

Managing and leading change in the electronic workplace

Nosotros vivimos en una cultura global digitalizada distribuida dentro de las culturas nacionales. Aquellos participantes en esta cultura digital tienen tremendas oportunidades para mejorar ellos mismos, sus naciones y el mundo.

We live in a digitally connected global culture imbedded within national cultures. Those participating in this digital culture have tremendous opportunities to improve themselves, their nations, and the world.

Johann van Reenen, University of New Mexico
ISTEC Library Linkages Program

Characteristics of the 21st Century

THE NEW, NONLINEAR WORLD OF WORK

Technology.
Globalization.
Competition.
Change and the novelty thereof
Speed
Complexity and Paradox



**Entrepreneurial freedom not
Centralized planning**
**Cooperative exchanges of
information, not closely guarded
power**
**Knowledge and spirit - not
material assets alone**

Stronger leadership in developing digital libraries - - - Why do we need it?

Your role & responsibility:

- | | |
|--|---|
| *Crisis in Scholarly Publishing : | - Educator and advocate for change |
| * Expensive electronic systems: | - Risk taking & decision making |
| * New types of workers and
new skills needed: | - Creating Learning Organizations
& systems designers + innovators |
| * Selection-Reference-Training
-Consultation continuum: | - Subject web services, expensive
electronic purchases |
| * Competing successfully in
the Information Economy: | - Partnerships with other libraries
- Politics & Networking |

Por qué necesitamos más liderazgo en el desarrollo de bibliotecas digitales?

Su función y responsabilidad:

- | | |
|---|---|
| *Crisis en Publicaciones Académicas: | - Educador y promotor de cambio |
| *Sistemas electrónicos caros: | - Toma de riesgos y decisiones |
| *Nuevos tipos de trabajadores y
necesidades requeridas: | -Creación de Organizaciones de
Enseño & diseñadores +
innovadores de sistemas |
| *Selección-Referencia-Capacitación
Consultoría Continua: | -Servicios Internet,
adquisiciones electrónicas caras |
| *Cómo competir con éxito en la
Economía de la Información: | -Asociaciones con otras
bibliotecas
-Políticas y Asociaciones |

“Research is a race against time” *

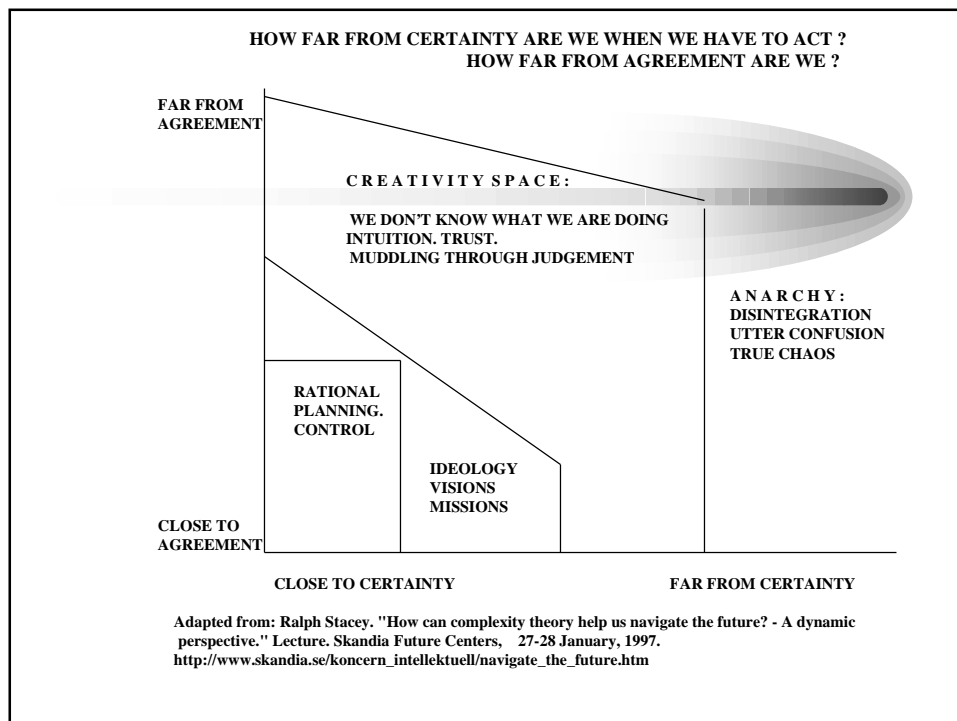
Digital library initiatives are shifting emphases to:

- Data mining and information analysis
- Integration and interoperability
- Collaboration and partnerships

Initially DL workers worked at and valued content

Now we are beginning to see the value of relationships between data, dialog, updates, ancillary material, research enabling tools, and the role/value of the original idea

*** Adapted from a talk by Rick Luce, Los Alamos Research Library, at the AIST Mini-Conference, Santa Fe, NM, October 16, 2001**



Drawing inspiration from being CAUT

“Complexity theory postulates that if an organization is too tightly structured, it can't move and if it's too chaotic, it can't move. There is a point called the 'edge of chaos' where companies can move. At that point, a company has enough structure to hold people and processes together, yet enough flexibility to allow innovation and adaptation. “

(Eisenhardt & Brown, 1998)

(Complexity, Ambiguity, Uncertainty & Turbulence, van Reenen, 1997)

Dibujando inspiración de ser CAUT*

“La teoría de la complejidad postula que si una organización está muy estructurada, no se puede mover y si es muy caótica, no se puede mover. Aquí está el punto llamado el ‘borde del caos’ donde las compañías se pueden mover. En este punto, una compañía tiene suficiente estructura para retener a las personas y a los procesos juntos, y al mismo tiempo con suficiente flexibilidad para garantizar innovación y adaptación”.
(Eisenhardt & Brown, 1998)

***(Complejidad, ambigüedad, incertidumbre & turbulencia, van Reenen, 1997)**

Chaos as a Self-Organizing Entity

BOIDS simulated bird-flocking

Boids fly together in a flock following only three rules:

- ⇒ fly in the direction of other objects
- ⇒ try to match velocity with neighboring boids
- ⇒ avoid bumping into things

Craig Reynolds' experiments at Los Alamos, 1987

This demonstrates the essence of chaos theory: simple agents obeying simple rules can interact to create elaborate and unexpected behaviors.

Are there real life example of this paradox of rules and randomness?

What are the implications for the workplace?

“So, when you insist on your vision, when you try to stick to your blueprint, when you cling with so much determination to control, are you destroying the capacity of your organization for complex learning? Is there time left for ... creativity?” (Stacey 1996).

Cuales son las implicaciones para el lugar de trabajo?



“Entonces cuando usted insiste en su visión, cuando usted trata de seguir su plan, cuando usted aferra con tanta determinación al control, esta usted destruyendo la capacidad de su organización para el aprendizaje complejo? Ha dejado tiempo para... la creatividad?”

(Stacey, 1996)

What does it mean for developing a Digital Culture in your organization?



The LINUX Story

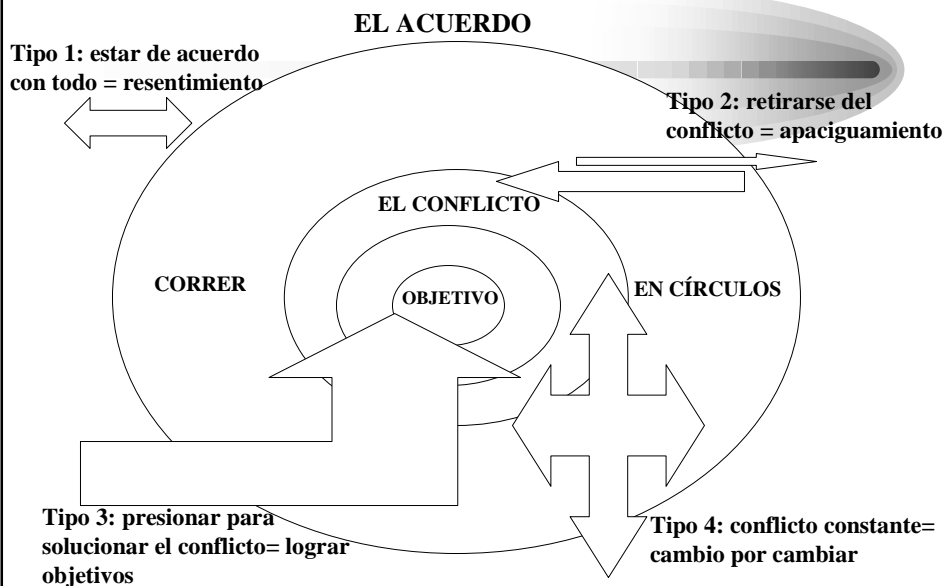
***At the Edge of System Disintegration
Unpredictable Long-Term Outcomes***

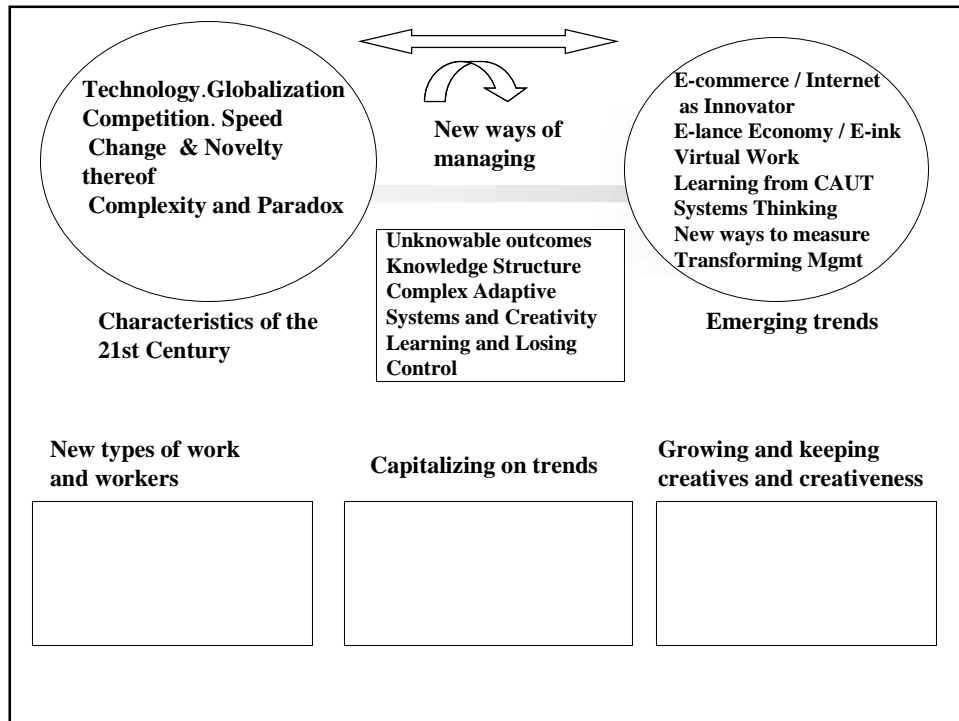
Managing Living Systems

Create a nimble organization by:

- * **Questioning linear thinking**
(Question everything)
- * **Letting Chaos flourish**
(Giving up control and stability to achieve innovation)
- * **Sharing intelligence and meaning**
(Exposing and facing adaptive challenges)
- * **Conflict is a source of creativity**
(There is rarely improvement without conflict)
- * **Eliciting good ideas**
“People only support what they create”
(Meg Weathley, LtF Conference 4/22/98)

Riesgo y Conflicto





Implications for Managers

Attitude shift

“These 4 roles - direction-setter, change agent, communicator, and mentor - provide the answer to all the turbulence, exploding uncertainty, change, and complexity.” (Nanus, 1997)

- * **Develop resilient workers to absorb “Future Shock”**
- * **Managing telework**
- * **Managing security**
- * **New ways to communicate and creating relationships**
- * **Efficient decision making and risk taking**
- * **New KM solutions**

The electronic manager

As a direction-setter ; *Explain the vision and theory underlying the practice to all stake holders (role of information services in the new non-linear world of work)*

As a change agent; *Create new drivers and reward new behaviors*

As a communicator; *Communicate obsessively and experiment with communication within natural systems*

A a mentor; *Develop electric workers from the traditional workplace*

Implications for Managers

Communication & Relationships

“In this new world, span-of-control mentalities must give way to span-of-communication mentalities.”
(Leinberger and Tucker, 1991)

- * The importance of “Wasting time”
- * Forging relationships and knowledge networks

Implicaciones para Gerentes

Comunicaciones & Relaciones

“En este nuevo mundo, mentalidades tipo control total deben dar un espacio a mentalidades tipo comunicación total”.

(Leinberger and Tucker, 1991)

- **La importancia de “Perder tiempo”**
- **Fomentando relaciones y redes de conocimiento**

What are the implications for

knowledge management?

- * **All aspects of work and business -all products, all activities, all methods - have an information structure at their core that has long been hidden, just like the genetic codes of plants.**
- * **We're now starting to decode that information and manipulate its structure.**
- * **What do traditional organizations have in common with traditional farmers?**

¿Cuáles son las implicaciones en la gerencia del conocimiento?

- Todos los aspectos del trabajo y los negocios –todos los productos, todas las actividades, todos los métodos- tienen una estructura de la información en su núcleo que han permanecido escondidas por mucho tiempo como los códigos genéticos de las plantas.
- Estamos ahora empezando a decodificar esa información y manipular su estructura.
- Que tienen en común las organizaciones tradicionales con granjeros traicionales?

Information inside processes

Example: Dell™ Computers; from push driven to pull driven.

- Sold about 70K computers in 2001
- Whenever a computer is sold, a signal is propagated through the Dell system back to the suppliers
- Suppliers know when and what materials to deliver to Dell factories so that the order can be filled

“So you get out of this business of having inventory problems. You don’t have any inventory, what you have is information, and information is a lot easier to manage than inventory.”

From: “Michael Dell takes on the world” *American Way* No. 10.01.01 pp.86-90 and 93-95

***Understand your organization's
Knowledge Management strategy.***

Economics of Reuse vs Economics of Expertise

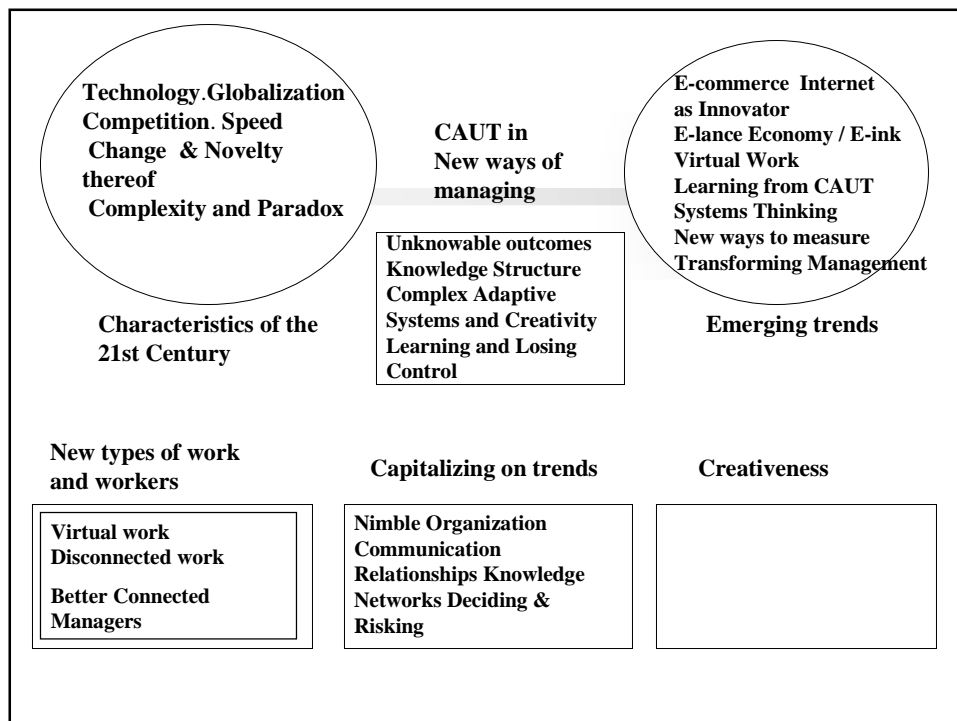
Codification of KM:

Knowledge is carefully codified and stored in databases, where it can be accessed and used easily by anyone in the organization. The reuse of knowledge saves work, reduces communications costs, and allows an organization to take on more activities

Personalization model of KM:

Knowledge is closely tied to the person (expert) who developed it and is shared mainly through direct person-to-person contacts.

Different strategies requires different drivers



The Virtual workplace

Research indicates the following benefits:

- improved quality of work life, morale, and less stress*
- better balance of work and family, with less commuting pressure*
- enhanced job performance and productivity*
- increased ability to recruit from larger pool of talent as well as ability to retain workers*
- environmental conservation*
- some organizational cost efficiencies*
- greater flexibility in the location and timing of work*

(Tapsell, 1999; Hill, et.al., 1998)

Fostering Creativity and Innovation

- Group support systems**
- Collaborative technologies**
- Rewards for good ideas**
- Electronic brainstorming**

The Fruits of Creativity

Virtual cross functional teams and Skunk works

“Organizations can sustain their competitive advantage by operating in multiple modes simultaneously - managing for short-term efficiency by emphasizing stability and control, and for long-term innovation by taking risks and learning by doing. Organizations that operate this way may be thought of as ambidextrous - hosting multiple, internally inconsistent architectures, competencies and cultures, with built-in capabilities for efficiency, consistency and reliability on the one hand, and experimentation, improvisation and luck on the other. In dramatic contrast, during periods of ferment - times that can generate architectural or discontinuous innovation - organizations require entrepreneurial "skunkworks"” (Tushman & O'Reilly, 1999)

Las Frutas de la Creatividad

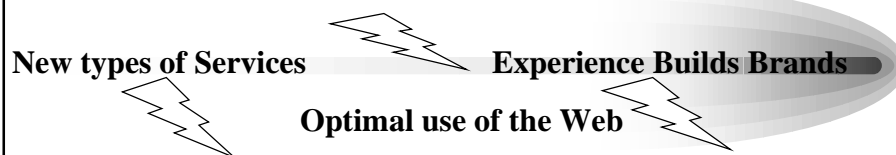
Equipos de multi-funcionales y virtuales y (skunkworkers)

“Las organizaciones pueden sostener su ventaja competitiva operando simultáneamente en múltiples modos –gerenciando para la eficiencia a corto plazo mediante la estabilidad y el control, y para la innovación a largo plazo tomando riesgos y aprendiendo experimentando. Las organizaciones que operan de esta forma pueden ser ambidiestras –múltiples, con arquitecturas internamente inconsistentes, funciones y culturas, con capacidades inherentes de eficiencia, consistencia y confiabilidad y de otra mano, experimentación, improvisación y suerte sobre la otra. En un contraste dramático, durante periodos de fermentación –los tiempos que pueden generar arquitectura o innovación no continua – las organizaciones requieren (skunkwork) empresarial” (Tushman & O'Reilly, 1999)

Acquiring, growing, and keeping Creative Workers

- **Structure without control**
- **Forget the 9-to-5 work day**
- **Right brain and left brain staff**
- **Feedback & Using peer reviews**
- **The creative career track**
- **Managing smarter people**
- **Job sculpting**

The Fruits of Creativity



Interactive User Experiences

Self-Service Tools & Direct Touch

Web-Driven Customer Transactions

Obsolete existing business practices

Focus on :

Convenience (saving time) - Ease of Use - Utility (adding value)

Brilliance is rarely planned up front - involve users a.s.a.p.

LEADERSHIP CHARACTERISTICS

*** ALWAYS QUESTION GROUPTHINK**

Are you curious?

Do you take risks and experiment?

*** RESET DIRECTION**

Do you have a vision for where you and your team are heading?

Can you reset it quickly?

*** GUIDE COOPERATIVE ACTION**

Do you actively encourage others around you?

Do you constantly link actions to goals?

*** WALK THE TALK**

Are you part of the problem or are you helping solve the problem?

Do you behave as you want others to behave?

*** MOTIVATE OTHERS**

Do you reward inventiveness and risk taking?

Do you celebrate your accomplishments and those of others?

Advice from a slow learner

HELPFUL PERSONAL BEHAVIORS BACK AT WORK

- "Behave as if you are in business for yourself *, and/or act as if you own the organization.
- Do not depend on your past contributions - only the value you are currently adding, really counts.
- Be a problem solver where others point fingers.
- Learn to make decisions when you don't have the complete information.
- Make decisions about customer service on the spot - even if you do not have the authority.
- Be a risk taker. "Learn to fail fast, fix it, and race on." *
- Surrender control and welcome the unexpected.

* (Pritchett, 1996)

Consejos de alguien que se demora en aprender

COMPORTAMIENTOS PERSONALES BENEFICIOSOS EN EL TRABAJO

- “Compórtese como si fuese el dueño/a de su propio negocio”*
- No dependa de sus contribuciones pasadas – solamente cuenta el valor que usted contribuye en el presente.
- Sepa solucionar problemas cuando otros culpan a los demás.
- Aprenda a tomar decisiones aún cuando no tiene información completa.
- Tome decisiones sobre el servicio al cliente en el momento - aún cuando no tenga la autoridad.
- Sea una persona que toma riesgos. “Aprenda a fracasar rápidamente, arreglar el problema, y proseguir.”*
- Entregue el control y acepte lo inesperado.

* (Pritchett, 1996)

Implications for Managers

Organizational Learning

is the sum of

**Communication, Relationship Building,
Risk Taking, Decision Making, Creating
Knowledge Networks and Portals**

and result in

CREATIVITY

