting will be one focus of competitive advantage. The other hub of advantage will be utilizing the pattern of connections you have formed. Can information quickly traverse your network? Is your network aware of what is happening outside the network? Does the pattern of connections have the right mix of redundancy for learning and agility — not too much and not too little?

Q3 knowledge will be accessed and utilized by the right pattern of connections between sub-webs in the larger group. Q4 knowledge will be discovered and transferred by links from the various sub-webs out to the environment. Close, redundant ties implement group goals. Radial, non-redundant ties monitor the environment and discover threats or opportunities for the group.

### **HRIS OF THE FUTURE**

The HRIS of the future will differ from the HRIS of today like the road network of the 20th century differed from the roads in Ancient Rome. All roads lead to Rome — there was one central point of focus. A central repository of employee data supported the business processes of recruiting, retention, payroll, and benefits. The processes of producing revenue such as product development and fulfillment rarely if ever utilized the HRIS — they had their own Rome — another central repository of data. Toward the end of the 20th century, new systems came into fashion that attempted to connect these independent resources. They succeeded in connecting everything, but did so in a rigid way — they were not easily adaptable to rapidly changing business processes. The speed of

change brought on by the Internet soon led to cracks in, and then crumbling of, these rigid, engineered structures. At the turn of the millennium, many companies which had installed systems that automated business processes started to experience problems in delivering products and services to their customers. Many a well-known company made announcement after announcement that their quarterly results would not meet expectations because of their inability to deliver the right mix of products in the right quantity to the right customers. It was 2001 and HAL was indeed alive — no more science fiction. He was alive and in control of the ship. Many a CEO, COO, CFO and CIO died trying to negotiate with the wayward, all-controlling computer.

The HRIS of the future will not be a “system” — it will be a navigator of, and a tool for, building temporary knowledge structures. It will not be focused solely on traditional HR business processes. It will be a key tool in accomplishing the day-to-day work within and between organizations. The aim will not be to build large stores of data and information recorded in silicon. The HRIS of the future will be a network of human and silicon nodes. The key will not be efficient storage of data items, but efficient paths to the knowledge and data necessary to accomplish current projects. The HRIS of the future will be like the road system of today. When traveling you can choose any combination of roads depending on your travel plans — the interstate highway for speed, the back roads for scenery, or something in between. Or you can choose the interstate from point A to B, two-lane highway from point B to C, and then the old scenic trails from C to D. The return trip may require a different combination.

In the industrial economy, the key was individual objects organized in a hierarchy. Paths to negotiate the hierarchy were predetermined and followed strict rules. In the new economy, the connections between objects become as important, or more, than the objects themselves. The links, and the pattern of links, in the network are as important as the nodes. Paths are not predetermined. Rules for traveling the network are limited only by security access privileges. Power is no longer accrued by gathering the most or the largest objects under your hierarchy. Power is gained by being well-positioned in the network of information flows and knowledge exchanges. Those with access to the right parts of the network have access to all four quadrants in the Knowledge Matrix.

The key is connectivity — finding the right patterns of connections to produce the desired results for the current goals. As strategy and goals change, so do the patterns of connections, and so does network membership — different combinations for different collaborations.

### **REFERENCES**

Figure 1. Knowledge Matrix based on work originally developed and copyrighted by Landmark Education Corporation, San Francisco, California.

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